

UNITED STATES DEPARTMENT OF AGRICULTURE
FOREST SERVICE

Establishment Record

for

HAYSTACK BUTTE RESEARCH NATURAL AREA

Crooked River National Grassland

Jefferson County, Oregon



Cover Page Info for Cover of RNA Establ. Record

Name: Haystack Butte RNA

Region: R06

Station: PNW

State: Oregon

County: Jefferson

Boundary Certified - not certified

TMIS #: 00

Date Reg. Forester signed: December 15, 2003 (Decision anno. in newspaper of record - 12/22/03)

Lat.: 44 degrees 28' 00" N

Long.: 121 degrees 09' 30" W

<u>1980 SAF</u>	<u>Acres</u>	<u>Ha</u>
238 Western Juniper	62	25
<u>1966 Kuchler</u>	<u>Acres</u>	<u>Ha</u>
24 Juniper Steppe Woodland (<i>Juniperus/Artemisia/Agropyron</i>)	62	25

Access (under "location"): map vs. description: both

Original maps, or photocopies? Original GIS

Photos included? No

Abutted by non-FS land? yes

SAF & Kuchler types consistent? No

Climate records: Nearest weather station 11 miles; climate record 71 years.

Fauna & Flora authorities: Hitchcock, C. L. and Cronquist, A. 1973; Hickman, J. C. 1993; Csuti, B. et al. 1992; McCaune, B. and Geiser, L. 1997; Nussbaum, R. A. et al. 1983; Scott, S. (ed). 1987.

Land use conflicts? Grazing? Trails? Recreation? Possible future recreation if hiking visitor use increases.

Commercial Forest Land: no in Wilderness: no

* Classify at Subsection level if possible: a 5-digit code (or 6-digit, if


SIGNATURE PAGE

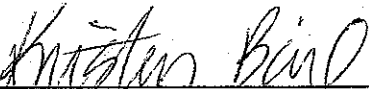
RESEARCH NATURAL AREA ESTABLISHMENT RECORD

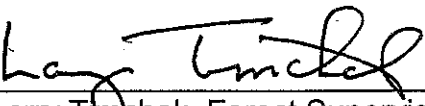
Haystack Butte Research Natural Area

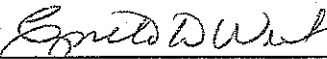

Ochoco National Forest, Crooked River National Grassland

Jefferson County, Oregon

Prepared by  Date 8/4/03
Mark Lesko, District Botanist
Lookout Mountain Ranger District,
Ochoco National Forest

Recommended by  Date 8/1/2003
Kristin Bail, District Ranger,
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Recommended by  Date 8/5/03
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Ochoco National Forest

Recommended by  Date 10/24/03
 Thomas M. Quigley, Director,
Pacific Northwest Research Station

TITLE PAGE

Establishment Record for
Haystack Butte Research Natural Area
Within Ochoco National Forest,
Crooked River National Grassland
Jefferson County, Oregon

**ESTABLISHMENT RECORD FOR
HAYSTACK BUTTE RESEARCH NATURAL AREA
WITHIN OCHOCO NATIONAL FOREST,
CROOKED RIVER NATIONAL GRASSLAND
JEFFERSON COUNTY, OREGON**

INTRODUCTION

Haystack Butte Research Natural Area (RNA) occupies approximately 62 acres (25 ha) in the High Lava Plains of Oregon and lies within the Crooked River National Grassland of the Ochoco National Forest. Haystack Butte is a flat-topped butte rising abruptly from the surrounding rolling land. The Haystack Butte RNA consists of the western and southern portions of the top and the western and northwestern upper slopes of Haystack Butte, with the eastern and northwestern portions of Haystack Butte being under private ownership.

The federally owned land adjacent to the Haystack Butte RNA is designated as General Forage in the Ochoco National Forest and Crooked River National Grassland Land and Resource Management Plan (USDA Forest Service 1989a). Although the Haystack Butte RNA has been a portion of an active grazing allotment for many years, little grazing has occurred on the butte's upper portions. Because the sides of Haystack Butte are steep and no water is available on the butte top for stock, cattle have rarely visited the top or upper slopes. This has left largely intact vegetative communities on the upper parts of the butte.

Land Management Planning

Haystack Butte was included as a proposed RNA in the Final Environmental Impact Statement (FEIS) for the Ochoco National Forest and Crooked River National Grassland, (USDA Forest Service 1989b).

The area is managed according to standards and guidelines outlined in the Grassland Plan for Management Area MA-G4 (Research Natural Areas) (USDA Forest Service 1989a).

OBJECTIVE

The objectives of the Haystack Butte RNA are to protect the ecological integrity of the plant communities within the RNA, to provide a reference area for determining long-term intrinsic ecological changes, and to serve as a benchmark for comparison with intensively used or managed sites supporting similar vegetation.

