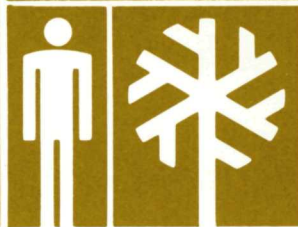


general management plan

october 1979

JOHN DAY FOSSIL BEDS



NATIONAL MONUMENT/OREGON

RECOMMENDED:

Benjamin F. Ladd, Superintendent
John Day Fossil Beds National Monument

June 29, 1979

Donald F. Benson, Manager
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July 6, 1979

CONCURRED:

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Klamath Falls Group

June 25, 1979

APPROVED:

Russell E. Dickenson, Regional Director
Pacific Northwest Region

July 9, 1979

GENERAL MANAGEMENT PLAN UPDATE
JOHN DAY FOSSIL BEDS NATIONAL MONUMENT
OREGON

The 1979 General Management Plan (GMP) contains four interrelated sections--Statement for Management, Resources Management, Visitor Use, and General Development. As the "Introduction" section of the plan states, these various sections may be updated, as needed, either separately or concurrently.

Consistent with this approach to the planning process, the four following documents have been written to update the GMP:

- I. Statement for Management (approved by the Regional Director in September 1983). This document replaces the first section of the General Management Plan. It provides an overview of the monument's purpose and objectives; assesses conditions; identifies planning issues and problems; and determines management objectives.

In compliance with the requirements outlined in the National Park Service Planning Process Guidelines (NPS-2), the Statement for Management is revised biennially, or more frequently if necessary. According to the Department of the Interior Manual on Environmental Quality, the Statement for Management is categorically excluded from the requirements of the National Environmental Policy Act (516 DM6 Appendix 7, 7.4a(5))

- II. Resources Management Plan (approved by the Regional Director in November 1981). This plan outlines the strategy for preserving significant paleontological, geological, cultural and biological resources in the John Day Basin.

The Resources Management Plan is reviewed annually and revised as necessary. The Resources Management Plan revises the second section of the General Management Plan. An environmental assessment, which analyzed the potential environmental consequences of the various actions proposed in the document was prepared as a part of the Resource Management Plan. The Regional Director approved a Finding of No Significant Impact for the Plan on January 29, 1982.

- III. Land Protection Plan (approved by the Regional Director in February 1984). On May 7, 1982, the Department of the Interior published a new final policy statement on Use of the Federal Portion of the Land and Water Conservation Fund. In response to this policy, the National Park Service prepared a Land Protection Plan for John Day Fossil Beds to:

- a. determine what lands, or interests in land, need to be in public ownership in order to achieve park purposes as established by the enabling legislation;
- b. analyze what means other than acquisition are available to achieve these objectives;

- c. inform landowners about NPS intentions for buying or protecting privately-owned land through other means within the unit;
- d. help manager identify priorities for making budget requests and allocating funds to protect park resources.

Thus, the John Day Land Protection Plan clarifies issues discussed under "Land Acquisition Proposals," a part of the second section of the General Management Plan.

IV. Agricultural Use Guide

In compliance with the National Park Service Historic Leasing Program (NPS-38) and Special Directive 82-12 ("Policy on Historic Property Leases and Exchanges," November 26, 1982), the feasibility of continued agricultural use of the James Cant Ranch area of the monument was explored. In reference to this area, the General Management Plan states that ". . . agricultural uses may continue, reinforcing the authentic appearance of a working ranch" [page 46]. However, the plan also states:

"Agricultural use (grazing) will be limited to those lands in the Sheep Rock Unit that have historically been grazed under BLM permits until such time as the permittees are willing to relinquish them. At the Cant Ranch grazing will be terminated in 1982, but hay production may continue as historical interpretation" [page 48].

In addition, the General Management Plan defines the purpose of the monument as follows:

"To identify, interpret, and protect the geologic, paleontological, natural, and cultural resources along the central and upper John Day River . . ."

It further establishes an historic zone for the preservation, protection, and interpretation of the Cant Ranch. The Cant Ranch was evaluated by the Regional cultural resource staff and nominated for inclusion in the "National Register of Historic Places" as "The James Cant Ranch Historical District."

After reviewing the proposal to lease those designated fields at the Cant Ranch, the Director determined that this action was consistent with the purpose for which the monument was established. The date of his concurrence statement is February 14, 1984. Thus, the Agricultural Use Guide amends the portions of the General Management Plan which calls for the termination of grazing.

A Triple X Form (Assessment of Actions Having an Effect on Cultural Resources) and a National Environmental Policy Act Categorical Exclusion Documentation memorandum were approved for this proposal by the Superintendent in March 1984.

GENERAL MANAGEMENT PLAN

JOHN DAY FOSSIL BEDS NATIONAL MONUMENT

OREGON

United States Department of the Interior / National Park Service

C O N T E N T S

INTRODUCTION / 1

PART 1: STATEMENT FOR MANAGEMENT / 5

Purpose of the Monument / 7

Significance of the Monument's Resources / 8

Existing Land Use / 11

Influences on Management / 15

Research Needs / 22

Management Objectives / 23

PART 2: RESOURCE MANAGEMENT / 25

Background / 27

Management Zoning / 28

Natural Resources / 31

Paleontology / 31

Scenic Values / 33

Vegetation / 36

Wildlife / 38

Water / 41

Fire Management / 43

Air Quality / 45

Cultural Resources / 46

Historical Scene / 46

Agricultural Use / 47

Archeology / 48

Land Acquisition Proposals / 52

PART 3: VISITOR USE / 57

Background / 59

Goals and Plans / 61

Philosophy / 61

Public Information / 62

Vistas / 62

Interpretation / 65

Facilities for Visitor Use / 67

Operations and Maintenance / 68

Protection and Safety / 70

PART 4: GENERAL DEVELOPMENT / 71

Parkwide Development Concept / 73

Development Plan / 75

Phasing / 85

Development Schedule / 86

APPENDIXES / 87

A: Rare and Endangered Plant Species / 89

B: Project Statements / 90

C: Legislation / 95

Bibliography / 99

Planning Team / 101

M A P S

The Region	/	3
Paleontology	/	9
Existing Land Use	/	13
The Vicinity	/	17
Management Zoning	/	29
Grazing Permits	/	48
Land Acquisition	/	54
General Development Plan	/	76
Overlook: Parking/Sheep Rock Unit	/	78
Turtle Cove: Parking/Sheep Rock Unit	/	82

I N T R O D U C T I O N

The General Management Plan is the parkwide plan for meeting the management objectives of John Day Fossil Beds National Monument. It charts a long-range strategy for resources management, visitor use, and development at a level of detail that will facilitate implementation of proposed actions.

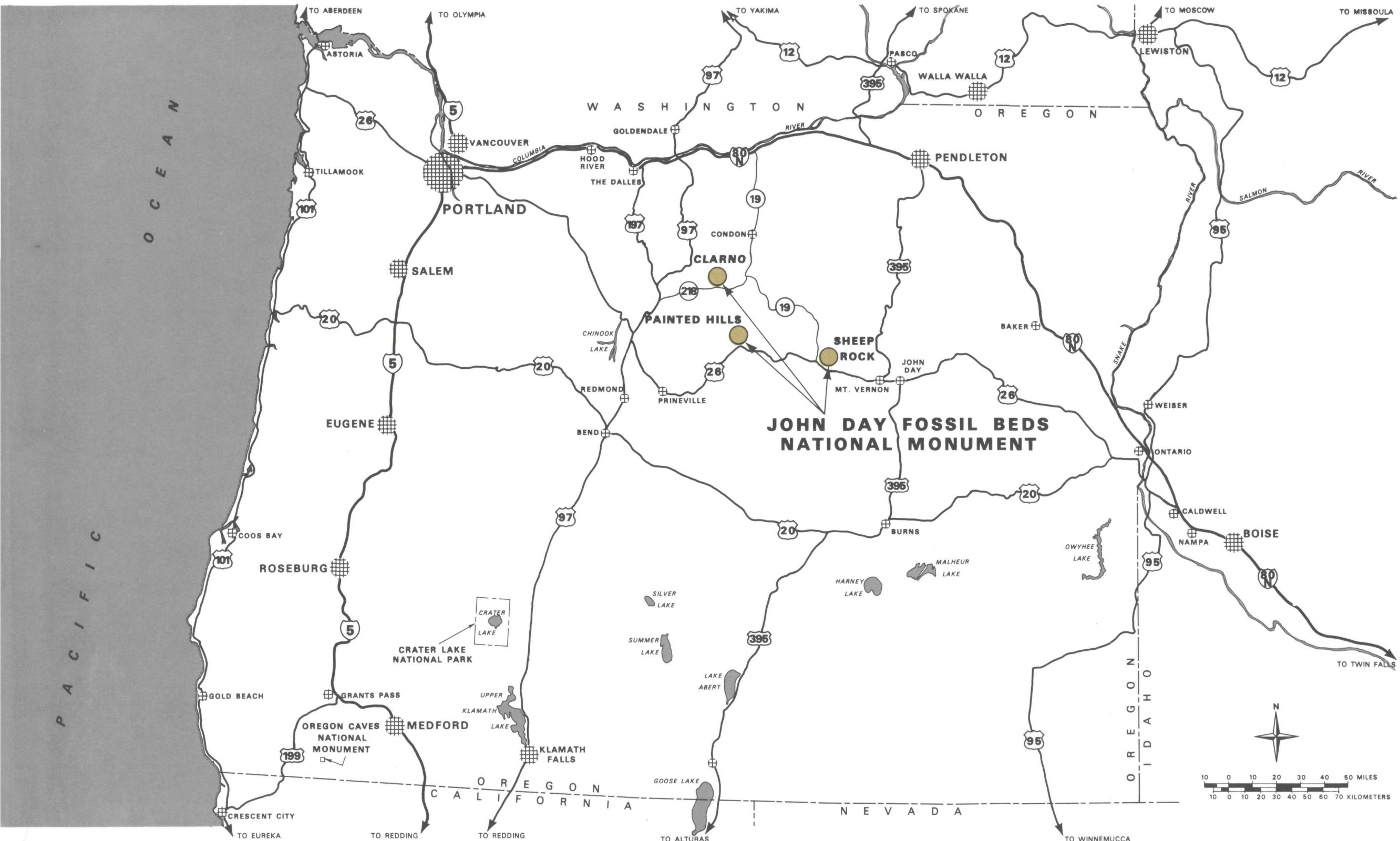
The General Management Plan contains four interrelated parts, which may be updated in the future, either separately or concurrently, as may be appropriate.

The "Statement for Management" section defines the purpose and significance of John Day Fossil Beds National Monument and identifies influences on management, existing land use, and management objectives.

The "Resource Management" section outlines the strategies for protecting, perpetuating, and preserving natural and cultural resources within the monument.

The "Visitor Use" section outlines the course for interpreting the monument resources, for providing for visitor use and safety, and for supplying information and support services.

The "General Development" section outlines the development necessary to accomplish the resource management and the visitor use proposals.



THE REGION
JOHN DAY FOSSIL BEDS NATIONAL MONUMENT
OREGON
UNITED STATES DEPARTMENT OF THE INTERIOR—NATIONAL PARK SERVICE

STATEMENT FOR MANAGEMENT

P U R P O S E O F T H E M O N U M E N T

John Day Fossil Beds National Monument was authorized October 26, 1974, and established October 8, 1975, under the authority of Public Law 93-486, 88 Stat. 1461 (see appendix C).

In 1967 the Advisory Board on National Parks, Historic Sites, Buildings, and Monuments, in its report on the National Park Service study of John Day Fossil Beds, determined that "it is eminently suitable for geological and paleontological exhibit and interpretive purposes as a John Day Fossil Beds National Monument."

The Department of the Interior report to the Congress dated December 10, 1973, stated that "establishment of the monument is intended to preserve, protect, and interpret the extensive tertiary fossils found in the geologic formations of these areas."

Based on these cited provisions and the more general provisions of the National Park Service's 1916 Organic Act, the purpose of the monument is:

To identify, interpret, and protect the geologic, paleontological, natural, and cultural resources along the central and upper John Day River and to provide facilities that will promote and assist visitor recreational enjoyment and understanding of the same.

SIGNIFICANCE OF THE MONUMENT'S RESOURCES

The national significance of the monument lies in the geological and paleontological resources of the John Day River basin. Its sedimentary strata, representing four major geological formations of the Columbia plateaus, span the last 70 million years and five consecutive geologic epochs. These strata contain one of North America's longest continuous records of plant and animal fossils, tracing the evolution of life forms from the subtropical climate of the Eocene epoch through the subarctic climate of the Ice Age.

Dr. J. D. Merriam, who studied the area intensively as early as 1899, said: "Although there are other geological sections, particularly in the Western United States, which furnish as remarkable history . . . there are probably none in which the relations of the various chapters to each other are more evident than they are in the record inscribed on the walls of the John Day canyon."

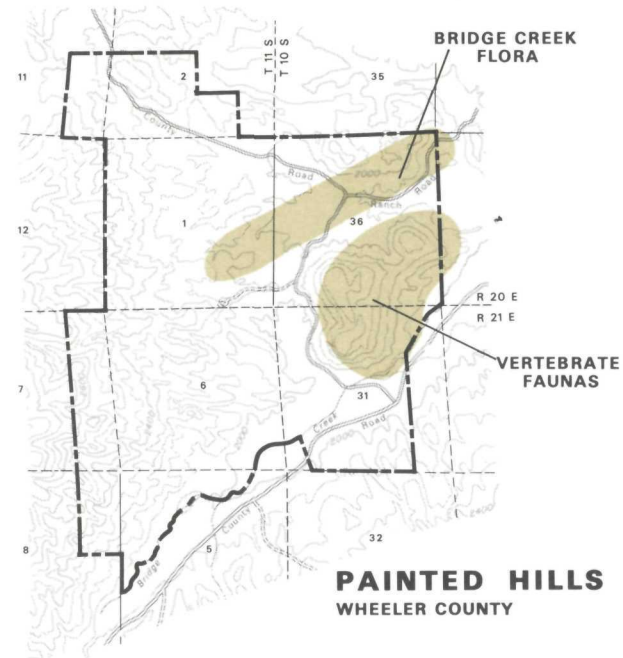
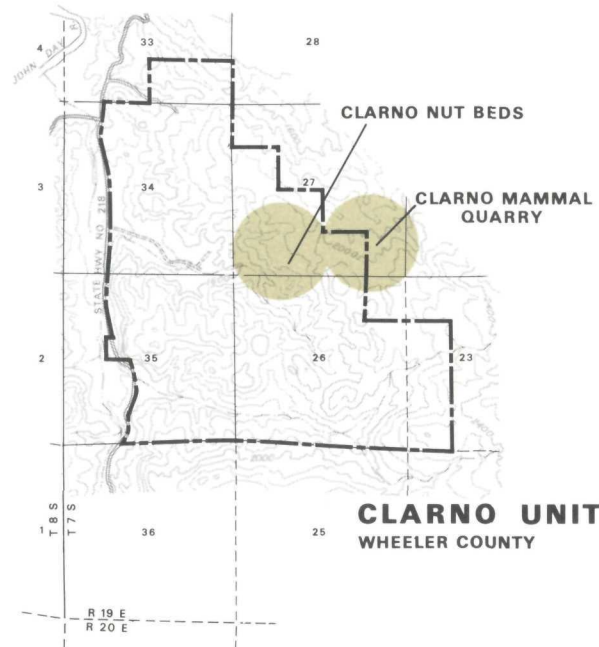
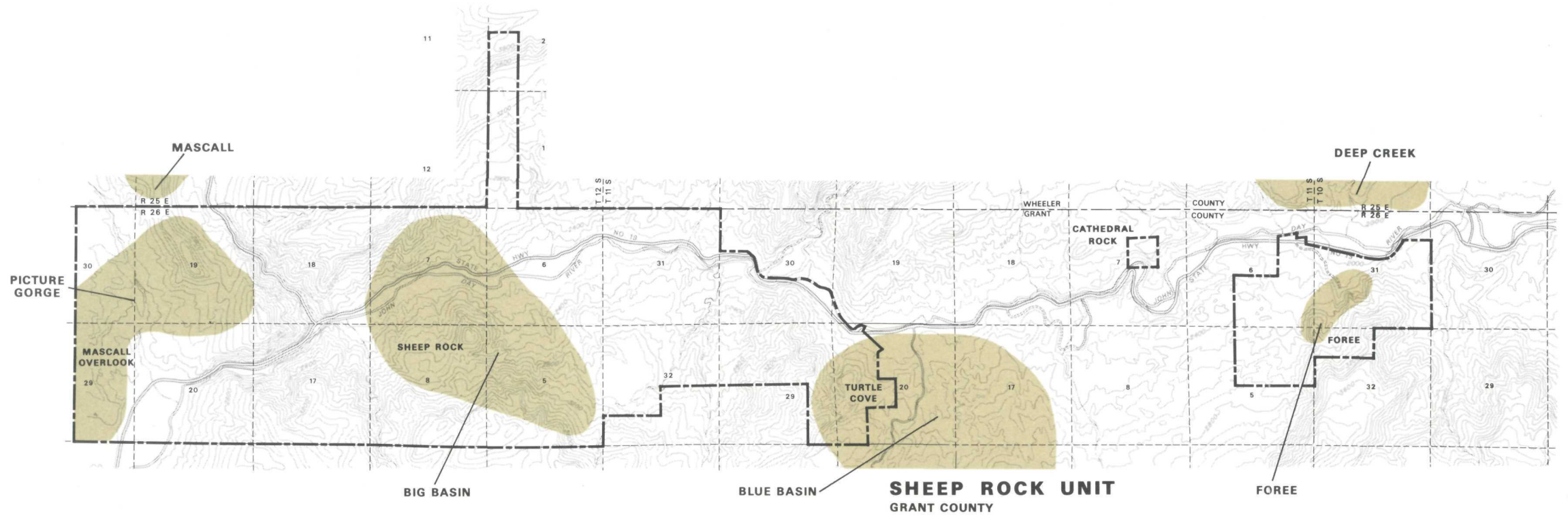
Another noted paleontologist, R. W. Chaney, said that "no region in the world shows more complete sequence of tertiary land populations, both plant and animal, than the John Day Basin."

Contributing to the significance of the monument are scenic, natural, and cultural resources.

The colorful exposures of the John Day formation, the high buttes, escarpments, and pinnacles formed by the Columbia River basalts, and the Clarno exposures in Wheeler County and the western part of Grant County present a pleasing and quite impressive scenic landscape.

The rather typical high desert ecosystem still contains examples of most of the plant and animal species that existed here before the coming of the white man.

Although the extent of the prehistoric human resource is not fully known, it exists and requires further study. Historic European impact was relatively minor from the fur trade exploration in the 1820s through the gold rush of the 1860s. With the gold rush came the settlers and the introduction of ranching and agriculture. The John Day Valley became known worldwide in the 1860s, when the rich fossil deposits were discovered.



