

Umatilla

DESIGNATION ORDER

By virtue of the authority vested in me by Regulation U-4 of the Regulations of the Secretary of Agriculture, I hereby designate as the PATAHA BUNCHGRASS RESEARCH NATURAL AREA the lands described in the preceding report by Michael M. Bauer and David M. Yates, dated April 15, 1968; said lands shall hereafter be administered as a research natural area subject to the said regulations and instructions thereunder.

Oct. 29, 1968  
Date

Edward R. Pliff  
Chief

Establishment Report  
for the  
Pataha Bunchgrass Research Natural Area  
Umatilla National Forest  
Garfield County, Washington

PRINCIPAL DISTINGUISHING FEATURES

Two distinct homogenous vegetative cover types are found within this natural area. The principal feature includes an outstanding example of bluebunch wheatgrass (Agropyron spicatum) and its associated species. This site represents the extensive stands of bunchgrass that once covered thousands of square miles of rolling prairie in southeastern Washington and neighboring Idaho. Now, with the land greatly altered by man, the bunchgrass stands have been modified by invasion of introduced plant species. Good examples of bunchgrass remain only in small isolated areas such as that found at the Pataha site.

In the north and northeastern portions of the area, a dense canopy of grand fir (Abies grandis) creates a shaded environment consisting of elk sedge (Carex geyeri), huckleberry (Vaccinium spp.) and shade tolerant forbs occupying the understory.

## LOCATION

The natural area is located near the north end of the Blue Mountains on the Pomeroy Ranger District, Umatilla National Forest, and is 18 road miles southeast of Pomeroy, Washington. It is in the northwest quarter of Section 1, T. 9 N., R. 42 E., W.M., in Garfield County, and lies on a ridge between the drainages of Pataha Creek on the west and Asotin and Alpowa Creeks to the east. Passing near the east boundary of the natural area, the Iron Spring Road No. N-94 provides the nearest access. The road turns off State Highway 128 approximately 14 miles south of Pomeroy. Access to the area by vehicle from Pomeroy is easy in the summer, but becomes more difficult in winter and early spring.

## MAP

### AREA BY COVER TYPES

1. <u>Agropyron spicatum</u> - <u>Poa secunda</u>	<u>Acres</u> 33
2. <u>Abies grandis</u> - <u>Vaccinium membranaceum</u>	<u>18</u>
Total acres	51

### PHYSICAL AND CLIMATIC CONDITIONS

Located at an elevation of 4,500 feet, the natural area is on gentle terrain. The area gradually slopes downhill in all directions from the rather flat eastern boundary. Toward the south and west sides of the enclosed natural area, the slope rapidly steepens as it drops to Pataha Creek, less than one mile away.

Weather records at Peola, only two miles to the north of the natural area, indicate an average annual precipitation of 23 inches with an average snowfall of 89.6 inches. Summer temperatures generally vary from lows of 35° F. to highs of 85° F., while in the winter lows generally range from -10° F. to +25° F. and highs from 20° F. to 50° F.

### DESCRIPTION OF VALUES

#### 1. Flora

The greatest research value of this natural area is the bunchgrass association.

Due to its largely undisturbed condition, now rare in this region, this association should be of great interest to ecologists, botanists, and students interested in learning more about the natural history of the Pacific Northwest.

The area will be kept in its present condition. This bunchgrass association must not be altered in the least because of the small size of the area.

The grand fir-huckleberry association is quite common in the northern Blue Mountains.

2. Geology

No recent soil surveys have been made in this area. A very broad soils classification map of the Blue Mountains was prepared by the Washington Agricultural Experiment Station and Washington State Extension Service at W. S. U. in 1946. This map shows that three soil series possibly occur on the site: Waha, Underwood, and Helmer. The underlying parent material is known to be basalt, dating back to the great Columbia Basalt Flows. Much of the soil is of wind blown volcanic origin. In the bunchgrass area, the soil is 12" to 40" deep and well drained, contrasting sharply with the shallow, "perched water table" condition found along the upper west edge of the site.

3. Fauna

Rocky Mountain elk, white-tailed and mule deer are frequent visitors to the area during both summer and winter. Under certain winter conditions, they may heavily graze the bunchgrasses. Other animals present include snowshoe hares, squirrels, chipmunks, mice, and birds of the forest and plains. There have been no known rodent eruptions in the area, although under the right conditions those animals with high reproductive potential could over-populate the area.

An 8 feet high, woven-wire, game-proof fence forms the eastern boundary of the natural area. This fence is designed to keep big game animals on the National

Forest land and out of the agricultural areas to the north of the Forest. In harsh winters, the fence will cause a heavy concentration of animals on the National Forest side which results in heavier than normal utilization of the natural area.