JUSTIFICATION

Haystack Butte RNA is dominated by a juniper/shrub/grass woodland. The Oregon Natural Heritage Plan has identified a western juniper/big sagebrush/Idaho fescue (*Juniperus occidentalis/Artemisia tridentata/Festuca idahoensis*) plant community as a cell or element lacking adequate representation in the High Lava Plains ecoregion (Oregon Natural Heritage Advisory Council 1998). This plant community occurs in a high quality condition within the RNA boundaries.

The varied aspects and soils on Haystack Butte support other smaller juniper shrub steppe plant associations (*described in Area by Cover Types, below*). As grazing has been limited by topography, the forces that both change and maintain the plant communities located within the RNA are closer to those occurring naturally than can be found on most public land in the High Lava Plains Physiographic Province.

The absence of significant non-native plant infestations within the Haystack Butte RNA is another factor contributing to the desirability of this area as a source of baseline information for comparison to exotics-occupied lands supporting similar plant communities.

PRINCIPAL DISTINGUISHING FEATURES

Haystack Butte RNA is located on the upper slopes and top of Haystack Butte, a small, isolated plateau rising approximately 600 feet (183 m) from the surrounding rolling terrain. The butte's slopes are quite abrupt on the north, south, and east with the west side inclining more gradually. The steepness of the slopes and the lack of water on the butte top have greatly restricted grazing. In the past, prescribed fire has been applied to portions of the butte, reducing the number of western juniper in some spots. Some of these burned areas now support very robust stands of bunchgrasses. Other areas support mature juniper woodlands. The shrub component is present at varying levels throughout the RNA boundaries, though it appears to be nearly absent on the northwest slopes.

T12S, R13E, Sec 3

LOCATION

Figure 1 shows the general location of Haystack Butte RNA. The RNA is located on the Crooked River National Grassland of the Ochoco National Forest. The center of the RNA is at latitude 44° 28' 00" North and longitude 121° 09' 30" West. The tract is located in Jefferson County, approximately 12 air miles (19 km) south-southwest of Madras, Oregon. The 62 acre site lies within Section 3 of Township 13 South, Range 13 East Willamette Meridian.

Boundaries

Haystack RNA is bounded on the east and northwest by private land. The rest of the boundary is shared with the Crooked River National Grassland of the Ochoco National Forest.

Haystack Butte RNA is composed of two units (Figure 2). The larger unit (Unit 1) contains 60.8 acres (24.6 ha). The smaller Unit 2 (1.3 acres) (0.5 ha) lies about 150 feet southeast of the larger main unit. The small piece is separated from the other larger portion of the RNA by private land. The Forest Service will attempt to acquire the parcel of private land to improve the integrity of the RNA.

The main unit (Unit 1) is bounded on the northwest, northeast, and by private land. The northern boundary approximately follows the 3800 foot (1158 m) contour of Haystack Butte. The western boundary approximately follows the 3600 foot (1097 m) contour. The southern boundary begins on the east at the edge of private land near the 4000 foot contour and goes west toward the 3600 foot contour, following a rim that drops abruptly to the south.

The small 1.3 acre portion (Unit 2) of the RNA lies slightly southeast of the main portion. This smaller area is bordered on the north by private land while its western, southern, and eastern boundaries approximately follow the 4000 foot contour of the butte top.

Area

Total area for the Haystack Butte RNA is approximately 62 acres (25 ha).

Elevations

Elevations range from about 3600 feet (1097 m) above sea level on the western slope of Haystack Butte to a high point of about 4000 feet (1219 m) on the southern edge of the RNA.

Access

The Haystack Butte RNA is in the western portion of the Ochoco National Forest on the Crooked River National Grassland (Figure 1).

Figure 1. Location map for Haystack Butte Research Natural Area, Crooked River National Grassland.