LEGEND

FOSSIL REGIONS

MONUMENT BOUNDARY



PALEONTOLOGY

JOHN DAY FOSSIL BEDS NATIONAL MONUMENT

OREGON

UNITED STATES DEPARTMENT OF THE INTERIOR — NATIONAL PARK SERVICE

EXISTING LAND USE

The zones and subzones identified on the Existing Land Use map divide the monument land base according to present uses and are subject to revision as changes occur.

NATURAL ZONE

The natural zone encompasses the undeveloped natural areas of former Oregon state park and Bureau of Land Management lands that have been transferred to the National Park Service.

Outstanding Natural Feature Subzone

This consists of most of the former Oregon state park lands. These lands encompass the significant paleontologic and scenic geologic resources.

Natural Environment Subzone

This includes approximately 300 acres of the Sheep Rock unit and approximately 1,200 acres of the Painted Hills unit that are not considered outstanding for their geologic, scenic, or other significant values.

Grazing Subzone

Federal land in this subzone encompasses former BLM land that will continue to be utilized for grazing under special use permits.

Development Subzone

This subzone consists of three small picnic areas in the Clarno and Painted Hills units and the overlook in the Sheep Rock unit.

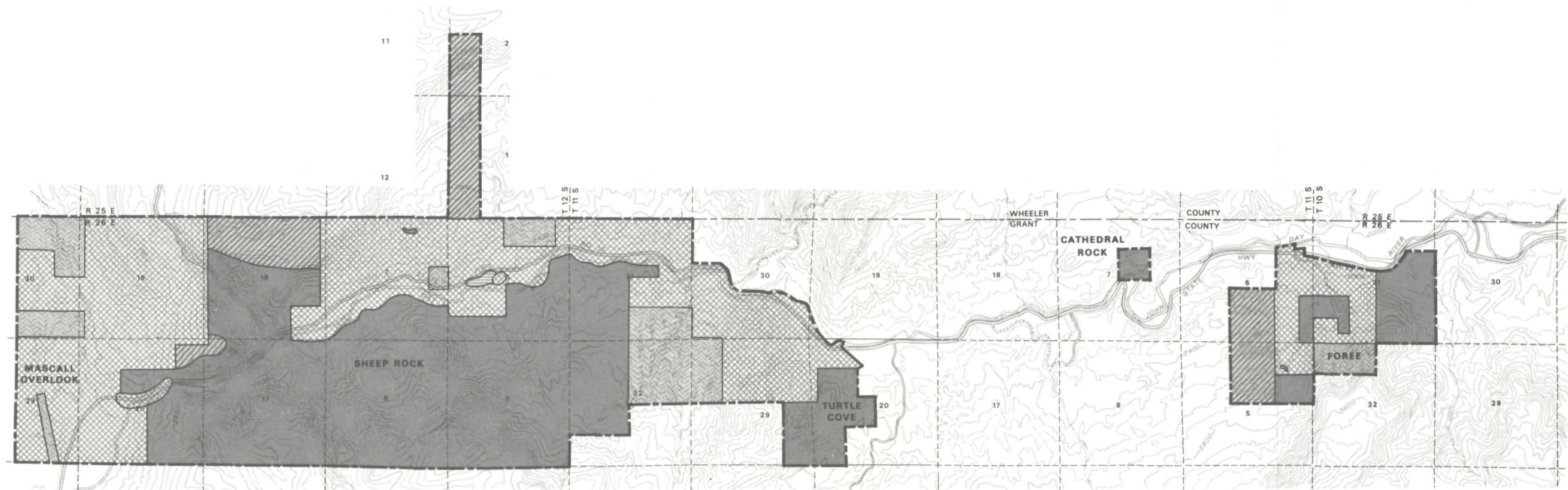
HISTORIC ZONE

The historic zone includes areas of known archeological, cultural, and historical significance. Other areas of significance may become evident as archeological and cultural studies are completed.

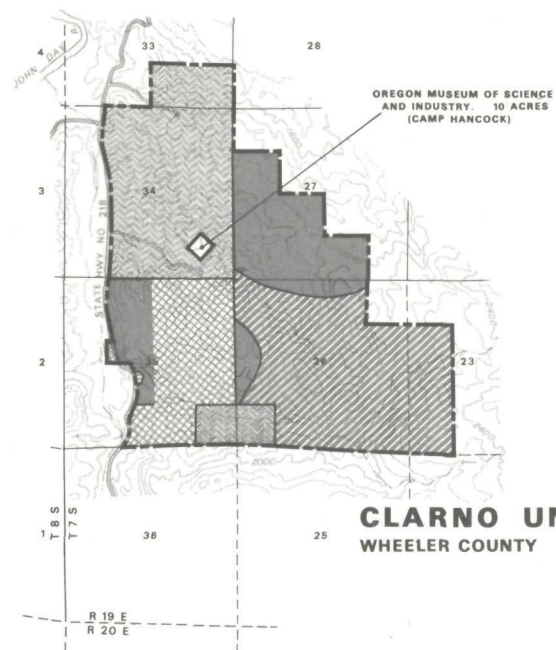
SPECIAL USE ZONE

Ranching Subzone

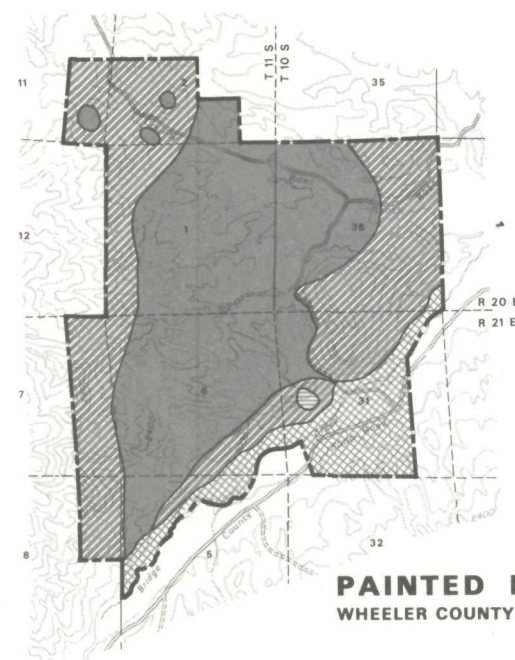
The ranching subzone embodies mostly privately owned lands that lie within the boundaries. In addition, the ranching subzone includes approximately 878 acres of federal land that was recently acquired in fee but where ranching will continue as part of the negotiated settlement until December 31, 1982.



SHEEP ROCK UNIT
GRANT COUNTY



CLARNO UNIT
WHEELER COUNTY



PAINTED HILLS UNIT
WHEELER COUNTY

LEGEND

- MONUMENT BOUNDARY
- NATURAL ZONE**
 - OUTSTANDING NATURAL ENVIRONMENT
 - NATURAL ENVIRONMENT
 - GRAZING
 - DEVELOPMENT
- HISTORIC ZONE**
 - HISTORIC
- SPECIAL USE ZONE**
 - RANCHING



EXISTING LAND USE
JOHN DAY FOSSIL BEDS NATIONAL MONUMENT
OREGON
UNITED STATES DEPARTMENT OF THE INTERIOR — NATIONAL PARK SERVICE

I N F L U E N C E S O N M A N A G E M E N T

LEGISLATIVE AND ADMINISTRATIVE CONSTRAINTS

Legislative Constraints

Constraints written into the Act of October 26, 1974 (P.L. 93-486, 88 Stat. 146), which authorized John Day Fossil Beds National Monument, and the Act of November 10, 1978 (P.L. 95-625, 92 Stat. 3467), that amended portions of the enabling legislation are as follows.

Lands: Public Law 95-625 revised the boundaries by adding 1,411 acres to the monument and deleting 1,620 acres from the monument as established by Public Law 93-486. Some \$3,500,000 is authorized for acquisition of the new acreage. NOTE: Reversionary provisions in deeds transmitting state-owned lands within the boundaries of the monument to the United States stipulate that if any of those lands should cease to be used for park purposes, ownership would then revert to the state of Oregon.

Fencing Incumbrance: A final judgment by Circuit Judge J.A. Campbell, Case No. 2250, in a condemnation suit brought by the state of Oregon in acquiring lands for the Painted Hills State Park, prior to donation to the federal government, stipulates that an easement be reserved to the defending landowner for a cattle and equipment passageway across the west half of Section 36, Township 10 South, Range 20 East, except the southwest quarter of the southwest portion of said section, and along Painted Hills County Road, No. 522 (which goes from Bridge Creek County Road, No. 538, to the former Fitzgerald ranch) 60 feet on each side of the center line of said road. Property lying within these reserved parcels cannot be fenced to exclude cattle from them.

Visitor Center: "The Secretary [shall] designate the principal visitor center as the Thomas Condon Visitor Center."

Exclusion of Camp Hancock: Map No. 177-30,000-B, referenced in the enabling act, identifies a 10-acre lease that the Oregon Museum of Science and Industry holds from the Bureau of Land Management. This leased land is an exclusion from the Clarno unit of the monument and is utilized primarily as an overnight outdoor classroom and research center for students of all ages. As such, the presence of this installation and the personnel using it have some influences upon adjacent resources and visitors.

The Antiquities Act of 1906 provides additional legislative reinforcement for the protection of paleontological resources on federal lands.

Administrative Constraints

John Day Fossil Beds National Monument is managed as a park unit under group management at Klamath Falls, Oregon, along with Crater Lake National Park and Oregon Caves National Monument.

John Day contains three separated units located in relatively isolated, sparsely populated east-central Oregon. The remoteness of the monument from population centers and the extreme distance separating the units influences both management and planning for visitor services and interpretive developments. The units are:

The Sheep Rock unit, situated 5 miles north of Dayville, Oregon, comprising approximately 8,640 acres

The Painted Hills unit, situated about 10 miles northwest of Mitchell, Oregon, comprising approximately 2,997 acres

The Clarno unit, located 20 miles west of Fossil, Oregon, comprising approximately 2,043 acres

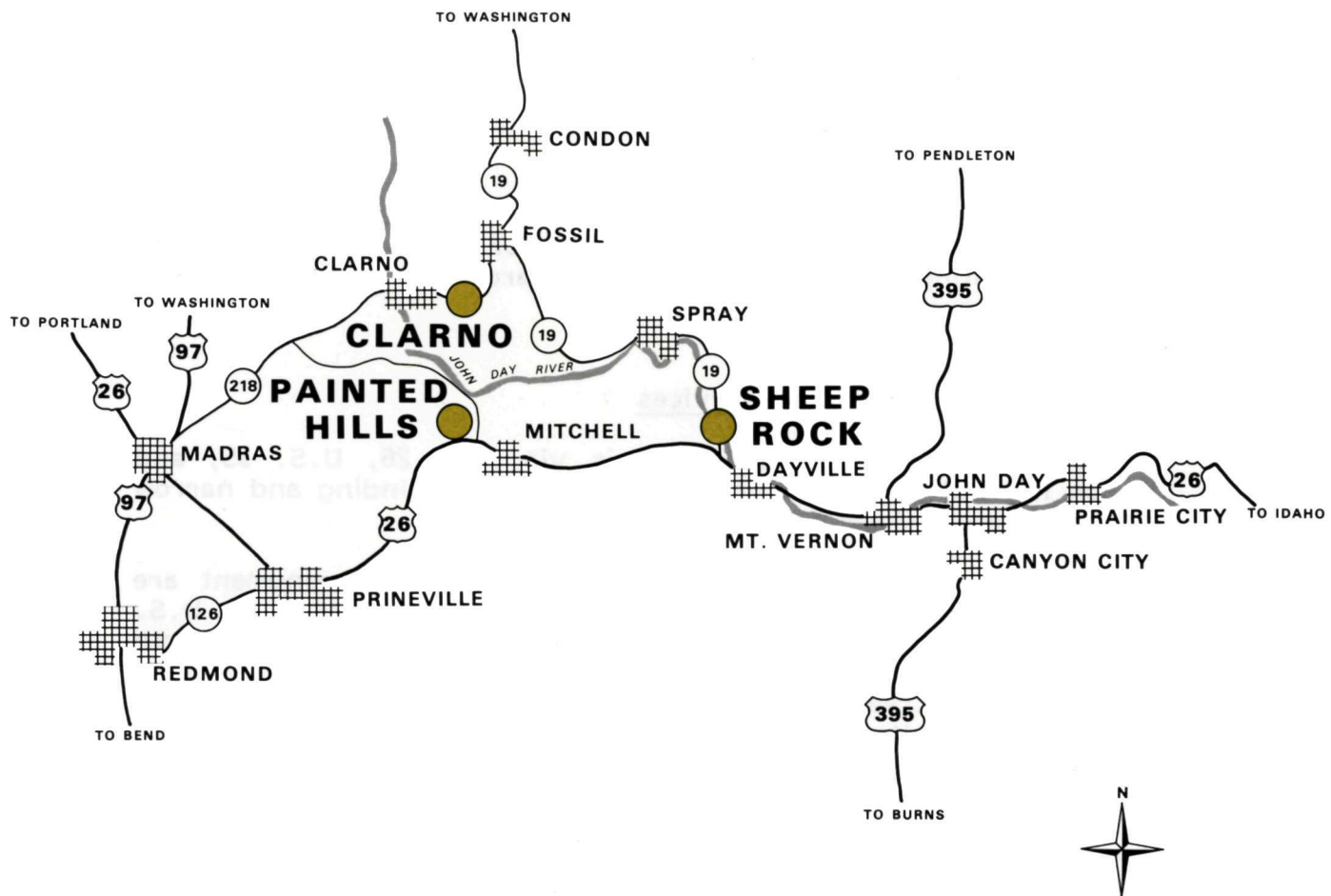
Jurisdictional Limitations

The National Park Service has proprietary jurisdiction on federally owned lands within the boundaries of the monument. On private lands within the monument, the National Park Service has no authority to enforce the regulations contained in the Code of Federal Regulations (Title 36, Part 1, Section 1.1 [b]) except for scenic easement violations. Proprietary jurisdiction does not present administrative or operational hardships for the management of the monument. Such jurisdiction during the early years following the establishment of a new area affords continuation of general protection and law enforcement activities in the hands of authorities most familiar with the enforcement problems and conditions of the area.

REGIONAL INFLUENCES

General Influences

The region is sparsely populated. Census figures show that Grant and Wheeler counties, which have a combined area of more than 6,500 square miles, experienced a 15 percent decline in resident



THE VICINITY

JOHN DAY FOSSIL BEDS NATIONAL MONUMENT

OREGON

UNITED STATES DEPARTMENT OF THE INTERIOR-NATIONAL PARK SERVICE

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population during the 1960s, from 10,448 persons in 1960 to 8,845 in 1970. The loss was almost entirely because the area has little supporting industry except for lumbering and ranching. In contrast to this decline, Prineville, the county seat of Crook County, experienced a 30 percent population increase during the same decade. (Prineville is 50 miles west of the Painted Hills unit of the monument.) The town of John Day also gained slightly in population during the same period.

The area surrounding the monument consists of ponderosa pine-covered mountains of the Malheur and Ochoco national forests. The wood products industry ranks first in economic importance to the region.

Residents of more densely populated western Oregon find the John Day area a popular and attractive area for recreational activities. The fall hunting season, in particular, produces a large seasonal influx of hunters.

Access and Transportation Services

Access to this area of the state is via U.S. 26, U.S. 35, and Oregon 19. All of these highways are relatively winding and narrow and carry mostly local traffic.

More heavily traveled routes in the vicinity of the monument are located some distance away. North-south traffic is carried by U.S. 97, west of the three units, and east-west traffic by I-80N, north of the three units. As the new area receives more recognition, visitation will increase. However, the relatively isolated locations of the monument units will undoubtedly remain a factor in restraint of visitation for some time.

Daily commercial bus service is available from the towns of John Day, Dayville, and Mitchell, to Portland, Oregon, and Boise, Idaho.

Existing access and transportation facilities do not appear to be adequate to serve the needs of future visitors to the three units.

The U.S. and Oregon highways that bisect the Sheep Rock and Clarno units and provide the nearest state highway access to the Painted Hills unit are administered by three separate Oregon state highway district offices. These are located in Pendleton, The Dalles, and Bend, Oregon.

Access to the Sheep Rock unit is by U.S. 26 and Oregon 19. Short paved access roads with terminal parking areas at Turtle Cove and Foree are provided. There is also a dirt access road to the Mascall overlook.

Oregon 218 provides access to the Clarno unit. Access to the Oregon Museum of Science and Industry camp is via a dirt road off Oregon 218.

Access to the Painted Hills unit is by a paved Wheeler County road. This unit is 7 miles north of U.S. 26 near Mitchell.

Bureau of Land Management Administration of Adjacent Lands

Lands administered by the Bureau of Land Management that lie adjacent to the three units of the monument are administered from district offices in Burns and Prineville, Oregon. A close working relationship must be maintained with these offices since these lands are leased for grazing and the boundary with the monument has not been fenced.

The immediate area surrounding the monument has been grazed, cultivated, and hunted for over 100 years. As a result numerous exotic species of flora and fauna exist.

State and County Programs

Deer and predator control activities by the state are particularly sensitive. Complete cooperation and understanding of respective policies must be established with the Oregon State Fish and Wildlife Commission in matters which affect wildlife within the lands adjacent to the monument.

Cooperation with both Grant and Wheeler counties is also necessary to comply with the county noxious weed control program since the program applies to federal lands within the monument.

Summary of Regional Influences

Regional influences strongly affect the potential management of John Day Fossil Beds National Monument. The relatively sparse populations of the immediate area will obviously affect visitation; a large proportion of the visitors may come from outside the region, probably Portland, and the number of visits is not likely to be large. Because of the lack of adequate public transportation, most visitors will arrive by private automobile or chartered buses.

The agriculture- and forestry-based economy will not support any large population gains in the near future. Manufacturing or industry probably will not play an increased role in the regional economy.

Management of natural resources within the monument will be influenced by regional resource management decisions. Bureau of Land Management grazing practices will affect the monument, at least until boundaries are fenced. Oregon Fish and Wildlife Commission predator control activity adjacent to the monument will also influence predator populations within the boundaries, and deer management in the entire region will influence the deer herds of the monument.

In summary, because of the small size and fragmented ownership of the monument, regional influences will make management as a traditional natural area difficult, at least in the near future. In addition, interpretation and visitor-use management must take into consideration the potentially small number of annual visits, with significant proportions of visitors coming from outside the immediate area.

WITHIN-PARK INFLUENCES

Land Use

Land use in John Day Fossil Beds National Monument is mostly agricultural, with the exception of the transferred state and federal lands. Agricultural uses within and adjacent to the monument consist almost entirely of dryland pasture supplemented by irrigated pasture and feed crops. Only the land close to rivers, approximately 1 to 3 percent of the land within the two-county area, is capable of sustaining such crops with the aid of irrigation.

The sensitivity of the resources and the fragility of the land--especially in the Painted Hills unit--will influence development, visitor services, and use considerations.

The John Day River flows through the Sheep Rock unit. The river will undoubtedly influence a certain percentage of visitors who want to fish, swim, or float in it.

Weather

The climate of the region is dry, with an annual average precipitation of 12 inches or less, some in the form of local cloudbursts.

The high summertime temperatures in the stark, eroded fossil-bearing formations will undoubtedly influence the length of stay of summertime visitors. The spring and fall temperatures and weather conditions are extremely pleasant for visitation.