4. Minerals

There are no known mineral claims on the natural area site. The northern Blue Mountains are not known to contain valuable mineral deposits.

5. Recreation

The natural area has little value for the weekend recreationist. There are developed Forest campgrounds within a 4-mile radius that offer more recreational activities than the land on or adjacent to the enclosure.

Damage could result from big game hunters and others who might try to drive vehicles into the natural area. A 3-wire fence has been constructed around the site in order to prevent unauthorized vehicle use.

6. Water Use

There is no surface water supply within the natural area.

7. Other Uses

The natural area lies within the Pomeroy Cattle and Horse Allotment. A 3-wire jack and stay fence constructed in 1967 around the north, west and south sides ties into the game-proof fence on the east. This completely encloses the natural area and will deny access to cattle.

No other resource uses that will disrupt the largely undisturbed condition of the natural area are planned.

A Forest Service telephone line crosses the northeastern portion of the natural area. Vehicles used in the maintenance of this line will be excluded from the area.

8. Recommendation

I recommend that the Pataha Bunchgrass Research Natural Area be established on the land described in this report.

April 15, 1968  
Date

Submitted: /s/ Michael M. Bauer  
Wildlife Biologist

/s/ David M. Yates  
Forester

April 15, 1968  
Date

/s/ Irving E. Smith  
District Ranger

Sept. 12, 1968  
Date

Recommended:  
*Acting*

V. J. Hughes  
Forest Supervisor

9/16/68  
Date

Recommended:  
*Acting*

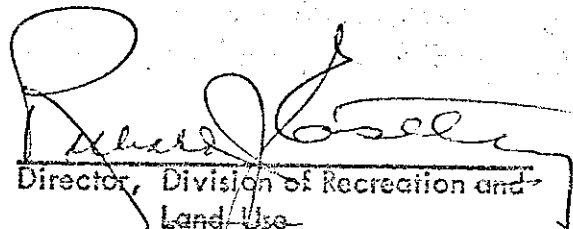
K. O. Wilson  
Regional Forester

9-19-68  
Date

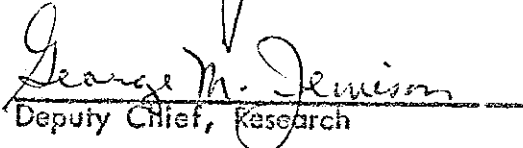
Recommended:

Philip S. Bringle  
Director

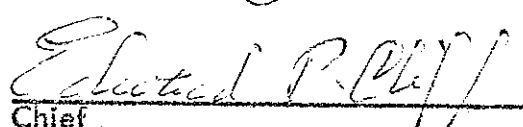
10-25-68  
Date

Approved:   
Director, Division of Recreation and  
Land Use

October 14, 1968  
Date

Approved:   
Deputy Chief, Research

October 29, 1968  
Date

Approved:   
Chief





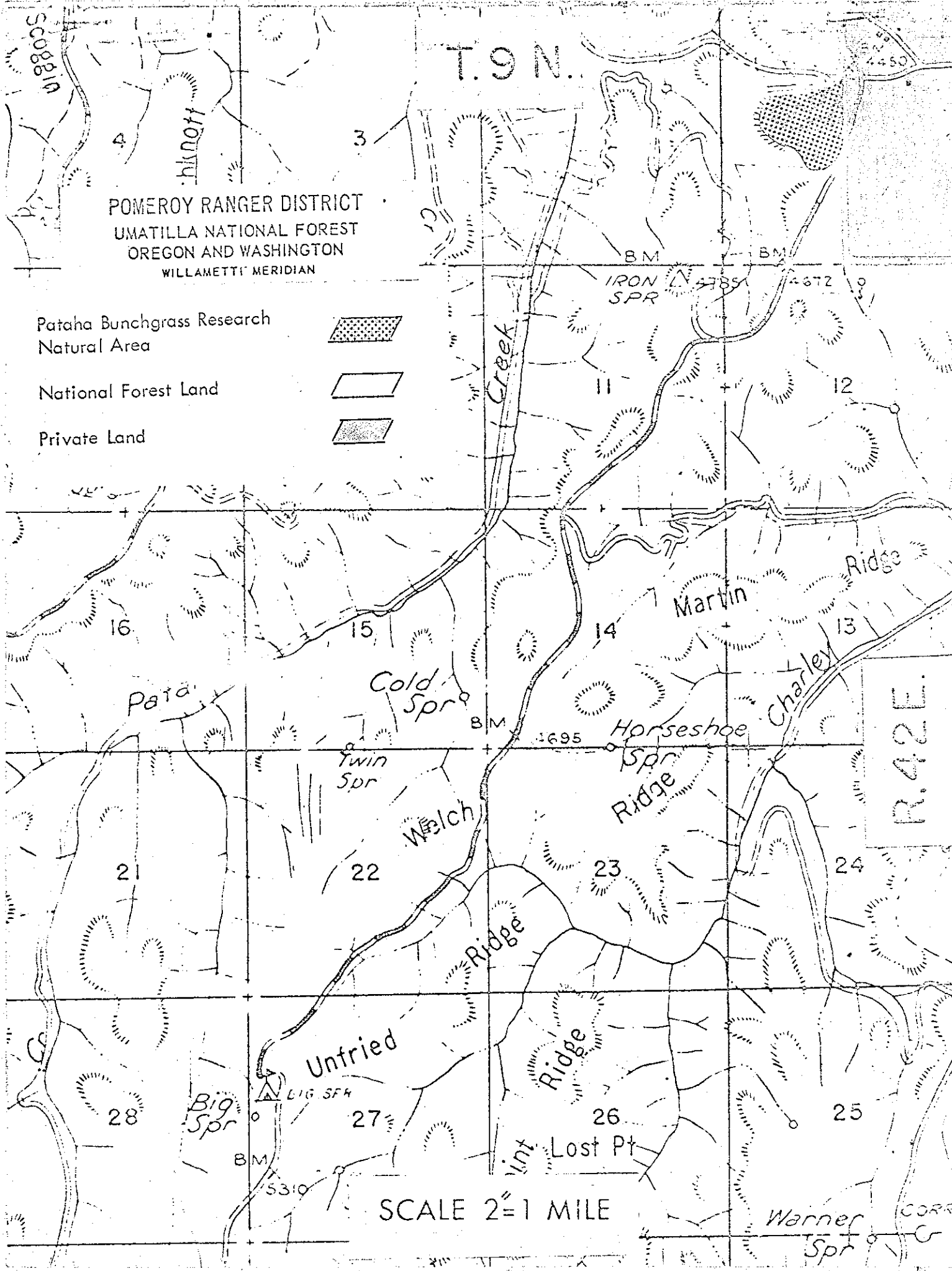
T.9 N.

POMEROY RANGER DISTRICT  
UMATILLA NATIONAL FOREST  
OREGON AND WASHINGTON  
WILLAMETTE MERIDIAN

Pataha Bunchgrass Research  
Natural Area

National Forest Land

Private Land



SCALE 2"=1 MILE

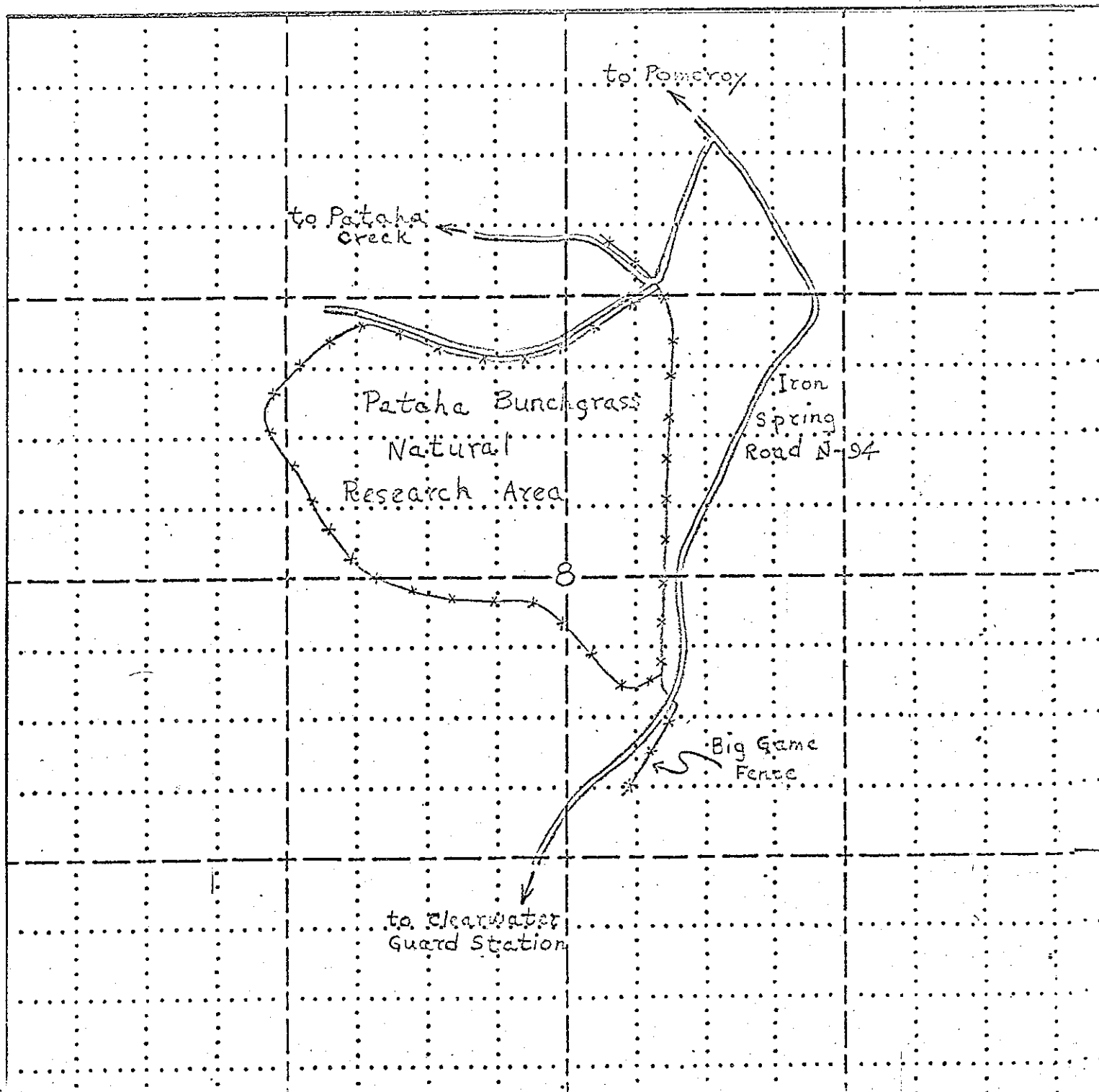
R.42 E.