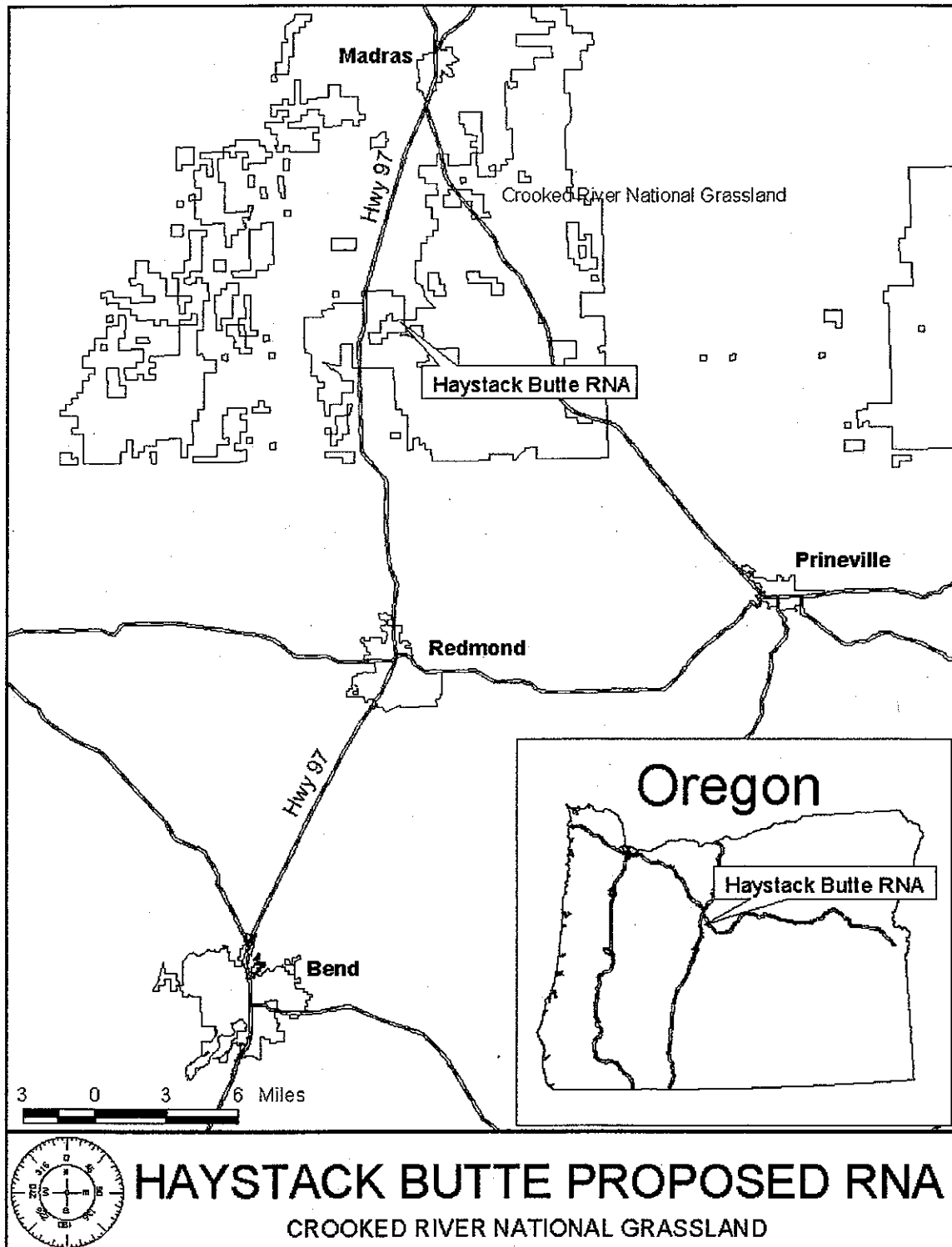
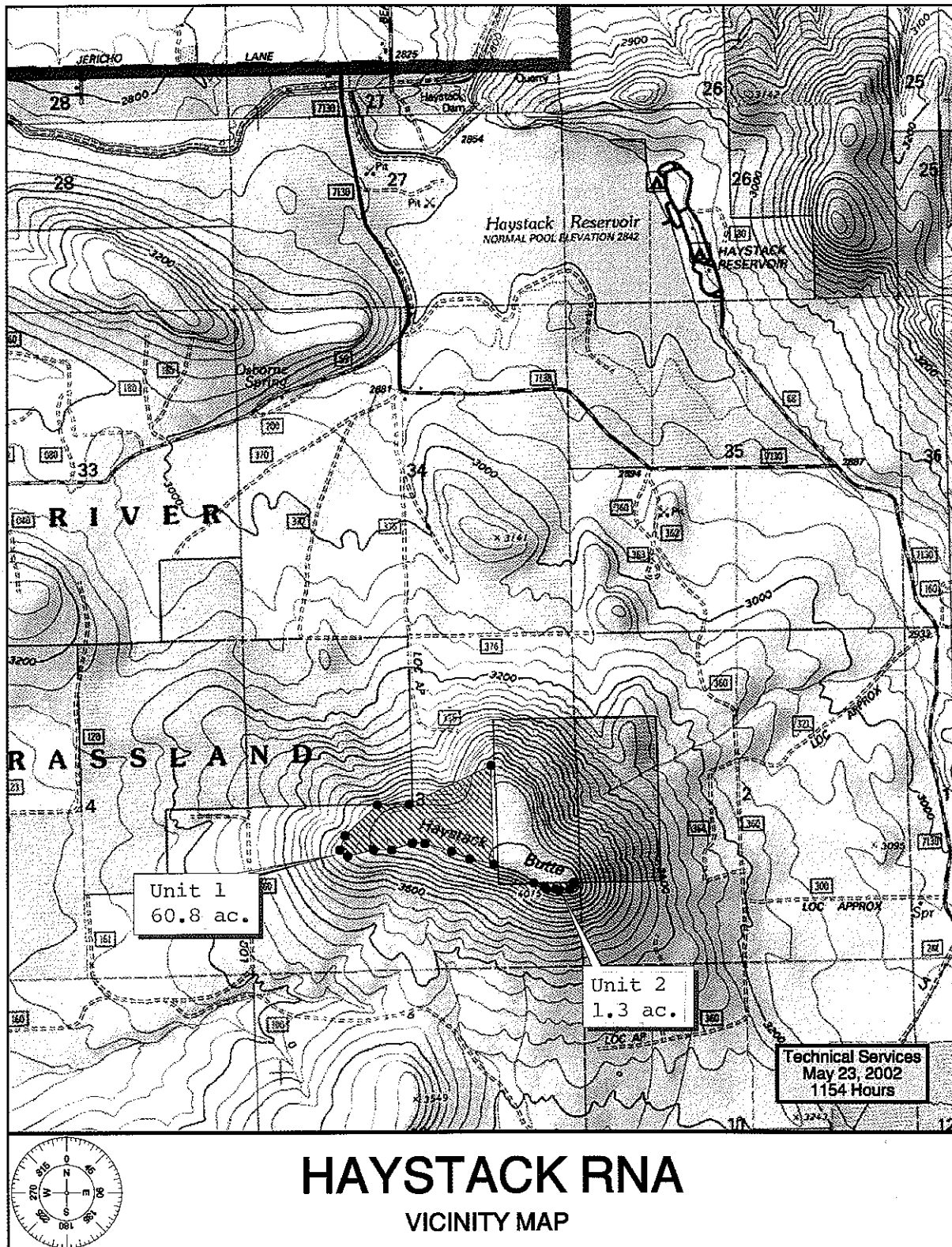