Private Lands and Private Operations

With the recent acquisition of the 878-acre Cant ranch in the Sheep Rock unit, the National Park Service agreed with the former owners to permit the continued agricultural use of 878 acres through 1982, and permit the former owners to continue their access across the monument lands for ranching purposes.

Grazing will be eliminated on those private lands acquired in fee title by the federal government; however, in some cases, grazing and/or other agricultural uses may continue as a condition of negotiated settlement for a specified period of time.

Lands within the monument formerly leased by BLM for purposes of grazing will continue to be utilized for grazing of domestic livestock under special use permits until each permittee is willing to relinquish his permit. Many such parcels within the monument are not contiguous with other government-owned lands, but are isolated parcels separated from each other by privately owned lands within monument boundaries. One such parcel in the Foree area is separated from other monument lands by approximately 57 feet of private land.

Access is provided by a road across monument lands to Camp Hancock, the Oregon Museum of Science and Industry facility, which is situated outside the monument boundary on a 10-acre parcel leased from the Bureau of Land Management. The road crosses monument lands historically used by the public. Trails to and from Camp Hancock, a water well, and utility lines servicing the camp are also located on monument land. These facilities will continue to be authorized by permit.

R E S E A R C H N E E D S

Significant deficiencies of information exist for certain monument resources; for example, there are possibly rare and endangered plants within the monument, the identity and location of which are presently unknown. The extent of animal damage to agricultural operations adjacent to and within the boundaries is not well defined. Research is needed to provide management with an estimate of the magnitude of, and possible solutions to, any such problems. Specific research needs will be identified during the planning process, but projects will require time for completion. Therefore, management will not have the benefit of all needed information during the interim period.

MANAGEMENT OBJECTIVES

CONSERVATION OF RESOURCES

To preserve the monument's extensive record of Cenozoic era plant and animal fossils and to encourage resource-compatible use of the monument for acquisition of additional knowledge on the paleontological, geological, and climatological history of the region.

To conserve, to the greatest degree possible, the monument's ecological resources, free from the adverse influences of man, as enduring examples of the physiographic and biotic communities of the Columbia plateaus.

To identify, determine the significance of, and protect the monument's cultural resources.

To ensure that grazing and agricultural uses of the monument by private interests are carried out in a manner that minimizes adverse impacts on monument resources. In areas where grazing and other agricultural uses are discontinued or not authorized, some restorative measures may be appropriate, but the principle should be to allow ecological changes and conditions to occur naturally where possible.

MANAGEMENT EFFICIENCY

To optimize the efficiency of management through provision of appropriate staff and environmentally compatible facilities for administration and operations in the monument.

Land Base

To secure a land base that is adequate to ensure preservation and public enjoyment of the significant geological and paleontological resources, and to incorporate resources for which the monument was established, as may be identified by research.

Recreational Use

To explore the feasibility for picnicking, camping, sightseeing, hiking, and other recreational uses by considering appropriate facilities and programs that optimize the diversity of visitor experience without impairing the long-term perpetuation of monument resources.

Interpretation

To foster an understanding, appreciation, and interpretation of the paleontological, geological, climatological, and ecological evolution of the monument and region, as recorded in the strata of the central and upper John Day River basin, and also of the cultural resources within the monument.

COOPERATION

To promote and perpetuate compatible use of the monument and regional resources through cooperation in planning and management activities with the Bureau of Land Management, the Oregon Museum of Science and Industry, and other governmental agencies, organizations, and public interests.

RESEARCH

To identify specific monument-related resource inventory and research needs for management, and direct management of resources to meet those needs.

B A C K G R O U N D

It is the purpose of this plan to identify the history and current condition of each of the monument's resources, state the condition that is sought, and propose management actions for achieving the new condition. The resource management proposals include actions that are necessary to protect monument resources from further deterioration and, where possible, to rectify existing conditions that pose a threat to monument resources or adjacent landowners, and actions that are necessary for compliance with existing legislation.

The National Park Service is obligated by law to manage the natural and cultural resources within its areas in such a way that they will be preserved or perpetuated in as nearly their natural and authentic state as possible. The most important resource at John Day Fossil Beds is, of course, its paleontological resource. However, the vegetative and wildlife resources must also be managed to perpetuate a natural state, and in such a manner that there are as few adverse effects on adjacent landowners as possible. In addition, the cultural (historical and archeological) resources must be identified and appropriately cared for.

M A N A G E M E N T Z O N I N G

The management zones/subzones are based on proposed land uses and reflect long-term resource management within the monument.

The following zones and subzones, identified on the Management Zoning map, divide the monument's land base according to the proposed land uses.

NATURAL ZONE

Lands in this zone are managed for the conservation of natural resources and processes, and the accommodation of uses that do not adversely affect these resources and processes.

The natural zone encompasses the undeveloped natural areas of former Oregon state park and Bureau of Land Management lands that have been transferred to the National Park Service.

Outstanding Natural Feature Subzone

This subzone consists of lands with natural features whose intrinsic value or uniqueness is preserved for public appreciation and interpretation.

Included in this subzone are most of the former Oregon state park lands. These lands encompass the most significant paleontological and scenic geologic resources of the monument.

HISTORIC ZONE

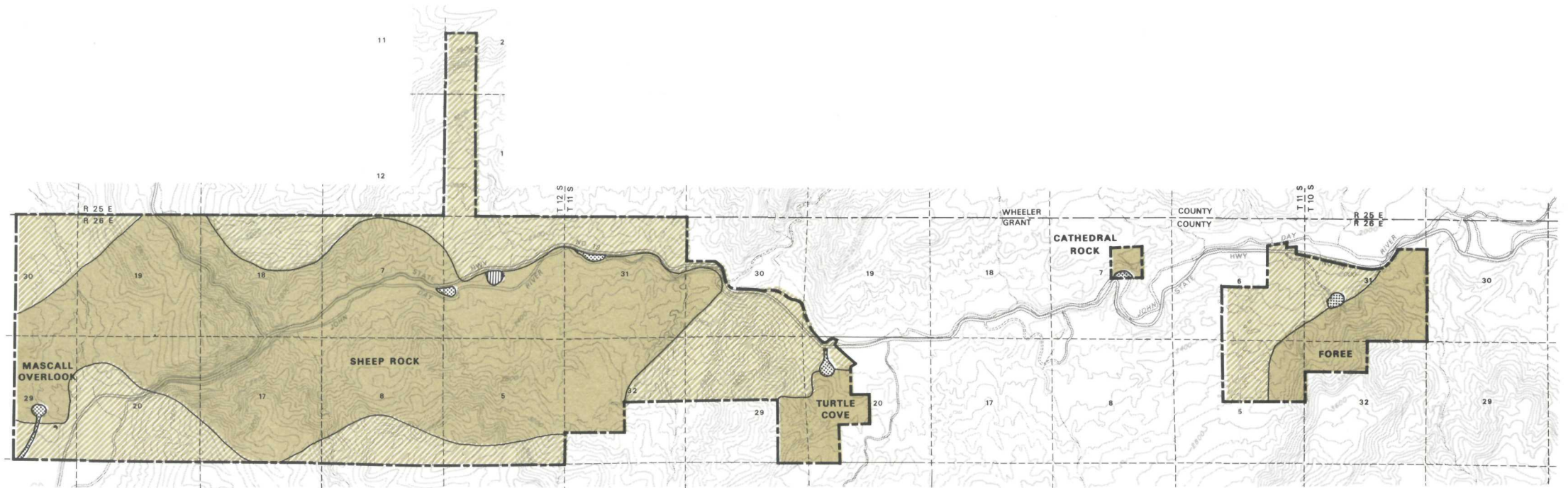
The historic zone includes lands intended for the preservation, protection, and interpretation of cultural resources and their settings.

Cant ranch is the only area of the monument contained within the historic zone.

PARK DEVELOPMENT ZONE

The park development zone includes lands used for the provision and maintenance of park developments which serve the needs of park visitors and management. The zone includes areas where park development and/or intensive use may substantially alter the natural environment or the setting of historically significant resources.

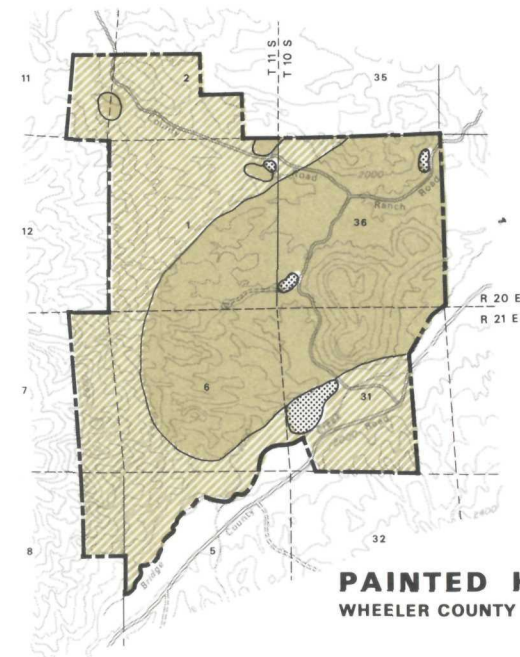
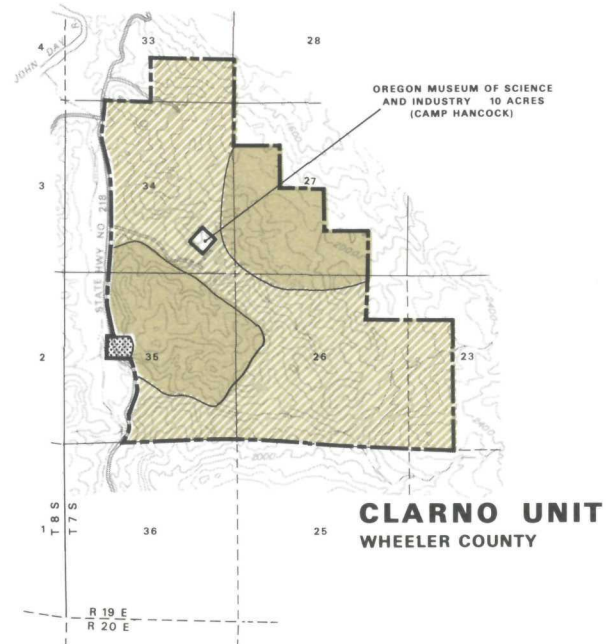
The developed areas, as shown on the General Development Plan map, are included in the park development zone.



SHEEP ROCK UNIT
GRANT COUNTY

LEGEND

-  NATURAL ENVIRONMENT ZONE
-  OUTSTANDING NATURAL FEATURE SUBZONE
-  HISTORIC ZONE
-  PARK DEVELOPMENT ZONE
-  MONUMENT BOUNDARY



PAINTED HILLS UNIT
WHEELER COUNTY



MANAGEMENT ZONING **JOHN DAY FOSSIL BEDS NATIONAL MONUMENT** **OREGON**

UNITED STATES DEPARTMENT OF THE INTERIOR — NATIONAL PARK SERVICE

N A T U R A L R E S O U R C E S

PALEONTOLOGY

Current Conditions

The resources within the national monument are not in themselves unique; the same geologic formations, for example, occur throughout a much more extensive area than the John Day River basin. However, probably nowhere else can the story of earth history be presented and interpreted for public benefit and enjoyment as clearly or in so compact an area as within the monument.

This region is the only one in the world in which an essentially continuous sequence of mammalian fossils extends over an interval of seven million years. The Mascall flora is one of those rare occurrences of fossil plants with an associated mammalian fauna with a radiometric age of 15.4 million years. The amount of currently exposed mammalian fossil material within the monument is extremely limited.

An Antiquities Act permit for collection of paleontological material has been issued to the Oregon State University and the University of Washington by the Department of the Interior. A scope of collections statement for the monument clearly sets forth the guidelines for all such collections.

The three units that make up the national monument differ in their geologic history and, consequently, in their outward appearance and fossil composition.

The Sheep Rock unit is dominated by a tall, imposing geologic feature that gives the impression of being a marker for an important location, which indeed it is. Weathering and landslides have exposed raw earth colors that typify geologic formations, some of which were deposited 30 million years ago.

Four ancient formations, the Rattlesnake, Mascall, Picture Gorge basalt, and John Day, occur in this unit. Flora and fauna fossils of the tertiary period have been found and collected beginning as long ago as the late 1800s, but these collections undoubtedly represent a small sampling of the fossils that still lie within these formations.

The Painted Hills unit is the most colorful of the three units of the monument, represented by a cluster of smooth and barren clay hills. Virtually the entire surface area of the two small hills that

bear leaf "imprint" fossils has been disturbed by past digging. Appearances indicate that an abundant amount of leaf imprint material remains.

The Clarno unit lies on high ground on the east side of the John Day River. The most prominent feature is the towering palisades, rising sharply from the valley floor and forming craggy pinnacles.

Small fossils are relatively abundant. The leaf and wood material embedded within the volcanic mudslide material at Clarno has not been extensively disturbed. The material is embedded over a large area and is not of specific interest to collectors. Interest in the Clarno area has been historically centered upon the Clarno Nut Beds and mammal quarry. Most of the area is undisturbed, although the area has been subject to collections of fossil materials since they were first discovered.

"A Report to the National Park Service on the Significance, History of Investigation, and Salient Paleontological Features of the Upper John Day Basin, Wheeler and Grant Counties, Oregon," by J. Arnold Shotwell, provides detailed information on the geologic and paleontological character of the monument. A copy of this report is a part of the monument library.

Conditions Sought

Paleontological features and the formations in which they occur will be managed so as to prevent unauthorized disturbance. Scientific research conducted by qualified persons will be encouraged to expose representative fossils. The establishment of collections should be properly housed in locations where they will be available to paleontologists for scientific study. All research will be based upon a research proposal approved by the National Park Service and upon issuance of an Antiquities Act permit. Methods of interpreting fossil remains and paleontological techniques at excavation sites and in display areas will also be developed. Access to paleontological sites should be provided only in areas that can be reached without adversely affecting buried or exposed fossils and that can be sufficiently controlled to prevent unauthorized access.

Proposed Management Actions

Protection of the fossils will involve several methods. Development of visitor sensitivity to the resource, through waysides and other interpretive exhibits, will certainly be a major thrust in all three units. Interpretation and protection of fossil resources by National Park Service personnel will be emphasized.

Signs warning against destruction or removal of fossil resources will be placed at critical locations.

If other protective means cannot be found, physical barriers will be constructed around the leaf fossil hills to prevent their loss or damage. Prominent interpretive devices will be developed to achieve optimum interpretation as well as protection.

Only conducted group tours will be allowed to visit the fossil nut beds and the mammal quarry at the Clarno unit.

The National Park Service will support activities conducted by the Oregon Museum of Science and Industry at Camp Hancock, and will cooperate in research projects consistent with resource protection and applicable regulations.

In areas of heavy human impact, e.g., Turtle Cove and the Foree area, interpretive trails will be constructed, which will include wayside exhibits and/or other interpretive devices explaining the paleontologic and geologic features. These trails will bypass some and enter other exposed fossil-bearing formations to achieve both protection and interpretation.

Trailside interpretation will be provided for fossil material that has been exposed in situ at Turtle Cove and Foree. If adequate fossil material cannot be located, consideration will be given to positioning of fossil replicas at appropriate places. Protective devices such as plastic bubbles will be used to house these exhibits.

Research programs will be encouraged. Prime fossils that have been exposed through natural processes will be mapped and located for examination by professional paleontologists and removed if necessary.

A listing will be compiled of all paleontologists and institutions who possess collections of material removed from the monument.

SCENIC VALUES

Current Conditions

The Sheep Rock unit, approached from the south along U.S. 26, features a natural basalt gateway, Picture Gorge. The John Day River meanders through the gorge and traverses the length of the unit, paralleled by Oregon 19. The river is tranquil as it eases across the foot of surrounding hills and is obviously a precious resource in a setting noticeably deprived of much moisture. The opportunity exists for spectacular viewpoints along the river.

The flanks of surrounding hills are sparsely decorated with sagebrush, grasses, and juniper, accustomed to waiting long periods for the summer showers that bring most of the 12 inches of annual precipitation. Upper slopes expose raw cliffs and spires that lay bare the color-coded chapters of geologic upheavals that altered the face of the earth, time after time, through millions of years.

Private lands within the boundaries do not constitute a distraction because of the management objective to integrate natural and ranching scenes. Potential does exist, however, for adverse development to occur in the future. Several large parcels of private lands surround the Sheep Rock unit. These private lands are active ranchlands, typical of many that are situated in an agricultural belt along the John Day River valley.

The most prominent ranch within the boundary is one that until recently belonged to the Cant family; it was purchased by the National Park Service in 1975. It lies about midway the length of the unit and serves as the visitor contact/paleontological display center. The ranch scene (ca. 1920), nestled in a valley surrounded by rimrock and colorful geologic exposures, characterizes the scene at Sheep Rock.

Cathedral Rock and Foree are detached portions of the Sheep Rock unit, lying adjacent to Oregon 19, a few miles north of the main body of the unit.

Spur roads to Turtle Cove and Foree do not impinge upon the natural scene. At each of these locations scenic views include lands outside the monument. Cathedral Rock is a roadside feature that has no insulation from surrounding public lands.

The Painted Hills unit is virtually hidden from U.S. 26 northwest of Mitchell, Oregon. In this small area is a series of smoothly sculptured hills and ridges, rounded and folded and startlingly colored in deep reds, green, and buff. Long colored striations run laterally from hill to hill. The colorful clay hills are virtually void of vegetation except for flowering plants that furtively cling to narrow creases in drape-like folds, indicating the presence of moisture.

A major scenic problem exists at the Painted Hills unit. This area of very little vegetation attracts off-road vehicles, motorcyclists, and hikers, who traverse and scar the colored hillsides. A county road passes through the middle of the unit, where the highest scenic values exist. To prevent off-road travel, the state--prior to National Park Service acquisition--erected an unsightly four-wire steel post fence along each side of the road. No trees, shrubs, or other natural features shield it from view. Previously existing foot

trails worn into the very fragile hillsides have been quite successfully erased by "raking out" and subsequent natural weathering. A few have been left for people to use temporarily.

A narrow, unimproved road enters the unit from the east and turns south. A short spur road enters from the north.

There is an overlook connected to the main road that provides an uninterrupted view into the heart of the Painted Hills. A trail continues beyond the overlook, utilizing the obliterated portion of the old overlook.

A small kiosk and attractive exhibits temporarily provide interpretation for visitors.

The Clarno unit is small, and its scenes are common in eastern Oregon and in the Sheep Rock unit, in particular, except for the dramatically sculptured outcrop known as the palisades. These tall weathered spires provide an exciting view that can be enjoyed leisurely from the picnic area at the base of the formation.

Little evidence of man's impact on the scene exists at the Clarno unit except for subtle evidence of grazing and the Camp Hancock enclosure. Camp Hancock--the Oregon Museum of Science and Industry site leased from the Bureau of Land Management--is cuddled in a little canyon surrounded by hills that hide it from view from all directions. Some indiscriminate trailways have been worn into the hillsides by residents and users of the camp.