# FIELD MAP SHEET

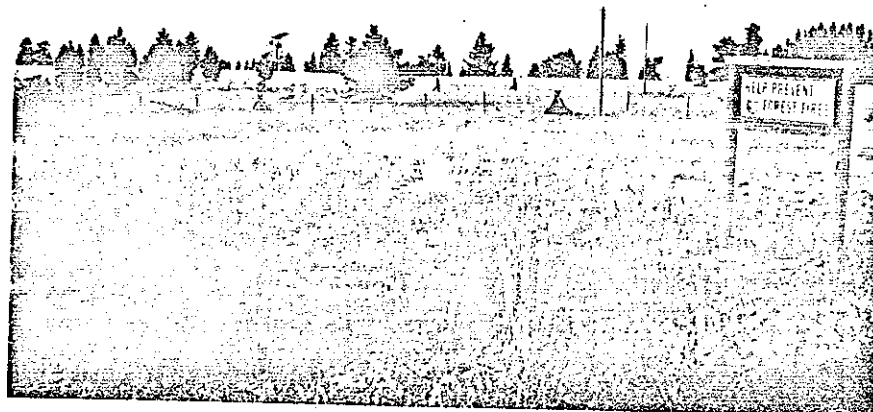
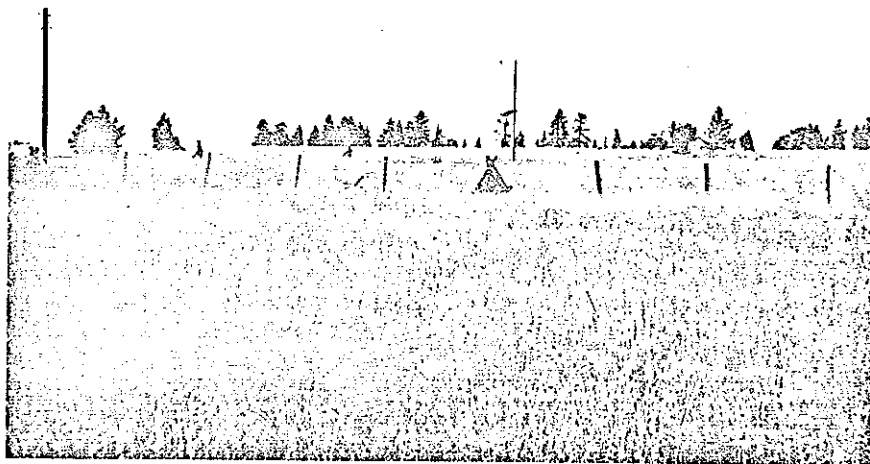
T. 9 N. R. 43 E. Sec. 1 Subdiv. Umatilla N.F.

Mapped by Michael M. Bauer Reviewed by Jimmy R. Wilkins Scale 8 inches = 1 Mile

March 29, 1968



## PHOTOGRAPHS



Two views of the Pataha Bunchgrass Research Natural Area from Iron Spring Road. Natural Area lies on the other side (west) of the three wire jack and stay fence across the center of each photo. The Forest Service telephone line crosses the natural area, then follows the Iron Spring Road to Clearwater Guard Station.