Figure 2. Boundaries and locations of two units comprising Haystack Butte Research Natural Area.



From the west, it is accessible from US Highway 97 between Madras and Redmond, Oregon. From Highway 97, 12 miles (19km) south of Madras, head east on Monroe Lane for 0.5 miles (0.8 km) to its terminus, then turn south on Culver Highway for 500 ft (152 m). Turn east on a dirt road passable by passenger car in dry weather and drive for 0.5 miles (0.89 km) to where the road meets two parallel north-south running barbed wire fences. From here proceed on foot over/through both fences and travel east-northeast toward the more gradually sloping west-facing side of Haystack Butte. After 0.5 mi. (0.8 km) climb another barbed wire fence and continue toward the butte. At about the 3600 ft. (1097 m) elevation, enter the RNA.

From the east, the RNA is accessible from US Highway 26. Turn west off of this highway at the sign for Haystack Reservoir. At mile 4.1, make a sharp left turn onto SE Springer Road. From this intersection drive 2.2 more miles to intersection with USDA Road 5770 on the left. This road is directly past a ranch and is gated. Continue up this road following a double fence line to the end of the road at a barbed wire fence. Continue on foot up the north face of the butte, entering the RNA at about the 3800 ft. (1158 m) level.

Maps

Haystack Butte RNA lies within the area covered by the USGS 7.5 minute topographic quadrangle map, Opal City, Oregon 1978. The Ochoco National Forest and Crooked River National Grassland Recreation Map (2000), is useful for ownership and general access information, however this map does not delineate the RNA boundaries.

Photos

Haystack Butte RNA can be viewed on aerial photo #195-72 (taken June 1, 1995). This photo is on file at both the Ochoco National Forest Supervisors Office in Prineville, Oregon, and the Crooked River National Grassland District Ranger's office in Madras, Oregon.

AREA BY COVER TYPES

Vegetation of the RNA has been surveyed during initial recommendation of the site for RNA status as well as in preparation of drafting this document. Plant associations were mapped using Johnson and Clausnitzer (1991) and Hopkins and Kovalchik (1983). Figure 3 depicts the locations of these plant associations.

The Haystack Butte RNA contains the following Society of American Forester (SAF) and Kuchler types, and plant associations:

	Estimated <u>Acres</u>	<u>(Hectares)</u>
<u>SAF Cover Types</u> (Eyre 1980)		
238 Western juniper	62	(25)
<u>Kuchler Types</u> (Kuchler 1966)		
24. Juniper Steppe Woodland (<i>Juniperus/Artemisia/Agropyron</i>)	62	(25)
<u>Western Juniper Associations</u> (Driscoll 1964)		
1) Western juniper/big sagebrush/Idaho fescue woodland (<i>Juniperus occidentalis/Artemisia tridentata/Festuca idahoensis</i>)	52	(21)
2) Western juniper/Idaho fescue (<i>Juniperus occidentalis/Festuca idahoensis</i>)	10	(4)
Total acres	62	(25)
<u>Plant Associations</u> (mapped using Johnson and Clausnitzer 1991; Hopkins and Kovalchik 1983)		
1) Western juniper/bitterbrush/Idaho fescue – bluebunch wheatgrass (<i>Juniperus occidentalis/Purshia tridentata/ Festuca idahoensis – Pseudoroegneria spicata</i>) (Johnson and Clausnitzer 1991)	52	(21)
2) Western juniper/big sagebrush/bluebunch wheatgrass – Sandberg's bluegrass (<i>Juniperus occidentalis/Artemesia tridentata/Pseudoroegneria spicata – Poa sandbergii</i>) (Hopkins and Kovalchik 1983)	10	(4)
Total acres	62	(25)