Conditions Sought

The scene should be a pleasing mixture of natural and pastoral landscapes. Highways and roads should be kept at a minimum but sufficient to provide thoroughfare and limited access to destinations with natural and scenic values. Alteration of existing roads should be undertaken only to enhance the scene and provide legitimate accessibility. Trails should be provided for specific, complementary purposes; others obliterated. Off-road vehicle use should not be permitted except on lands cultivated for agricultural purposes. Restrictive measures for preventing off-road use should be carried out in a manner that does not detract from the scene.

Proposed Management Actions

Ongoing liaison with Grant and Wheeler county planning commissions will be required to perpetuate land uses (grazing and hay production) now existing adjacent to monument lands and to prevent structures from being built which would impinge upon the natural or pastoral scene.

Some minor realignment of state highways is contemplated and will generally complement scenic attributes. No detractions are envisioned. No monument lands will be affected by realignment, and no changes in rights-of-way are anticipated except for some possible relocation at the Mascall overlook. Close coordination with the Oregon State Highway Department will be maintained to assure preservation of scenic values. Road signs are provided by the state. Entrance signs are placed on state rights-of-way by the National Park Service.

All development projects will be carefully reviewed to assure the greatest preservation of aesthetic values.

As detailed in the "General Development" section of this plan, permanent, well-defined trails will be provided for hikers and will hopefully reduce indiscriminate cross-country travel. A few new trails will be built to reach special points of interest in each unit. Old trails leading to destinations will be consolidated, particularly in the Painted Hills unit.

Ideally, the access road in the Painted Hills unit should be relocated away from the middle of the scenic overview, but feasibility of achieving this is not promising. For the foreseeable future, this access road will remain in its present location, but it will be improved to better confine traffic. Innovative landscape design will be required so that the fence on each side of the road can be removed as soon as possible. Although rerouting of the road does not now appear feasible, investigation of such possibilities should be continued.

VEGETATION

Current Conditions

All three units of the monument support similar plant communities, although species of these communities do vary from unit to unit.

The basic plant communities include the greasewood/cheatgrass, the shadscale/Sandberg's bluegrass, the sagebrush/Sandberg's bluegrass, the big sagebrush/bluebunch wheatgrass, and the western juniper/big sagebrush communities.

There is an excellent compilation of plant communities and the species they contain in a 1977 report by Berta A. Youtie and A.H. Winward, titled "Plants and Plant Communities of John Day Fossil Beds National Monument." This report serves as the most definitive reference on vegetation.

Approximately 200 acres of the bottomlands within the Sheep Rock unit and approximately 30 acres of bottomlands in Painted Hills unit are irrigated haylands. Numerous exotic plant species are associated with this haying operation.

Youtie and Winward state: "The damage presently occurring on the Monument appears to be minimal except immediately adjacent to watering sources. Under present management these areas will likely stay in a poor but stable condition. On the remainder of the Monument the range should begin to show improvement but at an extremely slow rate. Even if livestock are completely removed from the park the rate of improvement would be extremely slow, especially on the severely disturbed sites. Without use of 'artificial' techniques for improvement, a return to good or excellent conditions will likely require hundreds of years. In fact, this may never be attained due to the lack of seeds from original species and the strong competition from exotic and increaser species. Similar sites in other areas of the sagebrush-grass region have shown essentially no improvement after 35 years of complete protection within exclosures."

It is important to know the endangered and rare species in each unit and identify their location to assure that no human use adversely affects these species. The rare and endangered species that occur in each unit are listed here:

Sheep Rock unit--John Day milkvetch, barrel cactus, crested tongue penstemon, and belled cinquefoil

Painted Hills unit--pauper milkvetch, yellow hairy paintbrush, John Day chanactis, Henderson's lomatium, barrel cactus, and belled cinquefoil

Clarno unit--yellow hairy paintbrush and crested tongue penstemon

Conditions Sought

The natural zone should be managed to permit a natural plant succession to occur as a balanced environment and as a habitat for wildlife dependent upon it. Where exotic plants occur as a result of man's use of the land, causing natural growth and reproduction to be jeopardized, rehabilitation programs should be implemented to stop the adverse effect and restore ground cover to natural levels. Riparian habitats should receive particular attention to protect water courses and the wildlife dependent upon them.

Use of agricultural lands should be confined to those previously cultivated areas that are determined to be important to the history

of the monument and should be representative of the type of agriculture common during the early settlement of the area.

Proposed Management Actions

A study will be undertaken to determine the scope of a revegetation program for the reestablishment of native plant species. If original vegetation is to be restored, some artificial improvement will have to be employed. Reseeding of traditional range forage species does not meet the goal of restoring native vegetation but still may remain a viable alternative for establishment of perennial species.

Boundary fences around all three units will be constructed to control movement of livestock from adjacent areas. These fences will also help people distinguish monument lands from other federal and private land.

A portion of the Sheep Rock unit will be considered as a research natural area.

The reestablishment of native riparian habitat will be accelerated by judicious planting of willow and cottonwood as impact of livestock use is reduced and more natural streamflow is achieved.

The current program of ridding the monument of what Grant and Wheeler counties have classified as noxious nonnative weeds will continue. These are principally Tribulus terrestris (puncture vine), Cardaria draba (white top), and Centaurea repens (Russian knapweed).

WILDLIFE

Current Conditions

A drastic change in faunal composition of the region has evolved in the past hundred or so years due to intensive settlement and agriculture. Deer and coyotes have survived and flourished in all three units. Rabbits, squirrels, gophers, and rodents are common residents throughout the monument, and bobcats inhabit all three units. Mink, beaver, muskrat, and raccoons are occasional residents within the Sheep Rock unit. Partial bird lists have been compiled, but comprehensive lists of reptiles, amphibians, and anthropods have not.

Hunting is not allowed in the monument. A major concern on the part of neighboring ranchers is the refuge that will be provided for coyotes on monument lands. Opinions have been expressed that "coyotes foraging out of the Monument will attack, kill and devour

livestock and then return to their haven of protection." It is not known how serious a problem this actually is or might become, nor is the interaction between deer and coyotes known.

Deer depredation, particularly to alfalfa fields, may occur on lands adjacent to the monument, particularly near the Sheep Rock unit. It is obvious that deer feed in fields within the monument, but it is not known how far they range beyond monument lands or if they feed there.

Chukar partridge and pheasant are exotics that have become established in all units. Mouflon sheep periodically wander into the Painted Hills unit. No threatened or endangered wildlife species are known to inhabit the monument.

Three gallinaceous guzzlers (bird watering devices) were installed in the Sheep Rock unit by the state of Oregon before the establishment of the monument. Their purpose is to provide places to water away from the river.

The state of Oregon has jurisdiction over waters that flow through the monument. Fish such as the steelhead use the John Day River and tributaries for spawning. Other species of fish include redband trout and spring chinook salmon (native); and brook trout, rainbow trout, dolly varden, cut-throat trout, Montana whitefish, small-mouth bass, channel catfish, black bullhead, and brown bullhead (introduced). Freshwater sculpin, and miscellaneous minnows, carp, suckers, and lamprey are also present. Fishing is regulated by the Oregon Department of Fish and Wildlife.

Extensive wildlife habitat modification exists because of intensive human impact; particularly obvious disruptions are livestock grazing, fence barriers, and stream channelization. The John Day River has been channeled along much of its length to "reclaim" bottomland and to facilitate irrigation.

Conditions Sought

Adherence to a policy for wildlife management on a nonmanipulated basis is not possible. Limited land areas are involved and extensive habitat modification has taken place over the years. Restoration to as near natural conditions as is reasonably practical is the objective.

With proper management of the habitat, wildlife will be maintained at levels consistent with the carrying capacity of natural habitats. Introduction of native species will be based upon studies that demonstrate the ability of the habitat to sustain increased populations within monument lands. Manipulation of the habitat may

be necessary to restore natural conditions for mammals, birds, fish, or reptiles.

Exotic species that adversely affect natural processes will be eliminated from the monument when feasible and practical to do so.

There is a need to identify threatened and endangered species that are permanent or migrating residents of the monument.

Proposed Management Actions

A comprehensive survey of all species of wildlife inhabiting the three units of the monument will be undertaken. Threatened or endangered wildlife will be identified and their seasonal or breeding status determined. This survey will also identify species known to have inhabited the area in the past.

Deer management programs will be derived from a research program designed to monitor herd movements and population levels. Any management program will be coordinated with the Oregon Department of Fish and Wildlife. Should it be determined that a segment of the monument's resident deer herd is causing depredation, appropriate methods to alleviate the situation will be implemented in cooperation with the Oregon Department of Fish and Wildlife, consistent with National Park Service policies.

A research program to monitor coyote movements and population levels has been initiated. This research and subsequent action will also be coordinated with the Oregon Department of Fish and Wildlife.

Although the chukar partridge is an exotic, it is not feasible to eliminate the species from the monument due to its relative abundance on adjacent lands. The same is true for pheasant. No research or management programs are called for regarding these two species.

Data as to the effect that the three gallinaceous guzzlers have on wildlife populations must be collected and analyzed before any determination is made for removal. An option to move the guzzlers to adjacent lands outside monument boundaries must remain open, and any such action will be coordinated with the Oregon Department of Fish and Wildlife.

Raptor management will be based on continued identification, monitoring, enhancement, and protection of nesting sites, coupled with rehabilitation of riparian habitat.

Fishing will continue in those waters designated as open to fishing by the Oregon Department of Fish and Wildlife. The state has the authority to establish seasons, species taken, and limits, and fishermen are governed by state rules and regulations. The state retains authority to enforce these rules and regulations.

Habitat rehabilitation programs, such as the reestablishment of riparian vegetation along the John Day River and Bridge Creek, and noxious weed control areawide, will be carried out cooperatively with the state and counties involved.

Certain irrigation devices required for agricultural uses will be maintained in the future as in the past, but the river at Sheep Rock will not be channeled. Should channel cuts or streamside alteration occur through a natural course of events, no "corrective" action will be taken. No new artificial control of the channel flow will be instituted in the future. Hence, habitat for beaver, mink, waterfowl, and fish will be improved over a gradual long-range natural process of counter "reclamation." Fields that become affected from this process will be taken out of production. One exception to this management action, or inaction, would be erosion and flood protection for highways and highway structures (culverts, bridges, embankments, etc.).

Reintroduction of extirpated species will be considered subsequent to feasibility studies in each particular instance. The desirability of reintroduction of the California bighorn sheep will be considered subsequent to studies of the feasibility and practicality of such a reintroduction. An interagency committee, similar to one at Lava Beds National Monument, is proposed to act in an advisory capacity. All management actions, if the program is undertaken, will remain the responsibility of the monument superintendent.

WATER

Current Conditions

The average annual precipitation at the three units is low, as evidenced by the 12.84 inches recorded at Mitchell, 14.22 inches at Fossil, and 11.72 inches at Dayville, which can be considered to be comparable with the Painted Hills, Clarno, and Sheep Rock units, respectively. However, a serious problem lies in severe thunderstorms and flash flooding such as the Mitchell flood in 1956, when about 4 inches of precipitation fell within a three-hour period, causing extensive flooding and damage in the Bridge Creek (Painted Hills) area. There has not been a serious flood in the Sheep Rock unit since the 1964-65 flood, which was caused by heavy snowfall and rain followed by warmer weather. A documented report on flood hazard conditions is contained in a U.S. Geological Survey

report, "water for the John Day Fossil Beds National Monument, Oregon," by F.J. Frank. The document is available at monument headquarters.

One of the numerous discharge measurement stations for the John Day River basin, in existence since 1927, is located within the Sheep Rock unit at Picture Gorge. The U.S. Geological Survey gauge number 14-0405 shows how the runoff of the river has decreased in the valley in the 55 river miles downstream from Prairie City (taken from "Review of Water Power Classifications and Withdrawals, John Day River Basin," 1973, pages 17-18).

John Day River and Bridge Creek waters provide numerous hours of enjoyment for visitors fishing, swimming, and floating. These streams are important to the Oregon Department of Fish and Wildlife for producing salmon and steelhead spawning beds.

Ninety-seven percent of the cultivated bottomlands in the John Day River basin are irrigated from natural streamflow. Approximately 200 acres of land in the Sheep Rock and Painted Hills units are cultivated. Water shortages do occur because of the wide seasonal variance in precipitation.

Water rights on the Cant ranch property date back to 1899. The irrigation system that has watered these fields for nearly 80 years consists of approximately 2½ miles of irrigation ditches within the Sheep Rock unit.

At the Painted Hills unit, portions of Bridge and Bear creeks are under consideration by the Soil Conservation Service for irrigation developments according to the 1973 review of the John Day River basin. During periods of peak flow in the John Day River (Sheep Rock unit) and Bridge Creek (Painted Hills unit), bank cutting and sloughing of the cultivated lowlands adjacent to them continually occurs.

Traveling through the John Day River valley on U.S. 26 and Oregon 19, within the Sheep Rock unit, visitors view formations that have been exposed by the erosive action of the river. Numerous small and mostly intermittent streams drain all three units to expose fossil clay beds. In the spring, the water is colored green, red, and pink by the runoff from these formations.

Small landslides are quite common in the Sheep Rock area. They normally occur after rains and a drying-out period. Rock slides take place frequently along U.S. 26 through Picture Gorge, also after rains.

A potable water system is maintained at the Cant ranch. Water is supplied from a spring that flows at about 20 gallons per minute in

the spring of the year. Potable water quality is monitored and complies with public health standards. Development of the Cal Smith spring could increase water storage capability if a future demand occurs. Chemical analysis of the water from these springs indicates that the water contains relatively low concentrations of dissolved minerals. The USGS report also identifies water sources that may be developed for consumption throughout the monument.

Conditions Sought

Water courses should be allowed to flow naturally unless people or physical facilities are threatened. Contaminants should be prevented from being introduced into these waters. Water quality should be maintained or raised. Water sources may be developed and storage facilities established if deemed necessary in the management of the area and the accomplishment of management objectives.

Proposed Management Actions

Potable water quality will be sampled and tested regularly to comply with health standards.

River and streambanks will be stabilized if erosion threatens physical facilities.

Flash flooding will be recognized as a natural process that endangers people and facilities only when the paths of these forces are intruded upon. Use of the lands in these flash flood plains will be avoided.

Irrigation will be permitted in the Sheep Rock and Painted Hills units as long as hay production continues. Necessary ditches, headgates, etc., will be maintained and operated.

The monument staff will support the Oregon Department of Fish and Wildlife in all efforts made to determine desirable water flow and water quality standards needed to sustain fish populations. The monument staff will also cooperate in stream surveys with the Oregon Department of Fish and Wildlife and the U.S. Geological Survey.

FIRE MANAGEMENT

Current Conditions

Fire is always a threat within the three widely scattered monument units. Of the 14,030 acres designed for the national monument,

10,188 acres are in federal ownership and are being protected through an Oregon State Forestry Department fire agreement. The remaining privately owned lands are situated in all three units. Public land acreage breakdowns by unit are:

Sheep Rock unit	6,621 acres
Painted Hills unit	2,833 acres
Clarno unit	734 acres
	10,188 acres

Private and Bureau of Land Management lands surround National Park Service lands at all three units of the monument.

Most of the vegetation within the three units of the monument consists of semiarid sagebrush steppes. Vegetative cover is sparse in most areas; however, isolated islands of nongrazed native bunchgrass communities occur in some of the steeper more protected locations (see "Vegetation").

A full fire suppression program is maintained. The fire history is not well detailed, but apparently range fires have usually been kept to class A and B proportions. Grasses come back quickly, but shrubs return slowly. This may have an effect on wildlife. Paleontological sites are not significantly jeopardized.

Conditions Sought

The influence of natural fire should be beneficial to natural habitats and nondestructive to people, physical facilities, or agricultural resources.

Proposed Management Actions

All fires will be suppressed until the role of fire is determined and found to be beneficial under specific conditions. No fires will be allowed to burn, nor will prescribed fire management be implemented, until it has been determined that natural habitats will benefit.

Should the role of fire be determined to be important to natural plant succession, the use of management fires will be considered if it can be accomplished in harmony with other values. Before such a technique is adopted, a fire management plan will be prepared to detail conditions under which management fires may be utilized and be acceptable to other interests.

Presuppression efforts will be made to assure the preparedness of suppression crews and to contribute to public information programs. Designated National Park Service employees will be trained in a manner consistent with the fire program and servicewide needs for fire management personnel.

A cooperative agreement will be maintained with the Oregon State Forestry Department or other qualified agency to assure the effective suppression of wildfires and the protection of lands.

AIR QUALITY

Current Conditions

Air quality in the vicinity of the monument is generally high, subject to few sources of pollutants; industrial influences are minimal. Burning of agricultural fields is not a common practice. Wildfires are relatively infrequent, but fire history is sketchy (see "Fire Management").

The monument has class II air quality status.

Conditions Sought

Air quality should be protected against degradation.

Proposed Management Actions

Recommend designation as a class I area; comply with the Clean Air Act Amendments of 1977 (Public Law 95-95); and comply with the Oregon "Smoke Management Program," as approved by Oregon State Board of Forestry and Oregon Environmental Quality Commission, February 1972.

C U L T U R A L R E S O U R C E S

HISTORICAL SCENE

Current Conditions

Several themes that relate to monument history are the Columbia Plateau Indians, area exploration and discovery, trapping, ranching, and paleontological research. Location of physical evidences and historical documentation continues to be researched. Additional themes may also develop as a result of further research.

The Cant ranch is situated between U.S. 26 and the John Day River and embraces 878 acres. There is a large family home, which is partially furnished to typify home life of that area. Two rooms serve as exhibit rooms, containing displays that interpret the paleontological resources. There are several farm buildings, including an immense barn. Some of the buildings are used for maintenance and housing. Cattle graze the adjacent pastures.

An inventory of all buildings and structures on parklands has been compiled, and none were found to meet the criteria for nomination to the National Register of Historic Places.

Conditions Sought

A ranch scene that portrays the character of a ranch spanning three quarters of a century should be maintained. Furnishings in the home should typify various facets of home life during the evolution of the western ranch. A portion of the home should be used for interpretive purposes to enhance understanding of the ranch and the area in which it is situated.

All buildings should be outwardly authentic and some, such as the barn, adapted for functional use. Farm implements may be situated around the grounds, indicative of the evolutionary trends in ranching activities. Appropriate agricultural uses may continue, reenforcing the authentic appearance of a working ranch.

Proposed Management Actions

Preparation of a historic resources study will be the first action taken. This study will inventory and document all historic resources within the monument, provide a historic base map of the monument, identify and establish the significance of historical themes, and identify additional studies, reports, plans, or guidelines necessary to manage the historic resources of the monument, including the Cant ranch.

Verbal documentation of history and use of the Cant ranch through recorded interviews will continue in order to assure accuracy and excellence in interpretation of the Cant ranch and early use of the John Day River valley.

The Cant ranch will be maintained to represent the evolution of part of our western heritage. Any special maintenance needs that may be required will be detailed in the historic resources study. A comprehensive management plan for the Cant ranch will be developed concurrently with, and complementary to, the historic resources study. The plan will be specific about how the ranch will be used for cultural, functional, and interpretive purposes.

A photographic file of current ranching operations is being compiled. Several tapes are now on file recording recent events that have occurred at the Cant ranch. Principal authorities are Lillian Cant Mascall and James Cant, Jr.

AGRICULTURAL USE

Current Conditions

Two grazing leases are in effect, both at Sheep Rock. Some 1,000 acres with an authorized 130 animal-unit-months are leased. Three other leases, one at Sheep Rock and two at Clarno, have not been renewed. As part of the negotiated land settlement, 878 acres of lands previously owned by the Cant family at Sheep Rock will continue to be grazed and used for hay production until December 1982, but not used for grazing thereafter.

In each of the three units many of the existing fences are either improperly placed or in such condition as to warrant replacement. Boundary surveys are underway at the Sheep Rock unit. The Painted Hills boundary survey was completed in 1977.

The state of Oregon constructed 3 miles of barbed wire fence on each side of the road in the late 1960s to keep animals and motor vehicles from traversing and defacing the Painted Hills. Public concern over the defacement of the colorful hills brought about this action.

A warranty deed conveying lands of Painted Hills to the state of Oregon in 1947, and a final judgment given in 1971 by the Wheeler County Circuit Court of the state of Oregon, brought up a question concerning fencing and easement for a cattle and equipment passageway. (See legislative constraints in the "Statement for Management" section.)

Conditions Sought

Agricultural use (grazing) will be limited to those lands in the Sheep Rock unit that have historically been grazed under BLM permits until such time as the permittees are willing to relinquish them. At the Cant ranch grazing will be terminated in 1982, but hay production may continue as historical interpretation.

Grazing stock will be confined to the designated parcels so as to avoid interference with natural conditions in the natural zone.

Fences may be used to protect paleontological values from being intruded upon by stock from outside the monument.

The use of herbicides, insecticides, or other chemicals will be permitted only when it is determined that natural or paleontological features will not be affected and no other control is possible; approval must be specifically authorized by the superintendent.

Proposed Management Actions

The two remaining grazing leases will continue to be honored until the permittees are willing to relinquish them. Grazing will not be permitted on monument lands acquired in fee title except as previously mentioned.

After grazing is eliminated from the Cant ranchlands, fields will continue to be maintained as productive hayfields under special use permit in order to retain the ranchlike atmosphere and scenic qualities of this portion of the John Day Valley.

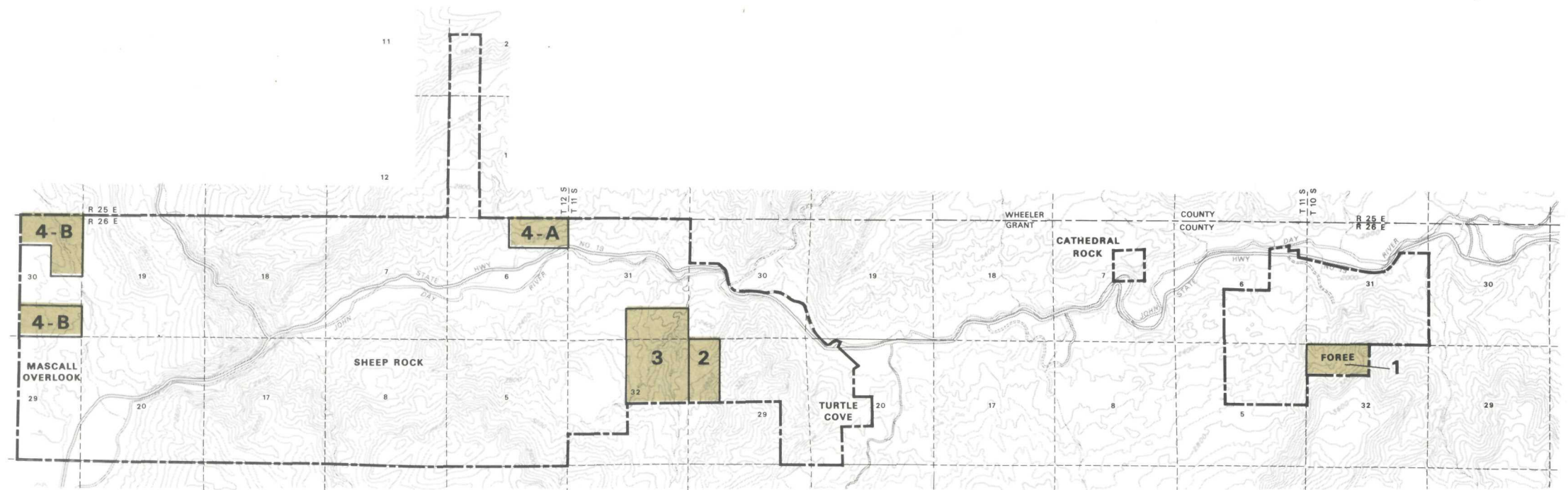
Fencing of all appropriate monument lands will be accomplished wherever feasible to ensure protection of the resources against stock trespass and to permit recovery of the vegetation.

The parcels of land at Sheep Rock and Clarno that were grazed before their special use permits were relinquished will be allowed to return to natural ground cover.

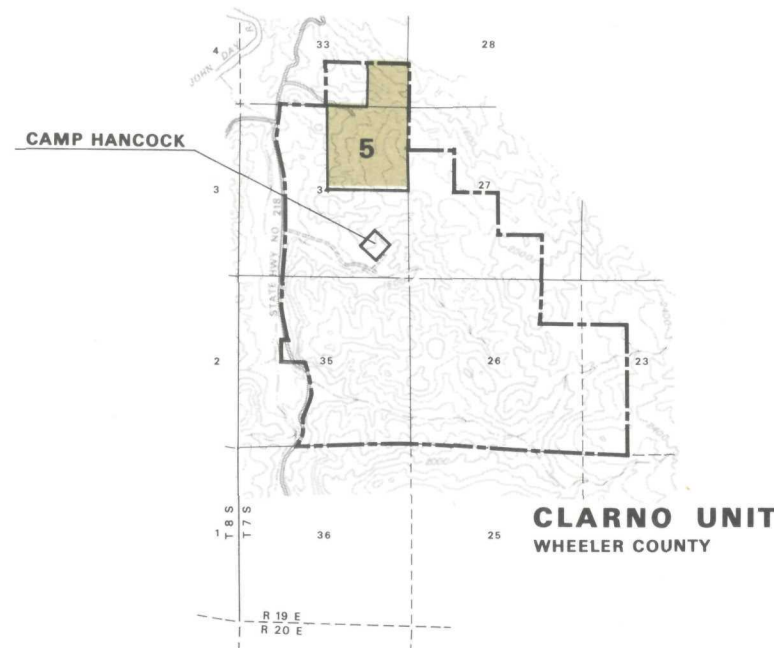
ARCHEOLOGY

Current Conditions

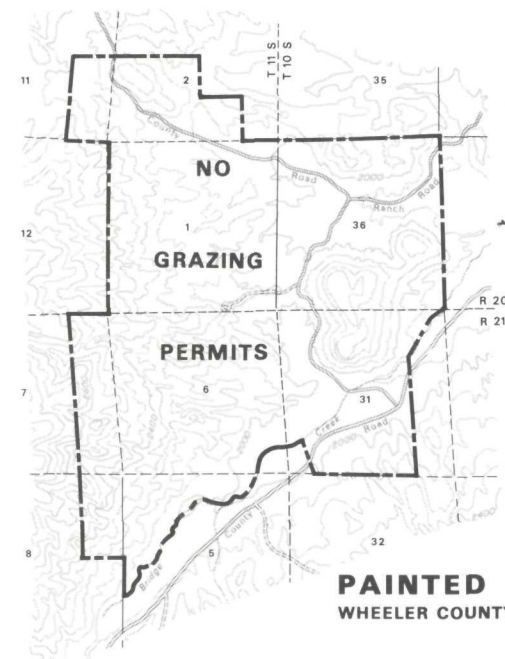
An archeological survey of the monument was conducted in 1976 by Oregon State University under National Park Service contract. The results of the survey are reported in a manuscript entitled "Final Report, Survey of Historic and Prehisotric Resources in the John Day Fossil Beds National Monument," by Wilbur A. Davis. The



SHEEP ROCK UNIT
GRANT COUNTY



CLARNO UNIT
WHEELER COUNTY



PAINTED HILLS UNIT
WHEELER COUNTY

- 1 - O'ROURKE
80 ACRES-6 AUM'S
USE APR. 1-NOV. 30
- 2 - MUNRO
80 ACRES-8 AUM'S
USE APR. 1-NOV. 30
- 3 - NONE
240 ACRES-24 AUM'S
- 4 - I. MASCALL
A. 77.30 ACRES-6 AUM'S
USE APR. 10-OCT. 30
B. 202.27 ACRES-10 AUM'S
USE MAY 1-SEPT. 30
- 5 - BIG MUDDY RANCH

LEGEND

GRAZING AREAS

MONUMENT BOUNDARY



GRAZING PERMITS **JOHN DAY FOSSIL BEDS NATIONAL MONUMENT** **OREGON**

UNITED STATES DEPARTMENT OF THE INTERIOR — NATIONAL PARK SERVICE

survey generally covered the areas of the monument judged most likely to yield remains, and areas where visitor or administrative facilities might be developed. The portions of the area covered by the survey (by no means was the entire monument included) are depicted in the report cited above.

Picture Gorge contains several undisturbed pictographs on the Oregon highway right-of-way. Others in the gorge have been vandalized, probably beyond saving. They are all situated on smooth basalt faces and, although accessible, are passed by, unnoticed, by most travellers.

Conditions Sought

Known remnants of earlier human habitation should be protected from deliberate or inadvertent damage. Steps must be taken to ensure that unrecorded resources on unsurveyed lands are protected from inadvertent damage or pilferage.

Pictographs in Picture Gorge should be given sufficient protection to ensure their preservation, and perhaps someday, be interpreted.

Proposed Management Actions

Any maintenance, construction or other activity that will result in disturbance to the ground surface will be preceded by a check of the survey report to determine if the area was covered. If an unsurveyed portion is involved, the regional archeologist should be consulted to determine if an archeological field inspection is needed.

Lands presently in private ownership and acquired by the National Park Service later should be surveyed for archeological remains. Work by the Oregon Museum of Science and Industry indicates that archeological sites are present on private lands within the monument boundaries.

Although the pictographs in Picture Gorge are on state right-of-way, the National Park Service will work in cooperation with the state of Oregon to prevent damage from being inflicted. If the state cannot provide protection, surveillance will be provided by the National Park Service to assist in the safeguard of these colorful drawings. The Park Service will consider proposals to move them to more secure locations within the monument for protection purposes.

LAND ACQUISITION PROPOSALS

BACKGROUND

Revised boundaries pursuant to the Act of November 10, 1978 (P.L. 95-625), consolidate resource values within a minimum land base needed to effectively preserve and portray them. Some government-owned lands previously within the boundaries are now available for disposal and may be used to exchange for private lands within the revised boundaries. Approximately 4,721 acres of private lands within the revised boundaries will be acquired in fee, and some 275 additional acres will be acquired in either fee or scenic easement, depending upon negotiated settlements.

Acquisition in fee is proposed to assure maximum protection of important geologic formations and paleontological resources, long-term scenic protection, and efficient management programs. Scenic easements may be appropriate in certain locations where aesthetic considerations are important and paleontologic values are lacking.

Specific acquisitions, either scenic easement or fee acquisition, whichever is appropriate at the time of purchase or exchange, will proceed generally as follows.

Sheep Rock Unit

An arrangement involving exchange of sec. 21, T12S, R26E for private lands of equal value within the monument boundaries is most desirable. This type of settlement would, of course, be most logically concluded with adjacent landowners. Should an exchange agreement not be possible, outright sale and purchase would be viable alternatives. Preferred acquisition as to fee or scenic easement is indicated on the land acquisition map.

Fee acquisition by purchase is contemplated at Foree since all private land involved is in one nonsevered ownership.

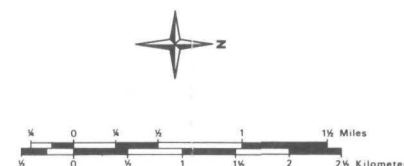
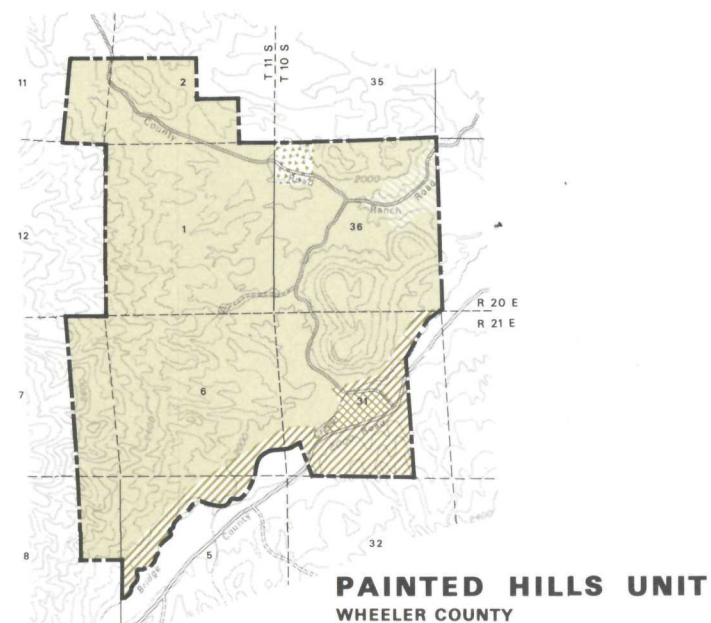
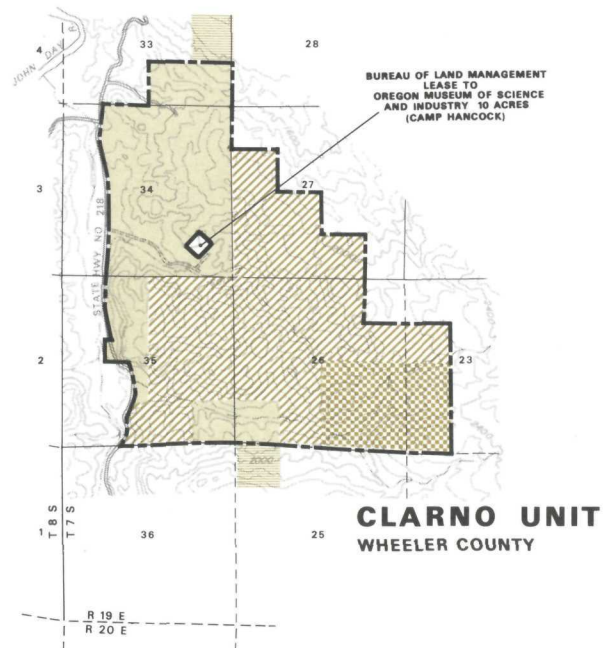
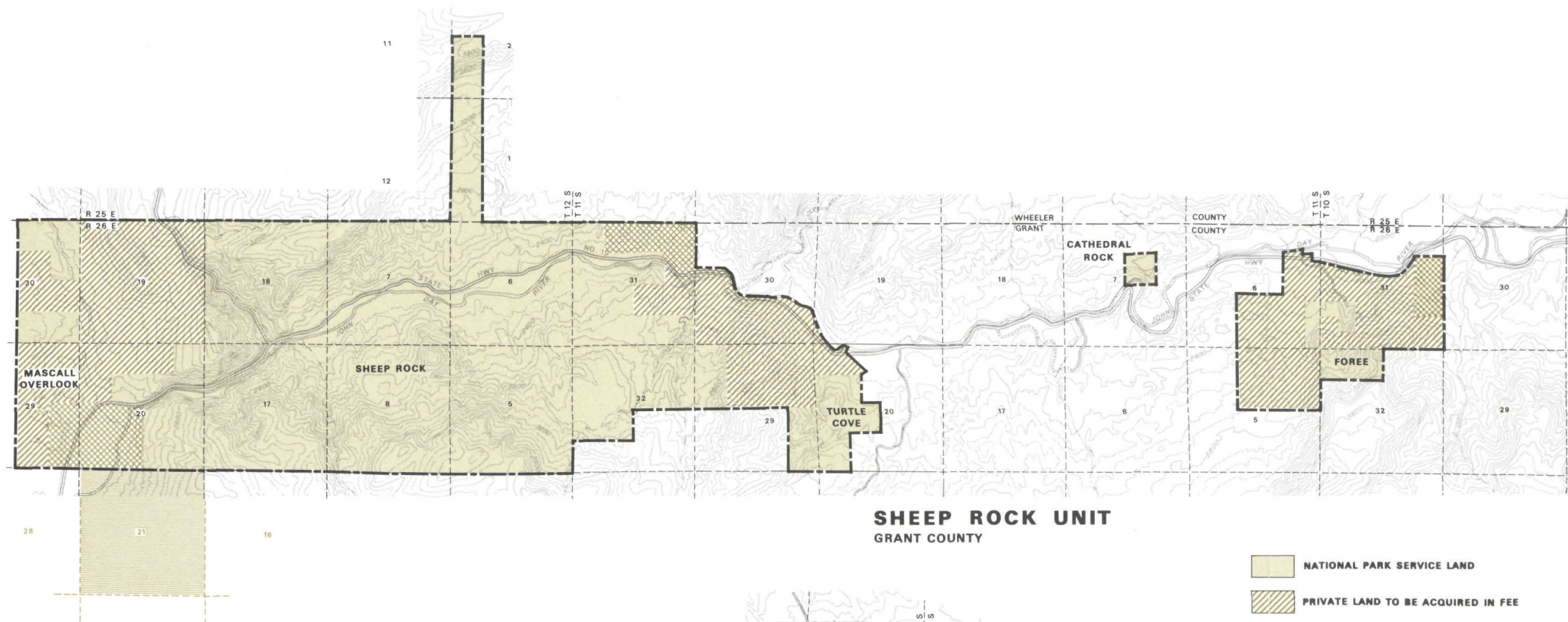
Painted Hills Unit

Consolidated federal ownership within the authorized boundaries is desirable. Acquisition in fee is proposed for all lands except an irrigated field, which would continue to be used for agricultural purposes under a scenic easement. A boundary adjustment along the north boundary of the unit is proposed to accommodate impoundment of water to expand irrigated crop production in the vicinity (not in the monument). An exchange agreement would

achieve a National Park Service goal of consolidated ownership and a local government goal of an enlarged supply of irrigation water.

Clarno Unit

A significant amount of paleontological resources exists on private lands within the boundaries of this unit. Acquisition in fee is proposed. Two 40-acre parcels of government land will be made available for disposal and could be traded for portions of private land within the boundaries on an equal value basis. Outright purchase would be required on the remainder, or on the whole if preferred by the landowners involved.



LAND ACQUISITION MAP **JOHN DAY FOSSIL BEDS NATIONAL MONUMENT** **OREGON**

UNITED STATES DEPARTMENT OF THE INTERIOR — NATIONAL PARK SERVICE

VISITOR USE

BACKGROUND

EXISTING ATTRACTIONS

The most striking scenic features of John Day Fossil Beds coincide with its fossil-bearing geological formations. This coincidence has direct bearing on the types and locations of facilities and programs for interpreting the significant resources of the monument to its visitors.