PHYSICAL AND CLIMATIC CONDITIONS

Physical Conditions

Haystack Butte is located in the Mid-basin Lava Buttes physiographic province (USDA Forest Service 1989A). It is one of several buttes rising from otherwise rolling country occurring in the southeastern portion of the Crooked River National Grassland. The RNA occupies the upper western and northern portions of Haystack Butte. On the RNA's eastern edge, the topography is nearly flat. A gradual westward sloping (<10%) occurs in

the mid portion of the RNA while the northern and far western portions of the RNA have steeper slopes (15-60%).

Climatic Conditions

The central Oregon climate is characterized by warm summers and cold winters. Most of the limited precipitation falls as snow during the winter with some rainfall occurring in the spring. Frost can occur in any month of the year. The frost-free season is very short with the average growing season approaching only 100 days. Summers are typically dry with high daytime temperatures and low nighttime temperatures. Winds during the summer are typically light and from the northwest. During spring and fall, very strong easterly winds may occur, enhancing fire hazards. Winter snowstorms generally come from the southwest with occasional frigid storms from the northwest.

Madras, Oregon, is the closest recording National Oceanographic and Atmospheric Administration (NOAA) weather station, and is located approximately 11 miles (17.6 km) to the north-northeast. Madras is at an elevation of 2242 ft (683 m) above sea level. The Madras station has a mean annual temperature of 48° F (10° C) and receives an average annual precipitation of 10.62 inches (27 cm). Nearly half of the annual precipitation falls between November and February. Summer high temperatures regularly reach into the 80's F (27-31° C), while winter lows often drop into the 20's (-6.6 to -1.6° C). Monthly climatic data (mean temperature and mean precipitation) for Madras, Oregon is listed in Table 1.

Table 1. Climatic records for Madras, Oregon between 1928 and 1999 (National Oceanic Atmospheric Administration 2000)

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
32	37	41	47	53	66	66	65	58	48	38	34	48° F
1.32	0.95	0.79	0.75	0.82	0.76	0.46	0.51	0.55	0.78	1.48	1.46	10.62"

As Haystack Butte is considerably higher in elevation than Madras, Oregon, it is likely that the precipitation and temperature averages may differ to some extent.

DESCRIPTION OF VALUES

Flora

Plant Associations and Communities

The primary plant associations included in the Haystack Butte RNA are:

- 1) Western juniper/bitterbrush/Idaho fescue – bluebunch wheatgrass (*Juniperus occidentalis*/*Purshia tridentata*/*Festuca idahoensis* – *Pseudoroegneria spicata*) (CJS 321 in Figure 3) (Johnson and Clausnitzer 1991).