The Sheep Rock unit contains all of the six important geological formations--Rattlesnake, Mascall, John Day, Columbia basalts, Clarno, and Goose Rock. The Painted Hills unit contains excellent displays of the John Day formation and minimal representation of the Columbia basalts. The Clarno formation is represented primarily in the Clarno unit.

The Sheep Rock unit is located on U.S. 26, the major east-west route through this part of Oregon. The Painted Hills unit is a short drive north of this road. The Clarno unit is not near major travel routes.

At present the visitor experience at John Day Fossil Beds is unstructured; only a minimum of assistance is provided to help the visitor understand what he is seeing and why the area is important enough to be a national monument. Some of the points of interest are unmarked and are used only by knowledgeable local residents. There is also minimum opportunity for recreational use since there are only a few relatively informal and undeveloped trails at Foree, Turtle Cove, Painted Hills, and Clarno.

VISITOR PATTERNS

The present visitor to John Day Fossil Beds National Monument, usually a day user, normally comes to one unit only and does not get a broad picture of what the overall monument contains in terms of fossil resources and geologic time spans. The wide range of time represented here and the tremendous evolutionary processes that are evident in the three widespread units are not apparent in a short visit. Visitors are mostly confined to private vehicles and are road-bound because of the nature of the monument. They normally have only a short time to spend in any one spot because of the long distances between the units and between available gas, food, and lodging. Units are connected by only minor highways and small roads; consequently it takes a long time to get between units, and getting about can be confusing.

During the 1976 visitor season, the people making these short visits were identified in the following statistics:

More than half were from Oregon, and another quarter from Washington, Idaho, and California.

Three quarters were single-family groups, two to four people in size on the average.

Over a quarter came specifically to see the fossils, while over a third were just driving by. Three quarters were sight-seeing.

Visitors obtained information about the monument through some sort of printed material, and the 12 percent who were local residents knew about the monument before they came.

Over three quarters of the visitors stayed less than one hour, visiting between 10 a.m. and 5 p.m.

The visitor season is mainly May, June, and July.

One fourth of all visitors go first to the Sheep Rock overlook. Less than a quarter of those who start at the overlook go on to Turtle Cove, and only 9 percent go on to Foree. Of the total number of visitors, about 13 percent go first to Turtle Cove, another 13 percent each to Foree and Painted Hills.

Painted Hills visitors very seldom go to the Clarno or Sheep Rock units.

Commonly asked questions are, in order of frequency, Where are the fossils? What is the geology we are seeing? Where can we dig for fossils, or is digging permitted? Where can we camp?

Visitors also ask, Where can we see displays? When did John Day come under National Park Service ownership? Where can we fish and for what? Where can we hike?

General comments usually relate to the need for additional signing of the monument and for displays of and about the fossils. Requests are also made for posting of general information about camping, fishing, and other recreational activities.

GOALS AND PLANS (by Unit)

PHILOSOPHY

The overall goals for visitor use and interpretation at John Day Fossil Beds National Monument are the following:

To manage the geological, paleontological, and related resources of the monument to ensure the perpetuation of those factors basic to the monument's establishment, and allow only those types and levels of development and use at locations that do not significantly impair the resources.

To protect resources which will be aided by interpretation and by location of facilities near each major resource. Closeness of administration and maintenance facilities to resources will help provide protection.

To design all facilities for minimal impact and to be visually and environmentally compatible with their surroundings. Trails will create minimal impact on the resource and will be well-defined to prevent damage to fossil-bearing layers.

The visitor use plan is based on a philosophy of presenting the resources of the monument to visitors as an indication of the evolution of this part of the world. The unique scenic qualities and the relationships of the formations to each other will be utilized to create a visitor experience that will not only impart information but may also encourage the visitor to stay longer and delve more deeply into the mysteries of millions of years of life at John Day.

The visitor use plan defines a set of actions that are designed to provide for appropriate appreciation of the resources of the monument by the visitor so that he may enjoy and benefit from these resources. It outlines procedures and developments for providing visitors with well-rounded and safe experiences anywhere in the widely separated units of the monument. It presents an overall concept for visitor use, plus informational and interpretive choices that will fit the visitors' varied schedules and interests, and it proposes actions to ensure that programs for visitor enjoyment actually meet the needs of the visiting public.

Programs and activities will be evaluated constantly, as will the types of visitors, so that the park can best serve the traveling public. Consideration will be given to repeat visitors (mostly locals) so that they will have varied programs that will continue to interest them.

PUBLIC INFORMATION

Goal

Inform travelers who are not already familiar with the monument about its interpretive and recreational opportunities. Offer appropriate informational and directional assistance to promote safe and enjoyable use of the monument's resources. Establish cooperative planning with local communities, state agencies, museums, and federal agencies to determine suitable highway junctions and other suitable locations for distribution of information.

Make off-site programs identifiable with the National Park Service available to a large area of the state.

Plan

Locations will be chosen throughout the state for signing and distribution of printed information to potential visitors. It is essential for the public to get information upon entering the state from any direction so that they can plan their routes effectively.

Copies of the free folder will be generously dispensed at the national parks, refuges, and forests; state parks; communities; chambers of commerce; museums; and other appropriate locations.

The possibility and effectiveness of an immediately identifiable standard symbol should be investigated. Such a symbol would lead people from all over the state to the monument. It should be incorporated on signs at junctions in the immediate areas of the three units, to lead people into Thomas Condon Visitor Center or one of the other units. As the monument becomes better known, the need for signs will decrease.

School programs will be carried out with interested communities, onsite as well as offsite. Community groups and service groups wanting programs or field trips will be accommodated. These combined local audiences are the groups that are the most concerned about not being able to continue digging fossils. A good outreach program in environmental and conservation education for these groups would gain exposure for the park and be a process for educating people about the need for restrictions.

VISTAS

Goal

Maximize scenic viewing opportunities, including the full variety of scenes in and near the monument; locate trails to maximize scenic viewing experiences, complementing auto viewing opportunities.

Plan--General

The monument should be thought of as a continuously evolving scene to be enjoyed by its visitors, as well as a significant paleontological resource. The state has allowed for vistas all along the John Day River. This use and development should be continued and encouraged in cooperation with the state highway department.

The Thomas Condon Visitor Center, located in the Sheep Rock unit, will provide a focus, a central location where the visitor will learn about the monument, why it exists, and what secrets of the past these formations impart to us. The visitor center will also act as an excitement generator, enticing the visitor to learn more, to take time to see and explore a bit on his own. It will be located so that a spectacular view of Sheep Rock is available.

A little more knowledgeable, the visitor may sally forth on an expedition of his own design back through time. He may choose to go only to Picture Gorge and inspect the Columbia basalts, then stop at the Mascall overlook and capture a nearly all-encompassing look at the formations important at John Day.

Or he may begin at the Mascall overlook and then go to the visitor center. Interest heightened, he may decide to ponder the formations in the Sheep Rock unit--Picture Gorge, Turtle Cove, Cathedral Rock, Foree--and follow with a tour of the Clarno and Painted Hills units to fully round out his experience.

Recreational opportunities, especially for hiking, will be increased. A trail paralleling the John Day River in the Sheep Rock unit is proposed, as well as a trail into the Columbia basalts above Picture Gorge. A series of trails of differing lengths will be provided for access to the formations at Foree and Turtle Cove.

A loop trail from the parking area at Clarno will lead to selected locations along and within Indian and Hancock canyons. A series of trails will lead to excellent vista points near the formations at Painted Hills. Scenic auto viewing opportunities will be enhanced by provision of strategically placed pulloffs along the highways and roads in the monument.

Plan--by Area

Since the majority of visitors will probably tour by auto, making stops at only two or three sites, a visitor use concept should be developed accordingly for each major area.

The Mascall overlook is a point of beginning or of conclusion for a visit to the monument. There is a spectacular view of four of the six formations in the monument, as well as of Picture Gorge and Sheep Rock. The visitor can begin to understand John Day Fossil Beds in terms of space, time, and beauty from this point.

In Picture Gorge the visitor may closely inspect the Columbia basalt formation, which surrounds him.

The Sheep Rock overlook and the Thomas Condon Visitor Center will be the intellectual and visual climax of the visitor's experience. Able to stand above the John Day River, viewing Sheep Rock across a calm pastoral scene, the visitor will have available whatever information and personal explanation he requires to gain a full understanding of and feeling for John Day Fossil Beds and the age of mammals.

Turtle Cove and Foree are the two locations within the Sheep Rock unit where the visitor may enter the John Day formation for a firsthand experience of its feeling, color, texture, and beauty. At these points the visitor may experience the formations showing evolution up close rather than from a distance.

Cathedral Rock will continue to be a scenic anomaly, an example of erosion and a relatively close-up view of the Columbia basalts perched on a spectacular piece of the John Day formation--silent evidence of both the building and the destructive force in nature.

The Cant ranch speaks of man's short presence within the basin. While the rest of the monument is devoted to our dim beginnings, the ranch speaks of yesterday. It will continue to illustrate man's use of the area for ranching.

The Painted Hills unit offers an experience in brief of the John Day story. This small outcropping of the Columbia basalts formation and the Painted Hills of the John Day formation and its leaf fossil hills, set in close proximity in a gently rolling landscape, provide ample opportunity for understanding the John Day story of evolution. Beautiful long and short distance views abound, and vegetation varies from brush flats to pockets of juniper forest. This variety of resources offers the visitor an easy opportunity for hiking, scenic viewing, nature study, and relaxing, while he comes to understand the geologic time scale at John Day.

The Clarno unit, with its volcanic mudslides and famous nut beds and mammal quarry, will be a broadening addition to the basic experience of the monument, providing limited but attractive scenic views in addition to the opportunity for great appreciation of the full scope of geologic activity which shaped the area.

INTERPRETATION

Goal

Interpret the sequence of geological processes that created the paleontological phenomena in the John Day River Basin and how these processes affect the ecological and cultural communities today. Provide various depths of interpretation, as some visitors know a great deal about paleontology and the John Day fossils.

Provide interpretive devices and programs that give visitors an overall understanding of the entire monument, even though most visitors will not see every unit. Use media that are simple but also sturdy, attractive, and effective.

Convince the visitor to help protect the resource himself by placing messages where they are most needed--on the sites of the features to be protected and/or interpreted.

Provide interpretive options and assistance for the handicapped.

Plan

The concept for interpretation is that each unit or subunit must cover the same story, but from a different aspect of evolution, according to the location of the resource and the earth history represented. Everyone must get a complete picture of the monument from an incomplete trip. If a visitor does go to all units and sites, there will be no actual repetition; instead, he will learn more about the same thing because of the different approaches at each unit.

Interpretive and recreational options will be available to all visitors through personal services, exhibits, and audiovisual programs, and through publications available year-round at headquarters and the Thomas Condon Visitor Center. At Cant ranch, Turtle Cove, Foræ, Painted Hills, and Clarno there will be seasonal personal services and year-round 24-hour exhibits. Enough information will always be available so that visitors will be able to choose the options best suited to the amount of time they wish to spend.

Scenic vistas will be available year-round at overlooks and pullouts, where there will usually be interpretive devices as well. Interpretive trails from these major sites will be available to all visitors at all times.

Interpretive Themes

Geology/Climatology. A primary interpretive theme is geologic processes: deposition by seas, volcanism, erosion, earth shifting,

etc. Climatic conditions that nurtured the flora and fauna now preserved in fossil form in the monument are still nurturing flora and fauna today.

Paleontology. This is the most important theme in the park, as evidence of evolutionary processes covering the widest time and life spans of any single area in the world is exhibited. Subthemes include the following:

Age of mammals--The whole evolutionary process, extinction, and the eventual return

Plants that developed here and became extinct, others that survived but are native only in China, some that remain as they evolved millions of years ago, others gone in the original form but remaining in greatly reduced scale--What is this telling us about the earth?

What grew here, was buried, preserved, and replaced or became extinct

The process of fossilization, and what and how we can learn from the remains

Present Day Natural History. Existing landforms, flora, and fauna represent the present stage of evolution. Interpretive subthemes include the following:

Ancient plants and animals that evolved here and became extinct, but still live in other parts of the world--Why?

Plants still here in the same form as they grew 30 million years ago--Why?

Species endangered by man, or vestiges of the evolutionary process

Existing plants and animals that developed millions of years ago, and whose existence here brought man into this country in the last few thousand years

Man in the John Day River Basin. Early people--Why did they come here, why did they leave--lack of water, grass, game? Who was here: natives, European explorers, fur traders, pioneers, missionaries, frontiersmen, loggers, paleontologists, now tourists.

The following subthemes, dealing with man and the John Day Basin, are:

Paleontology--Where are the fossils? What has man done with them? What is the worldwide significance of what has been collected? What is still in the ground?

Conservation--What are we doing with our natural resources, including the fossils? (We are protecting the buried material from destruction by vandals and those who would waste them. We will preserve, research, and provide good safe storage for the collections. Such pillaging would eliminate fossils for future viewing.)

FACILITIES FOR VISITOR USE

Plan--Day Use

The monument is primarily a day use area. Most facilities, interpretive activities, and programs will be geared to day use visitors. Walks and programs will be of fairly short duration to fit into the comparatively short time visitors can stay.

Picnic areas in nonsensitive parts of each unit will encourage visitors to extend their day use activities. Trails beginning at these areas will further encourage visitors to experience the monument in more depth, as will associated exhibits and the presence of an interpreter. Year-round picnic facilities are now available at Cant ranch and Foree in the Sheep Rock unit, and also in the Clarno and Painted Hills units. Additional year-round picnicking will be available later at the proposed campground in the Sheep Rock unit.

Trails will be short enough for day users, easy enough for all kinds of visitors. Longer trails will be available in the units where it is feasible.

Sheep Rock Unit. A trail from the overlook to Cant ranch will encourage walking the short distance, leaving the car at one end or the other.

A 1-mile trail from Cant ranch to the campground will encourage use of the Cant ranch and overlook on foot.

There is currently a well-defined trail into the formation at Turtle Cove. An additional interpretive trail will go up into the hills to provide views into the John Day formation and back into the John Day River valley. It will start at the interpretive wayside exhibit shelter.

The Foree interpretive trail will lead the visitor right into the resource and allow a much closer look at the John Day formation. It will also start at the interpretive wayside exhibit shelter.

Painted Hills Unit. An interpretive loop trail to the top of Carrol Rim and back will provide vistas of the Painted Hills and the country north of this unit.

An interpretive trail will lead from the picnic area to the overlook. Visitors can then return to the picnic area the same way or along the road.

The interpretive trail from the overlook will lead up into the hills above the formation to the south and join the trail from the picnic area, providing visitors with changing views of the Painted Hills and encouraging them to experience the juniper-sagebrush plant communities.

An involvement trail on the west side will allow physical access to an isolated piece of the Painted Hills-type John Day formation.

A short trail from the road on the west side will lead to an interpretive wayside exhibit shelter at Fossil Hills.

Clarno Unit. The interpretive loop trail will take visitors from the interpretive wayside exhibit shelter at the picnic area to a vista that provides a closer look at the outcrop, nut beds, and mammal quarry, then return back to the picnic area.

Plan--Overnight Use

Minimum overnight facilities will be available, as there are few appropriate resources and little unfulfilled demand.

A 30-35 unit campground will be provided in the Sheep Rock unit. It is 1 mile from the Thomas Condon Visitor Center and Cant ranch. Campers will be encouraged to use the hiking trails and the visitor center.

Interpretive programs for campground users will be available both at the campground and at the visitor center. A group campground with the capacity to accommodate three busloads of visitors will be included in the Sheep Rock facility. It will be separate from the main campground to avoid conflict.

OPERATIONS AND MAINTENANCE

Goals

Provide monument administration and maintenance facilities in locations where employees and facilities can be utilized to maximum efficiency.

Use the Cant ranch for maintenance and housing as well as for interpretation.

Design facilities to make maximum possible use of alternative energy.

Plan--Personnel

Visitor contact will be an adjunctive but important portion of the job for all maintenance personnel. Because they will need to be able to answer questions about the monument, they should be well informed and neat in appearance. They should be encouraged to communicate with the public at all times.

Plan--Support Facilities

Various types of maintenance facilities will be required for all units. The Sheep Rock unit will contain the primary maintenance support facility for the entire monument, with lesser support facilities provided at the Painted Hills and Clarno units. Storage facilities will also be provided at the headquarters office in John Day.

Equipment and supplies for roads and trails and for buildings and utilities in the Sheep Rock unit will be stored in the barn, which will be adapted for such use. A small workshop will continue to be used as a carpenter and maintenance shop.

Supplies for maintaining the grounds and comfort stations in the Painted Hills and Clarno units, will be stored in small support facilities.

Supplies will be kept at headquarters for maintaining the headquarters building and for distribution to the other units.

Plan--Manuals and Special Procedures

Harpers Ferry Center will provide maintenance manuals for both the visitor center and the wayside exhibits. The manuals will delineate materials, procedures, and schedules for proper upkeep.

A cyclic maintenance program will be individually developed for each structure to assure that the buildings will continue to meet National Park Service standards.

The exterior of the buildings and the grounds at the Cant ranch will be maintained to the appearance of a working ranch using the particular materials and techniques of the period.

All roads, trails, and structures will be maintained to the required National Park Service standards.

PROTECTION AND SAFETY

The National Park Service has proprietary jurisdiction over monument lands. Close cooperation will be needed with all state and county law enforcement agencies.

Seasonal and permanent technicians and rangers will have experience and training in law enforcement, interpretation, first aid, and search and rescue operations. First aid supplies and personnel will be located at headquarters, Sheep Rock overlook/Thomas Condon Visitor Center, Cant ranch, and the Painted Hills and Clarno units during the main visitor season.

Particular emphasis will be placed on prevention of damage to or loss of fossil resources. Also, security of the buildings and facilities is needed. There must be onsite personnel at the Thomas Condon Visitor Center and Cant ranch. Fire and intrusion alarms will be required for the Cant ranch house and barn, Thomas Condon Visitor Center, and headquarters in John Day.

P A R K W I D E D E V E L O P M E N T C O N C E P T

The development actions that follow relate to specific physical facilities that are necessary to implement the preceding resource management and visitor use and interpretation plans.

The overall development concept is to create a parkwide development motif and consistency of design elements that will reflect the unique character of John Day Fossil Beds National Monument. The following considerations must be borne in mind in implementing this plan:

A common design motif must be strictly adhered to in all units of the monument. It should also be reflected in information publications so that the visitor can more readily determine when he is within the monument boundaries and when he is not.

All structures, trails, and other facilities should be designed to be conveniently and easily usable by handicapped visitors.

Colors should be of earthen tones. Natural materials (for example, stone and wood) should be used, since they are most compatible with aesthetic resources of the monument.

Alternative energy sources, especially solar energy, should be strongly considered for use at the Thomas Condon Visitor Center.

Sizes of visitor facilities such as parking areas, the visitor center, and the campground were established utilizing the following criteria:

Development should be confined, to the greatest degree possible, to previously disturbed areas.

The size of parking facilities should be increased from existing sizes only to provide for efficient traffic flow, to meet conservative estimates of future visitation increases, or to accommodate bus parking to serve school groups.

Increases in size are appropriate only in cases where there is presently unacceptable visitor crowding (e.g., Painted Hills overlook).

Severe impacts should not occur as a result of development (i.e., severe cutting or filling, etc.).

The size of the visitor center auditorium was established to serve a maximum of 1 busload (45 people) plus a maximum of 8 families (28 people).

The total visitor center capacity was estimated to hold a maximum of 2 busloads and up to 15 carloads of visitors. Additional parking is provided to serve those outside the visitor center and utilizing adjacent trails.

DEVELOPMENT PLAN

PARKWIDE

Development actions needed for all units of the monument are completion of boundary surveys, fencing of all units, and placement of entrance and directional signs.

SHEEP ROCK UNIT

Mascall Overlook

This overlook will serve as a beginning orientation and interpretation point or conclusion point for a tour of the monument. It is important because of the scenic views through Picture Gorge to Sheep Rock and because four of the six major geological formations within the monument can be seen from here. The following development actions are needed:

- Redesign the intersection of the overlook access road and U.S. 26 to increase safety and sight distance (to be accomplished in cooperation with the state highway department)

- Pave the access road

- Construct a 20-car, 3-bus paved parking area at the overlook

- Construct a wayside exhibit shelter

Development of the Mascall overlook for visitor use should not occur until the intersection redesign is accomplished.

Picture Gorge

The walls of Picture Gorge are composed of the Columbia basalts, one of the six geological formations in the monument. Safe visitor (and fisherman) access to the river is desirable. The following actions are necessary in the gorge:

- Pave the highway pulloffs (in cooperation with the state highway department)

- Provide two signs identifying Picture Gorge

Sheep Rock Overlook

This overlook commands one of the most impressive scenic vistas in the monument; four fossil formations and Sheep Rock are visible from it. This location will become the major orientation, information, and interpretive point in the monument. The proposed Thomas Condon Visitor Center, to be located here, will provide the most extensive in-depth interpretive opportunities available in the monument, as well as an all-weather viewing area and necessary administrative space. The following actions are needed:

Construct the Thomas Condon Visitor Center with an interpretation space/work area, office space, public rest rooms, exhibit space, all-weather viewing area, storage space for museum study collections, and an auditorium to seat approximately 75 people (the building design should include provision for utilization of alternative energy sources, as appropriate)

Provide water, sewer, and power (solar energy should be considered)

Construct a 50-car, 5-bus paved parking area in phases; first phase, 30 cars and 3 buses

Construct a 1/2-mile walking trail to the Cant ranch

Retain and relocate the existing commemorative plaque and sign

Remove the existing sign interpreting the geology of the area

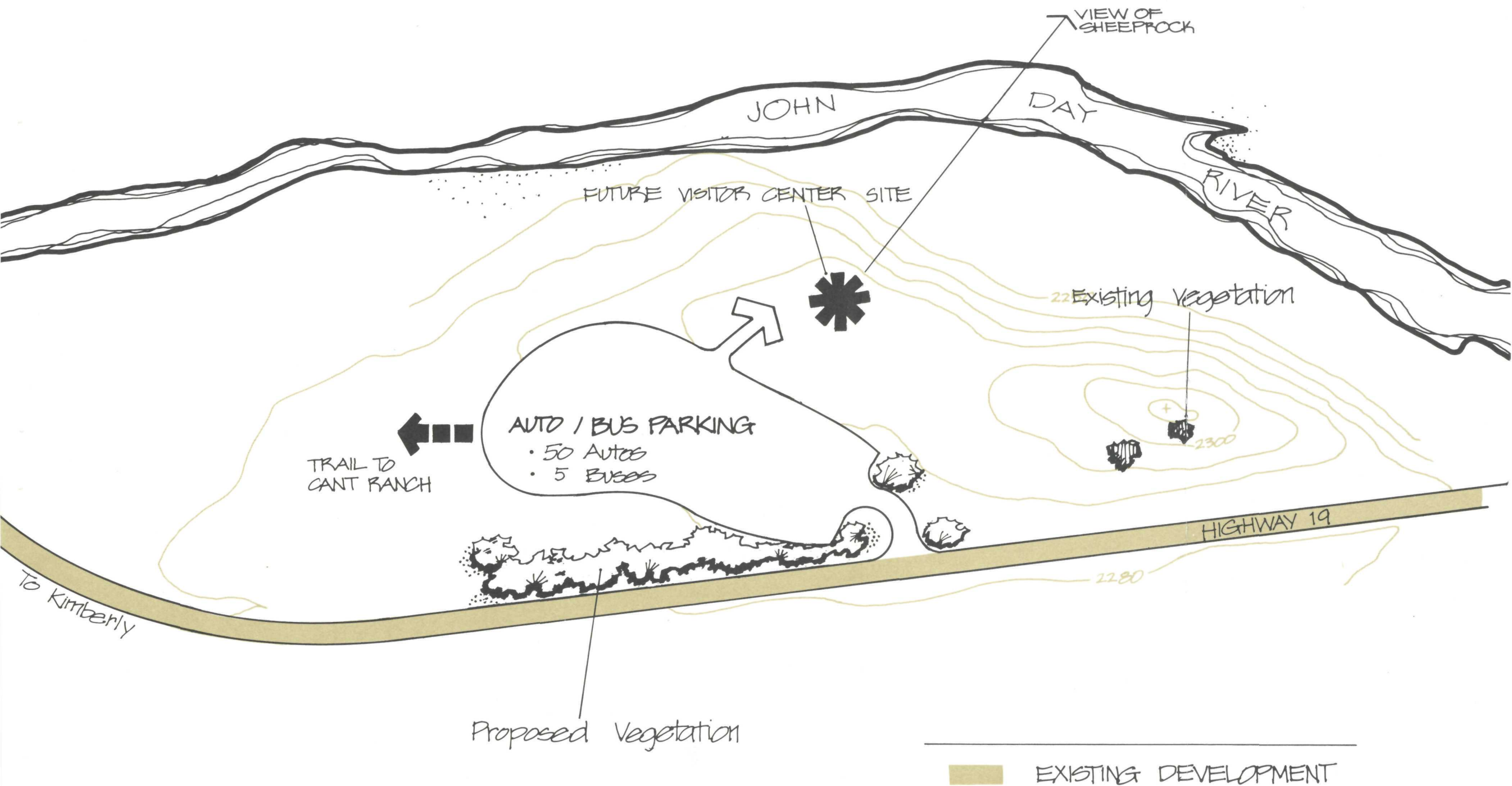
Cant Ranch

The ranch will serve as an information station and will be utilized to interpret the history of ranching in the area, as well as a seasonal housing area and maintenance area for the unit. The following development actions are necessary to augment the existing parking, picnicking, interpretation, and utilities:

Adapt and repair the interior of the barn for use as a maintenance and storage building, restoring and stabilizing the exterior to the appearance of a working barn of the period

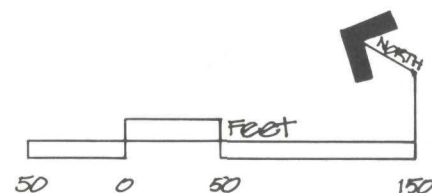
Modify the upper story of the ranch house to serve as quarters for a maximum of two seasonal employees

Restore and stabilize the exterior of the ranch structure to the appearance of a working ranch of the period



OVERLOOK: PARKING / SHEEP ROCK UNIT

JOHN DAY FOSSIL BEDS NATIONAL MONUMENT
NATIONAL PARK SERVICE / UNITED STATES DEPARTMENT OF INTERIOR



Turtle Cove

The John Day formation will be interpreted at Turtle Cove. Needed development actions include the following:

- Construct a 30-car, 3-bus paved parking area in phases; first phase, 20 cars and 3 buses

- Construct a 2-mile interpretive loop trail around the formation including innovative devices for interpretation of fossils in place, either real fossils found at the site or facsimilies

- Construct an interpretive wayside exhibit shelter

- Construct a comfort station with drinking water

Cathedral Rock

Interpretation of Cathedral Rock cannot occur until the state highway is relocated. When that is accomplished, the following development actions will be needed:

- Construct a 10-car, 3-bus paved parking area utilizing the existing road grade

- Construct interpretive wayside exhibits

Foree

The John Day formation is displayed at Foree, as it is at Turtle Cove. Visitors to Foree will be encouraged to walk into the area of exposed fossil-bearing strata. Required development actions include the following:

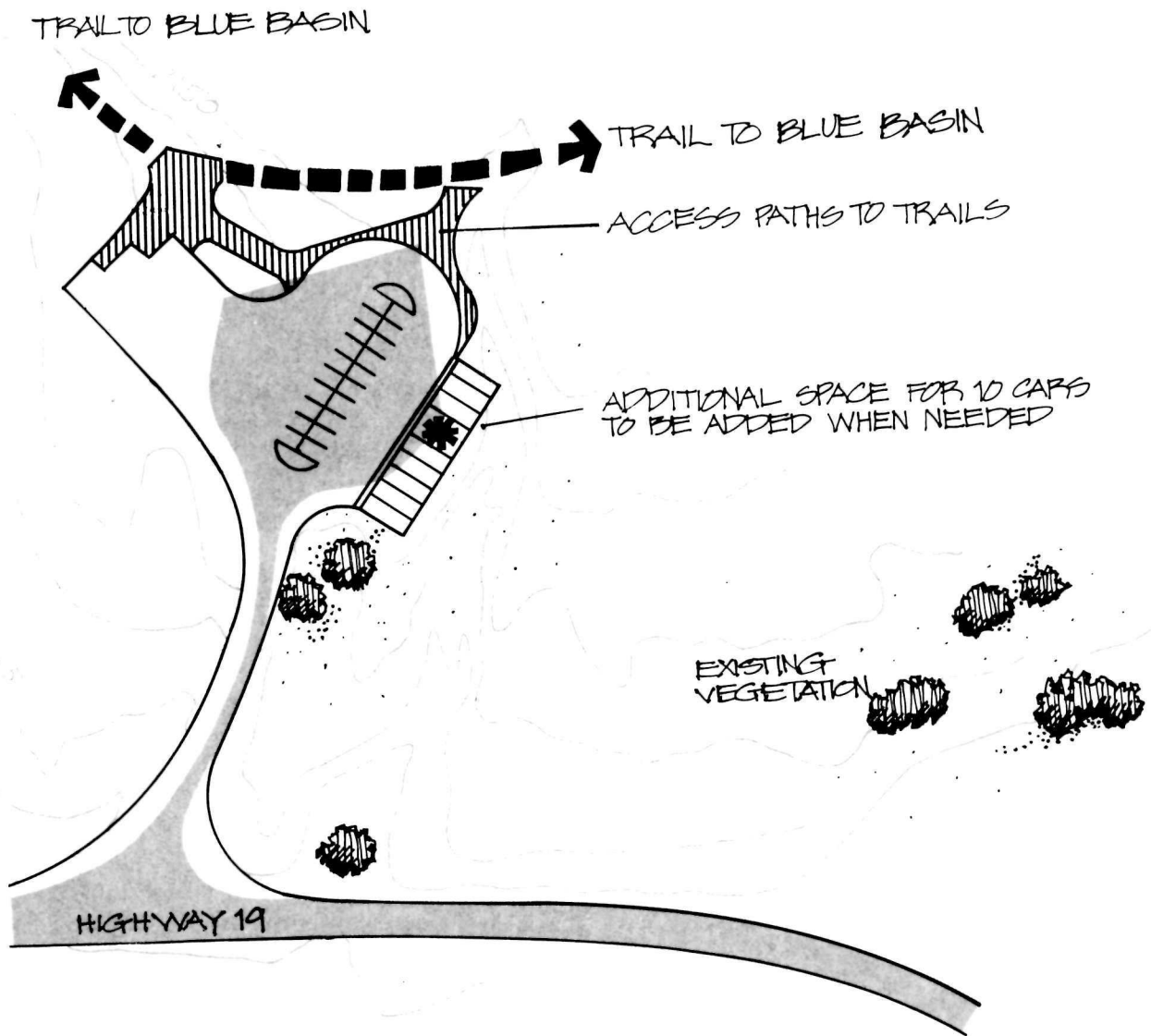
- Retain the existing parking area for 25 to 30 cars

- Provide a small picnic area

- Provide an interpretive wayside exhibit shelter

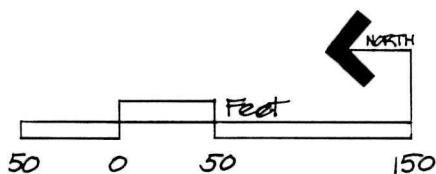
- Construct a 1/2-mile interpretive trail into the formations

- Construct a comfort station with drinking water



BLUE BASIN: PARKING / SHEEP ROCK UNIT

JOHN DAY FOSSIL BEDS NATIONAL MONUMENT
UNITED STATES DEPARTMENT OF THE INTERIOR / NATIONAL PARK SERVICE



Campgrounds

The visitor use concept for the monument envisions day use and minimal personal services interpretation at the Clarno and Painted Hills units. Visitors desiring in-depth understanding of the monument's resources will be able to gain it only at the Sheep Rock unit where a low-key but multi-faceted approach to visitor enjoyment is envisioned. This approach assumes longer stays than at the other two units, and invites the visitor to slow his trip substantially, including nighttime appreciation of the monument. In order to achieve this objective, the opportunity to stay overnight is essential.

There are three existing campgrounds within the region. However, each is at least a one-hour drive from the area. The potential for provision of additional campgrounds by government entities or the private sector in the immediate area is considered minimal. Consequently, a campground in the Sheep Rock unit is essential to meet visitor use objectives without causing undue inconvenience to the visitor. The following campground development is proposed:

- Construct a 30-35 unit family campground with comfort stations, trailer dump station, and potable water; provide a limited number of walk-in sites for those desiring additional solitude

- Construct an informal interpretive campfire circle that seats 100 people

- Construct a group campground capable of accommodating three bus loads of people at one time

The National Park Service is conducting investigations to ensure that the site under consideration is not subject to flash flooding.

PAINTED HILLS UNIT

Location of physical improvements will be determined by the availability of potable water. Most likely prospects are in the vicinity of the present entrance or in the vicinity of the leaf fossil hills. The site will serve as the primary information and orientation area within the unit. In addition, it may be a trailhead and picnic area.

Painted Hills Overlook

This will be the major point of resource interpretation in the Painted Hills unit. The overlook will be moved from its present location to near the junction with the main road in order to remove

it from the immediate vicinity of the Painted Hills resource. Necessary development actions include the following:

- Construct a 10-car, 2-bus parking area

- Construct an interpretive wayside exhibit shelter

Leaf Fossil Area

The leaf fossils are a unique resource of the monument. As such, they will be interpreted and protected from vandalism. The following are necessary actions:

- Construct a 10-car, 2-bus parking and turnaround area

- Construct an interpretive wayside exhibit shelter over a portion of one of the fossil hills

- Construct a 1/4-mile trail to the fossils

- Construct a fence around the formation (total length 3,000 feet)

- Construct a minimum facility for visitor and staff use

- Provide water, sewer, and electricity

Northwest Hill

These mounds are composed of the same material as the Painted Hills, and are of similar color. An interpretive trail around and into these mounds will allow visitors to see up close and to feel the John Day formation. Required development actions include the following:

- Construct a 10-car, 2-bus parking area

- Construct a 1/4-mile interpretive trail

- Construct wayside exhibits

Trails

An additional sightseeing/interpretive trail will be provided within the unit. The following development action is needed:

Construct a Painted Hills loop trail and interpretive wayside exhibit

CLARNO UNIT

Palisades

This will be the primary visitor contact and interpretive area within the Clarno unit. In addition to the existing picnicking and parking facilities, the following development actions are needed:

Construct a single facility which serves as a wayside exhibit shelter, contact station, office, maintenance/storage area, and comfort station

Retain the existing parking area (12 cars), picnic area (5 sites), and expand into Indian Canyon if necessary

Provide water, sewer, and electricity

Photo Pullout

Pave and sign this pullout

Trails

One interpretive loop trail is necessary within the unit, to provide access to Indian and Hancock canyons and return to the palisades. Necessary development actions are as follows:

Construct a 4-mile loop trail

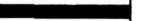
Construct a 1/4-mile spur to the base of the Palisades

Provide interpretive wayside exhibits along the trail

P H A S I N G

Phasing of development has been designed to meet immediate needs for visitor use and monument management first. Full packages to provide a full information and interpretive program have been given a high priority, as have urgent resource protection and maintenance needs. The phasing program also attempts to maximize contracting and construction efficiencies. Proposals which require preliminary actions (such as boundary change) have received lower priorities. It is assumed that boundary alterations will take place within the first phase.

DEVELOPMENT SCHEDULE

	PHASE 1	PHASE 2	PHASE 3	Construct. Cost*
PARKWIDE				
☐ Provide exhibit shelters				20
☐ Provide entrance & directional signs				5
☐ Develop water sources at all developed areas				197.5
☐ Complete boundary survey				99
☐ Construct trails, all units				240
SHEEP ROCK UNIT				
☐ Construct visitor center & parking, including landscaping				1212
☐ Construct family campground				664
☐ Construct group campground				
☐ Fence boundary				193
☐ Construct Mascall overlook parking, overlook & roads				330
☐ Construct restrooms & parking at Turtle Cove & Foree				156
☐ Construct picnic area at Foree				4
☐ Construct Cathedral Rock parking & exhibits				27
PAINTED HILLS UNIT				
☐ Fence boundary & Leaf Fossil Hills				257
☐ Construct building, picnic area & parking				154
☐ Pave road from entrance to picnic area				95
☐ Construct Fossil Hills interpretive shelter & Painted Hills overlook				85
☐ Construct parking at Leaf Fossil & Northwest Hill				36
CLARNO UNIT				
☐ Complete boundary survey				30
☐ Construct building & trail; pave photo pullout				95
☐ Fence boundary				173

* in thousands

APPENDIX A

RARE AND ENDANGERED PLANT SPECIES OF THE JOHN DAY FOSSIL BEDS NATIONAL MONUMENT

Species	Location and General Information
¹ <u>Astragalus diaphanus</u> (John Day milkvetch)	Located on low hills by the John Day River in the Sheep Rock unit; flowers are white with a purple tinge, leaves are broad and oval; several patches were found.
¹ <u>Astragalus misellus</u> var. <u>misellus</u> (pauper milkvetch)	Located along a few drainages in the Painted Hills unit; flowers are yellow.
² <u>Castilleja xanthotricha</u> (yellow hairy paintbrush)	Located in patches on the low sagebrush-covered hills in the Clarno and Painted Hills units; flowers are yellow.
² <u>Chaenactis nev·i</u> (John Day chaenactis)	Located on heavy clay soil at the Painted Hills unit; blooms in May and June; flowers are yellow; abundant in this specific habitat.
² <u>Lomatium hendersonii</u> (Henderson's lomatium)	Located on heavy clay soils in the Painted Hills unit; blooms in early spring; fruits and peduncle nodding; flowers are yellow and roots are subglobose or turnip-shaped, only a few plants were spotted in one area.
³ <u>Pediocactus simpsonii</u> var. <u>robustior</u> (barrel cactus)	Moderately abundant at the top of ridges in Sheep Rock and Painted Hills units; flowers are pink, and plants are clumped.
¹ <u>Penstemon eriantherus</u> var. <u>argillosus</u> (crested tongue penstemon)	Located on north slopes around Camp Hancock and along Rock Creek immediately off the Sheep Rock unit; only a few scattered plants were observed.
¹ <u>Potentilla glandulosa</u> var. <u>campanulata</u> (belled cinquefoil)	Located on rock cliffs at Picture Gorge and in the drainages at the Painted Hills; flower petals are longer than the sepals and erect instead of spreading.