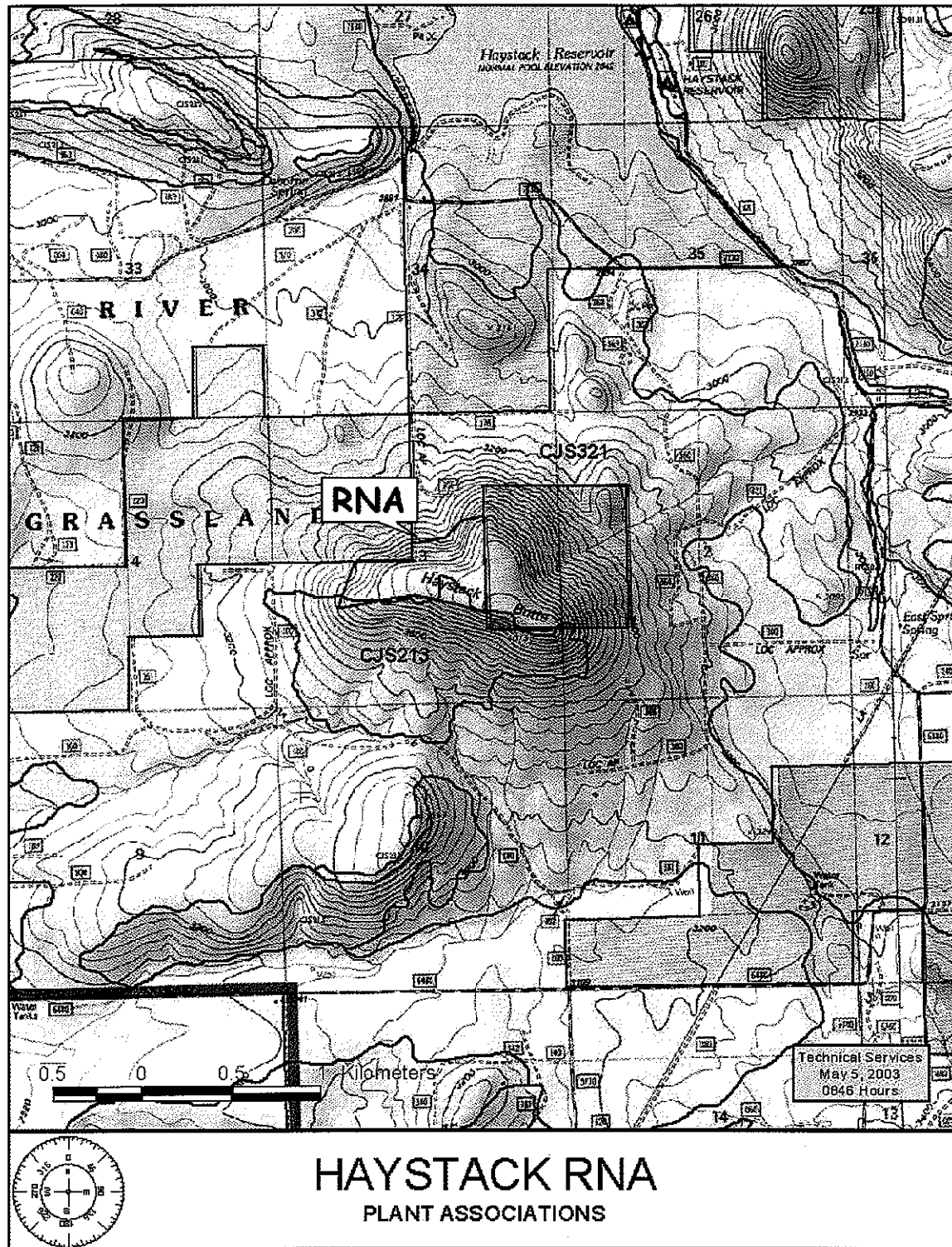
Mapping of the western juniper/bitterbrush/Idaho fescue – bluebunch wheatgrass woodland plant association in the Crooked River National Grassland is quite broad and includes a variety of plant communities. Within this plant association in the RNA, the Oregon Natural Heritage Advisory Council identified the following plant communities (Oregon Natural Heritage Advisory Council 1998) and the Oregon Natural Heritage Program provided descriptions of each (Murray 2000).

- a) Western juniper/big sagebrush/Idaho fescue woodland. This vegetation community occupies much of Haystack Butte and comprises the eastern, middle, and western portions of the RNA. An excellent example of juniper – bunchgrass woodland, it is the superior condition of this plant community that prompts the establishment of this Research Natural Area. It is characterized as scattered western juniper and scattered or patchy big sagebrush with Idaho fescue bunches between the trees and shrubs. Common associated species include green rabbitbrush (*Chrysothamnus viscidiflorus*), gray rabbitbrush (*Ericamerica nauseosa*), horsebrush (*Tetradymia canescens*), bluebunch wheatgrass (*Pseudoroegneria spicata*), Sandberg's bluegrass (*Poa sandbergii*), yarrow (*Achillea millefolium*), arrowleaf balsamoroot (*Balsamorhiza sagitata*), Hood's phlox (*Phlox hoodii*), nine-leaf biscuitroot (*Lomatium triternatum*), and blue penstemon (*Penstemon euglaucus*).
- b) Western juniper/Idaho fescue – bluebunch wheatgrass woodland. This woodland is similar to the western juniper/big sagebrush/Idaho fescue woodland, but lacks the big sagebrush component. This woodland association occurs largely in patches on the steep north slope. Associated species are similar to the previous community. This is a fire-maintained community that can take repeated low intensity fire; without fire, shrubs and denser junipers will develop (M. Simpson 2003 pers. comm.)

- 2) Western juniper/big sagebrush/bluebunch wheatgrass – Sandberg's bluegrass (*Juniperus occidentalis/Artemisia tridentata/Pseudoroegneria spicata – Poa sandbergii*) (CJS213 in Figure 3) (Hopkins and Kovalchik 1983)

The western juniper/big sagebrush/bluebunch wheatgrass – Sandberg's bluegrass plant association designated by Hopkins and Kovalchik generally occupies drier sites than the western juniper/bitterbrush/Idaho fescue – bluebunch wheatgrass association (Figure 3). It is found on the southern edge of the RNA. Many of the same species are shared with the previous plant association, but Sandberg's bluegrass largely replaces Idaho fescue. Plants are more widely spaced and are often less robust.

Figure 3. Haystack Butte RNA plant associations (Johnson and Clausnitzer 1991; Hopkins and Kovalchik 1983). CJS321 = western juniper/bitterbrush/Idaho fescue-bluebunch wheatgrass; and CJS213 = western juniper/big sagebrush/bluebunch wheatgrass-Sandberg's bluegrass.