¹These plants are tentatively identified as deserving special consideration in land management activities, including selection of research natural areas (Dryness, C.T., et al., 1975).

²Species is on national list of threatened and endangered plants (Smithsonian Institution, 1974).

³Appears on Oregon Rare Plant Task Force's list as being rare in Oregon.

A P P E N D I X B

PROJECT STATEMENTS

JODA Wildlife Inventory Project Statement

Park and Region. John Day National Monument, PNW.

Project Name and Number. JODA Wildlife Inventory. JODA-N-2.

Statement of Problem. No comprehensive wildlife inventory exists. The area is generally high quality raptor habitat and an inventory of nests and nesting territories is needed for management and development planning. Additionally, the monument supports an undetermined number of coyotes. While it is unlikely that monument coyotes are causing significant livestock losses, the possibility does exist.

What Has Been Done. No previous research.

Description of Work to be Undertaken. The study will (1) provide a general inventory of wildlife species, (2) provide a detailed inventory of raptors, (3) provide a detailed inventory of coyotes, (4) identify any threatened or unusual wildlife present within the monument, and (5) develop wildlife management recommendations for monument lands.

Length of Time Needed. Start March 1, 1978; complete by March 1, 1980.

What Will Happen If Project Is Not Undertaken. Management and development will continue without the benefit of a wildlife inventory and interpretation will not be able to utilize such information. It is unlikely that a crisis would result.

What Are the Alternatives. a) No action. b) Conduct coyote and raptor inventory projects separately.

Who Will Accomplish Project. Unknown.

Administration and Logistics of the Project. Approximately \$10,000/year for two years. Budget must be developed jointly with principal investigator selected.

References and Contacts. Stewart Janes, Graduate Student, Oregon State University Department of Fisheries and Wildlife; David de Calesta, Asst. Professor, Oregon State University Department of Fisheries and Wildlife; Edward E. Starkey, Research Biologist, National Park Service, Oregon State University.

Date of Submission. February 15, 1977.

JODA Human Use Inventory

Park and Region. John Day National Monument, PNW.

Project Name and Number. JODA Human Use Inventory.

Statement of Problem. Consistent with the desire to understand the resources being managed, the staff at John Day National Monument desire to know the visitors they serve and the nature of visitor use patterns in the monument. Initial efforts by the Denver Service Center to design a "field observation guide" to measure visitor use patterns should be continued as a regular activity by the staff.

What Has Been Done. No previous research.

Description of Work to be Undertaken. The study will provide a general inventory of (1) who the visitors are and (2) what they are doing in the park.

Length of Time Needed. Annual inventory.

What Will Happen If Project Is Not Undertaken. The management will not be able to monitor changes in visitor use patterns in the monument over time. In a new area, the staff has a unique opportunity to gain a baseline impression of the initial visitors to this monument as a benchmark for monitoring patterns over time and to anticipate management actions required to meet visitor needs.

What Are the Alternatives. a) No action. b) Conduct independent studies as patterns emerge.

Who Will Accomplish Project. Unknown.

Administration and Logistics of the Project. Approximately \$3,000 per year for development, conduct and analysis of information obtained. Conducted jointly with staff at JODA and Oregon State University, National Park Service, Cooperative Park Studies Unit.

References and Contacts. Dr. Ken Hornback, research sociologist, National Park Service, Denver Service Center; Dr. Donald R. Field, Regional Chief Scientist, Pacific Northwest Region; and Dr. Edward E. Starkey, National Park Service; Cooperative Park Studies Unit, Oregon State University, Corvallis, Oregon.

Date of Submission. February 15, 1977.

JODA Literature Survey Project Statement

Park and Region. John Day National Monument, PNW.

Project Name and Number. Annotated literature survey for JODA paleontological resources.

Statement of Problem. A considerable amount of research has been conducted on paleontology of the John Day area. No comprehensive attempt has been made by the National Park Service to locate and assemble this information. In addition, various collections throughout the United States contain fossil materials collected from land now in the monument, before the monument was established. No attempt has been made to locate and inventory these materials.

What Has Been Done. A considerable amount of research has been done, but no comprehensive literature review has been made.

Description of Work to be Undertaken. This survey would produce a comprehensive and annotated literature review of the paleontology of the John Day area, and locate and inventory John Day fossil materials in collections such as those at University of California, Berkeley.

Length of Time Needed. Can start any time, would require approximately one year.

What Will Happen If Project Is Not Undertaken. Interpretation and management will continue without the benefit of a great deal of information about the fossil resources of JODA.

What Are the Alternatives. The only reasonable alternative is no action.

Who Will Accomplish Project. John Rensberger and students, University of Washington, Seattle.

Administration and Logistics of the Project. \$10,000 (\$5,000 salary, \$4,000 travel, \$1,000 supplies, etc.).

References and Contacts. Oregon Museum of Science and Industry, Portland.

Date of Submission. February 15, 1977.

JODA Mule Deer Project Statement

Park and Region. John Day National Monument, PNW.

Project Name and Number. Ecology of JODA Mule Deer. JODA-N-1.

Statement of Problem. A fairly large population of mule deer is present within and adjacent to the monument during the late summer, autumn, and winter. An undetermined amount of damage to alfalfa crops in the area results from deer depredation. The role of the monument as a refuge for these deer has not been determined.

What Has Been Done. No previous research.

Description of Work to be Undertaken. The study will (1) assess the scope of the damage problem, (2) determine whether the monument deer cause a significant proportion of any damage, (3) provide basic ecological data on mule deer habitat relationships within the monument and adjacent region, and (4) develop mule deer management recommendations for the monument. Marking and radio tracking will be used to identify and follow monument deer.

Length of Time Needed. Start August 1, 1977; complete by August 1, 1979.

What Will Happen If Project Is Not Undertaken. Deer depredation will most likely continue, even after completion of the project. However, it is entirely possible that such problems can be at least partially mitigated with proper management. While no assurance can be given that the research will provide solutions, there is considerable public relations value in making the attempt to find some answers.

What Are the Alternatives. The only reasonable alternative is no action.

Who Will Accomplish Project. Dr. Edward E. Starkey, Research Biologist, National Park Service, Oregon State University.

Administration and Logistics of the Project. See attached budget.

References and Contacts. Ralph Denney, Oregon Fish and Wildlife Commission, John Day.

Date of Submission. February 15, 1977.

Budget--JODA Mule Deer Project

	<u>FY 77</u>	<u>FY 78</u>	<u>FY 79</u>	<u>Total</u>
Salary (research assistant)	\$ 700	\$4,100	\$3,700	\$ 8,500
Personnel benefits (15%)	85	615	555	1,255
Travel (8,000 miles/year @ \$.15/mile)	300	1,200	900	2,400
Supplies and equipment				
Capture gun (.22 cal.)	200			200
Radio transmitters (12 @ \$100)	1,200			1,200
Batteries	100	50	50	200
Miscellaneous	100	100	50	250
Immobilizing drugs	200	100	100	400
Data analysis		150	350	500
	<u>\$2,885</u>	<u>\$6,315</u>	<u>\$5,705</u>	<u>\$14,905</u>

APPENDIX C: LEGISLATION



Public Law 93-486
93rd Congress, H. R. 13157
October 26, 1974

An Act

88 STAT. 1461

To provide for the establishment of the Clara Barton National Historic Site, Maryland; John Day Fossil Beds National Monument, Oregon; Knife River Indian Villages National Historic Site, North Dakota; Springfield Armory National Historic Site, Massachusetts; Tuskegee Institute National Historic Site, Alabama; Martin Van Buren National Historic Site, New York; and Sewall-Belmont House National Historic Site, Washington, District of Columbia; and for other purposes.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled,

Historic sites
and national
monument.
Establishment.

TITLE I

SEC. 101. (a) Unless otherwise provided hereafter, the Secretary of the Interior (hereinafter referred to as the "Secretary") is authorized to acquire by purchase with donated or appropriated funds, donation, exchange, or by transfer from another Federal agency such lands and interests in lands as hereafter provided for establishment as units of the national park system, as follows:

Land acquisition.

(1) for establishment as the Clara Barton National Historic Site, Maryland, those lands depicted on the map entitled "Boundary Map, Clara Barton National Historic Site, Maryland", numbered NHS-CLBA 90,001 and dated February 1974, which shall include the land and improvements occupied by Clara Barton, founder of the American Red Cross, located at 5801 Oxford Road, Glen Echo, Maryland: *Provided*, That the above-mentioned land and improvements may be acquired only by donation: *And provided further*, That the donation of any privately owned lands within the historic site may not be accepted unless and until the property is vacant;

Clara Barton
National His-
toric Site,
Md.
16 USC 461
note.

(2) for establishment as the John Day Fossil Beds National Monument, Oregon, those lands depicted on the map entitled "Boundary Map, John Day Fossil Beds National Monument", numbered NM-JDFB-20,014-A and dated June 1971: *Provided*, That the national monument shall not be established unless and until the State of Oregon donates or agrees to donate the Thomas Condon-John Day Fossil Beds, Clarno, and Painted Hills State Parks: *Provided further*, That the Secretary shall not acquire a fee title interest to more than one thousand acres of privately owned lands except by donation or exchange: *Provided further*, That the Secretary shall designate the principal visitor center as the "Thomas Condon Visitor Center";

John Day Fossil
Beds National
Monument, Oreg.
16 USC 431
note.

(3) for establishment as the Knife River Indian Villages National Historic Site, North Dakota, those lands depicted on the map entitled "Boundary Map, Knife River Indian Villages National Historic Site, North Dakota", numbered 468-20,012 and dated July 1970;

Thomas Condon
Visitor Center,
designation.
Knife River
Indian Villages
National His-
toric Site,
N. Dak.

(4) for establishment as the Springfield Armory National Historic Site, Massachusetts, those lands depicted on the map entitled "Boundary Map, Springfield Armory National Historic Site, Massachusetts", numbered NHS-SPAR-91,003 and dated January 1974, the oldest manufacturing arsenal in the United States: *Provided*, That the historic site shall not be established unless an agreement is executed which will assure the historical integrity of the site and until such lands as are needed for the historic site are donated for this purpose;

16 USC 461
note.
Springfield
Armory Nation-
al Historic
Site, Mass.
16 USC 461
note.

88 STAT. 1462

Tuskegee Institute National Historic Site, Ala.
16 USC 461
note.

(5) for establishment as the Tuskegee Institute National Historic Site, Alabama, those lands depicted on the map entitled "Boundary Map, Tuskegee Institute National Historic Site, Alabama", numbered NHS-TI 20,000-C and dated September 1973, which shall include the home of Booker T. Washington, the Carver Museum, and an antebellum property adjacent to the campus of Tuskegee Institute, known as Grey Columns; and

Martin Van Buren National Historic Site, N. Y.
16 USC 461
note.

(6) for establishment as the Martin Van Buren National Historic Site, New York, those lands depicted on the map entitled "Boundary Map, Martin Van Buren National Historic Site, New York", numbered NHS-MAVA-91,001 and dated January 1974, which shall include the home of Martin Van Buren, eighth President of the United States.

Personal property, acquisition.

(b) The Secretary may also acquire personal property associated with the areas referred to in subsection (a) of this section. Lands and interests therein owned by a State or any political subdivision thereof which are acquired for the purposes of subsection (a) of this section may be acquired only by donation.

Notice to congressional committees.

SEC. 102. (a) When the Secretary determines that an adequate interest in lands has been acquired to constitute an administrable unit for each of the areas described in section 1 of this Act, he may, after notifying the Committees on Interior and Insular Affairs of the United States Congress of his intention to do so at least fourteen days in advance, declare the establishment of such unit by publication of a notice to that effect in the Federal Register. Such notice shall contain a map or other description of the boundaries of the unit, together with an explanation of the interests acquired and the costs incident thereto. The Secretary may refrain from acquiring property for establishment of any unit authorized by this Act where, in his judgment, satisfactory agreements or donations with respect to properties which are needed for the protection and administration of a particular unit have not been consummated with the owners of such properties.

Publication in Federal Register.

Administration.

(b) Pending the establishment of each unit and, thereafter, the Secretary shall administer the property acquired pursuant to this Act in accordance with the provisions of the Act of August 25, 1916 (39 Stat. 535), as amended and supplemented, and, to the extent applicable, the provisions of the Act of August 21, 1935 (49 Stat. 666), as amended.

16 USC 1.
16 USC 461.

Tuskegee Institute National Historic Site, road construction.

SEC. 103. Notwithstanding any other provision of law, the Secretary is authorized to construct roads on real property in non-Federal ownership within the boundaries of the Tuskegee Institute National Historic Site. Any roads so constructed shall be controlled and maintained by the owners of the real property.

Appropriation.

SEC. 104. There are authorized to be appropriated such sums as may be necessary to carry out the provisions of this Act, not to exceed, however, the following:

(a) Clara Barton National Historic Site, \$812,000 for acquisition of lands and interests in lands and for development;

(b) John Day Fossil Beds National Monument, \$400,000 for the acquisition of lands and interests in lands and \$4,435,200 for development;

(c) Knife River Indian Villages National Historic Site, \$600,000 for the acquisition of lands and interests in lands and \$2,268,000 for development;

(d) Springfield Armory National Historic Site, \$5,300,000 for development;

(e) Tuskegee Institute National Historic Site, \$185,000 for the acquisition of lands and interests in lands and \$2,722,000 for development; and

(f) Martin Van Buren National Historic Site, \$213,000 for acquisition of lands and interests in lands and \$2,737,000 for development.

TITLE II

SEC. 201. In order to preserve for the benefit and inspiration of the people of the United States as a national historic site, the Sewall-Belmont House within the District of Columbia, the Secretary of the Interior is authorized to enter into a cooperative agreement to assist in the preservation and interpretation of such house.

Sewall-Belmont
House National
Historic Site,
D. C.

SEC. 202. The property subject to cooperative agreement pursuant to section 101 of this Act is hereby designated as the "Sewall-Belmont House National Historic Site".

16 USC 461
note.

SEC. 203. The cooperative agreement shall contain, but shall not be limited to, provisions that the Secretary, through the National Park Service, shall have right of access at all reasonable times to all public portions of the property covered by such agreement for the purpose of conducting visitors through such property and interpreting it to the public, that no changes or alterations shall be made in such property except by mutual agreement between the Secretary and the other parties to such agreement. The agreement may contain specific provisions which outline in detail the extent of the participation by the Secretary in the restoration, preservation, and maintenance of the historic site.

Cooperative
agreement.

SEC. 204. There are hereby authorized to be appropriated such sums as may be necessary to carry out the purposes of this Act, but not to exceed \$500,000.

Appropriation.

Approved October 26, 1974.

LEGISLATIVE HISTORY:

HOUSE REPORT No. 93-1285 (Comm. on Interior and Insular Affairs)
SENATE REPORT No. 93-1233 (Comm. on Interior and Insular Affairs)
CONGRESSIONAL RECORD, Vol. 120 (1974):

Aug. 19, considered and passed House.

Oct. 8, considered and passed Senate, amended.

Oct. 16, House concurred in Senate amendments.

County, Pennsylvania", numbered 446-40,001B, and dated April 1978: \$166,000.

(6) Fort Caroline National Memorial, Florida: To add approximately ten acres as generally depicted on the map entitled "Boundary Map, Fort Caroline National Memorial, Florida", numbered 5310/80,000-A, and dated April 1978: \$170,000.

(7) George Washington Birthplace National Monument, Virginia: To add approximately eighty-two and twenty-five one-hundredths acres as generally depicted on the map entitled "Boundary Map, George Washington Birthplace National Memorial, Virginia", numbered 332-30,000-B and dated September 1978: \$450,000.

(8) Great Sand Dunes National Monument, Colorado: To add approximately one thousand one hundred and nine acres as generally depicted on the map entitled "Boundary Map, Great Sand Dunes National Monument, Colorado", numbered 140-80,001-A, and dated November 1974: \$166,000.

(9) Gulf Islands National Seashore, Mississippi-Florida: To add approximately six hundred acres as generally depicted on the map entitled "Boundary Map, Gulf Islands National Seashore, Mississippi-Florida", numbered 20,006, and dated April 1978: \$300,000.

(10) Hawaii Volcanoes National Park, Hawaii: To add approximately two hundred sixty-nine acres as generally depicted on the map entitled "Boundary Map, Hawaii Volcanoes National Park, Hawaii", numbered 80,000, and dated August 1975: \$562,000.

(11) John Day Fossil Beds National Monument, Oregon: To add approximately one thousand four hundred and eleven acres, and to delete approximately one thousand six hundred and twenty acres as generally depicted on the map entitled "Boundary Map, John Day Fossil Beds National Monument, Oregon", numbered 177-30,000-B, and dated May 1978: \$3,500,000. The Act of October 26, 1974 (88 Stat. 1461), which designates the John Day Fossil Beds National Monument is amended by deleting the second proviso of section 101(a)(2). Furthermore, notwithstanding any other provision of law to the contrary, the Secretary may, if he determines that to do so will not have a substantial adverse effect on the preservation of the fossil and other resources within the remainder of the monument, convey approximately sixty acres acquired by the United States for purposes of the monument in exchange for non-Federal lands within the boundaries of the monument, and, effective upon such conveyance, the boundaries of the monument are hereby revised to exclude the lands conveyed.

(12) Monocacy National Battlefield, Maryland: To add approximately five hundred and eighty-seven acres as generally depicted on the map entitled, "Boundary Map, Monocacy National Battlefield", numbered 894-40,001, and dated May 1978: \$3,500,000.

(13) Montezuma Castle National Monument, Arizona: To add approximately thirteen acres, and to delete approximately five acres as generally depicted on the map entitled "Montezuma Castle National Monument, Arizona", numbered 20,006, and dated April 1978.

(14) Oregon Caves National Monument, Oregon: To add approximately eight acres as generally depicted on the map entitled "Oregon Cave, Oregon", numbered 20,000, and dated April 1978: \$107,000.

Land conveyance.

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YOUTIE, BERTA A., AND A.H. WINWARD

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Note: A bird list is also included.

*All documents are unpublished and on file at John Day Fossil Beds
National Monument.

P L A N N I N G T E A M A N D C O N S U L T A N T S

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As the nation's principal conservation agency, the Department of the Interior has basic responsibilities to protect and conserve our land and water, energy and minerals, fish and wildlife, and parks and recreation areas, and to ensure the wise use of all these resources. The department also has major responsibility for American Indian reservation communities and for people who live in island territories under U.S. administration.