Plant Species Present

The flora of Haystack Butte RNA is representative of the High Lava Plains Physiographic Province. The flora has not been systematically collected or studied other than those taxa encountered during survey for the establishment of the Research Natural Area. These surveys were conducted by Oregon Natural Heritage Program (ONHP) personnel (1995 and 1998) (Murray 2000), Stu Garrett (Garrett 1998), and Forest Service botanists (2002). Mosses were identified by John Christy, ONHP. Table 2 lists known plant species for Haystack Butte RNA.

Species identifications of vascular plants were determined from Hitchcock and Cronquist (1973), The Jepson Manual (Hickman 1993), and Intermountain Flora, Vol. 6 (Cronquist et al. 1977). Lichens species were identified from McCune and Geiser (1997). Vascular plant nomenclature follows the PLANTS database from USDA Natural Resources Conservation Service (2000). "E" = exotic non-native species. No state or federally threatened, endangered, or sensitive plant species are known to occur within the Haystack Butte RNA.

Table 2. Plant species list for Haystack Butte RNA.

Plant Association 1 = western juniper/bitterbrush/Idaho fescue (Johnson and Clausnitzer 1991).

Plant Association 2 = western juniper/big sagebrush/bluebunch wheatgrass – Idaho fescue (Hopkins and Kovalchik 1983).

E = exotic non-native species.

Scientific name	Common name	Plant Associations	
		1	2
TREES			
<i>Juniperus occidentalis</i>	western juniper	X	X
<i>Pinus ponderosa</i>	ponderosa pine	X	
SHRUBS			
<i>Amalanchier alnifolia</i>	Saskatoon serviceberry	X	
<i>Artemesia arbuscula</i>	little sagebrush	X	X
<i>Artemisia rigida</i>	scabland sagebrush	X	X
<i>Artemisia tridentata</i> var. <i>vaseyana</i>	big sagebrush	X	X
<i>Chrysothamnus viscidiflorus</i>	green rabbitbrush	X	X
<i>Ericameria nauseosa</i>	gray rabbitbrush	X	X
<i>Holodiscus dumosus</i>	rock spirea	X	
<i>Purshia tridentata</i>	antelope bitterbrush	X	
<i>Ribes cereum</i>	wax current	X	
<i>Tetradymia canescens</i>	horsebrush	X	X

FORBS

<i>Achillea millefolium</i>	western yarrow	X	X
<i>Agoseris heterophylla</i>	annual agoseris	X	X
<i>Arabis holboellii</i>	Holboell's rockcress	X	X
<i>Astragalus purshii</i>	woolypod milkvetch	X	X
<i>Astragalus filipes</i>	basalt milkvetch	X	X
<i>Astragalus curvicaupus</i>	curvepod milkvetch	X	X
<i>Balsamorhiza sagittata</i>	arrowleaf balsamroot	X	X
<i>Calochortus macrocarpus</i>	sagebrush mariposa lily	X	X
<i>Castilleja miniata</i>	scarlet paintbrush	X	X
<i>Calyptidium umbellatum</i>	Mt. Hood pussypaws	X	
<i>Collinsia parviflora</i>	small-flowered blue-eyed Mary	X	X
<i>Draba verna</i>	spring draba	X	X
<i>Epilobium brachycarpum</i>	autumn willow-herb	X	X
<i>Erigeron pollospermus</i>	purple cushion fleabane	X	X
<i>Erigeron sp.</i>	fleabane		X
<i>Eriogonum umbellatum</i>	sulfur buckwheat	X	X
<i>Fritillaria pudica</i>	yellow fritillary	X	
<i>Lewisia rediviva</i>	bitter root	X	
<i>Lithophragma parviflora</i>	small-flower woodland star	X	X
<i>Lithospermum ruderales</i>	western stoneseed	x	X
<i>Lomatium canbyi</i>	Canby's biscuitroot	X	X
<i>Lomatium donnellii</i>	Donnell's biscuitroot	X	X
<i>Lomatium macrocarpum</i>	bigseed biscuitroot	X	X
<i>Lomatium triternatum</i>	nineleaf biscuitroot	X	X
<i>Penstemon euglaucus</i>	glaucous beardtongue	X	X
<i>Penstemon humilus</i>	low beardtongue	X	X
<i>Penstemon speciosus</i>	royal beardtongue	X	X
<i>Phacelia linearis</i>	threadleaf phacelia	X	X
<i>Phlox hoodii</i>	Hood's phlox	X	X
<i>Sedum debile</i>	weak-stemmed stonecrop	X	
<i>Zigadenus paniculatus</i>	death camas	X	X

GRAMINOIDS

<i>Achnatherum hymenoides</i>	Indian ricegrass	X	X
<i>Bromus tectorum</i> (E)	cheatgrass		X
<i>Elymus elymoides</i>	squirreltail	X	X
<i>Festuca idahoensis</i>	Idaho fescue	X	X
<i>Koeleria macrantha</i>	prairie junegrass	X	X
<i>Poa secunda</i> ssp. <i>Secunda</i>	Sandberg's bluegrass	X	X
<i>Pseudoroegneria spicata</i> var. <i>spicata</i>	bluebunch wheatgrass	X	X

MOSESSES (Plant associations were not identified for the moss species)

Bryum cf. caespiticum
Cerotodon purpureus
Grimmia montanum
Tortula ruralis

LICHENS (Plant associations were not identified for the lichen species)

Letharia columbiana
Xanthoria sp.

Fauna

Faunal species have not been systematically studied or inventoried in Haystack Butte RNA. Observations of animal species taken during surveys conducted at the site as well as surveys on nearby areas are included below. The terrestrial vertebrates in Table 3 are among those most likely to be encountered in the RNA (Nussman et al. 1983, Scott 1987, Csuti et al. 1997). No surveys for invertebrates have been conducted within the RNA or on adjacent lands.

Table 3. Wildlife species list for Haystack Butte RNA

E = exotic non-native species

* = taxa having special status in the Oregon Natural Heritage Program (Oregon Natural Heritage Program 2001)

<u>Scientific name</u>	<u>Common name</u>
BIRDS	
<u>Cathartidae</u>	
<i>Cathartes aura</i>	turkey vulture
<u>Acciptiridae</u>	
<i>Accipter cooperii</i>	Cooper's hawk
<i>Accipter striatus</i>	sharp-shinned hawk
<i>Aquila chrysaetos</i>	golden eagle
<i>Buteo jamaicensis</i>	red-tailed hawk
<i>Buteo regalis</i>	ferruginous hawk
<i>Circus cyaneus</i>	northern harrier
<i>Haliaeetus leucocephalus</i> *	bald eagle
<u>Falconidae</u>	
<i>Falco mexicanus</i>	prairie falcon
<i>Falco peregrinus</i> *	peregrine falcon
<i>Falco sparverius</i>	American kestrel
<u>Phasianidae</u>	
<i>Alectoris chukar</i> (E)	chukar
<i>Callipepla californica</i>	California quail
<i>Perdix perdix</i> (E)	gray partridge
<i>Phasianus colchicus</i> (E)	ring-necked pheasant
<u>Columbidae</u>	
<i>Columba livia</i> (E)	rock dove
<i>Zenaida macroura</i>	mourning dove

Tytonidae

Tyto alba

barn owl

Strigidae

Asio flammeus

short-eared owl

Asio otus

long-eared owl

*Athene cunicularia**

burrowing owl

Bubo virginianus

great horned owl

Otus kennicottii

western screech-owl

Caprimulgidae

Chordeiles minor

common nighthawk

Phalaenoptilus nuttallii

common poorwill

Apodidae

Aeronautes saxatalis

white-throated swift

Picidae

Colaptes auratus

northern flicker

Tyrannidae

Contopus sordidulus

western wood-pewee

Empidonax oberholseri

dusky flycatcher

Empidonax traillii

willow flycatcher

Empidonax wrightii

gray flycatcher

Myiarchus cinerascens

ash-throated flycatcher

Sayornis saya

Say's phoebe

Tyrannus verticalis

western kingbird

Alaudidae

Eremophila alpestris

horned lark

Hirundinidae

Tachycineta thalassina

violet-green swallow

Corvidae

Corvus corax

common raven

Pica pica

black-billed magpie

Aegithalidae

Psaltriparus minimus

bushtit

Sittidae

Sitta carolinensis

white-breasted nuthatch

Troglodytidae

Catherpes mexicanus canyon wren
Salpinctes obsoletus rock wren
Troglodytes aedon house wren

Muscicapidae

Sialia currucoides mountain bluebird
*Sialia mexicana** western bluebird
Turdus migratorius American robin
Myadestes townsendii Townsend's solitaire

Laniidae

*Lanius ludovicianus** Loggerhead shrike

Vireonidae

Vireo solitarius solitary vireo

Emberizidae

Chondestes grammacus lark sparrow
Euphagus cyanocephalus Brewer's blackbird
Icteria virens yellow-breasted chat
Icterus bullockii Bullock's oriole
Molothrus ater brown-headed cowbird
Passerina amoena lazuli bunting
Pipilo chlorurus green-tailed towhee
Pooecetes gramineus vesper sparrow
Spizella breweri Brewer's sparrow
Spizella passerine chipping sparrow
Sturnella neglecta western meadowlark

Fringillidae

Carduelis psaltria lesser goldfinch

REPTILES

Iguanidae

Phrynosoma douglassii short-horned lizard
Sceloporus graciosus sagebrush lizard
Sceloporus occidentalis western fence lizard
Uta stansburiana side-blotched lizard

Scinidae

Eumeces skiltonianus western skink

Colubridae

Coluber constrictor racer

<i>Hypsiglena torquata</i>	night snake
<i>Masticophis taeniatus</i>	striped whipsnake
<i>Pituophis melanoleucus</i>	gopher snake
<i>Thamnophis elegans</i>	western terrestrial garter snake
<i>Thamnophis sirtalis</i>	common garter snake

Viperidae

<i>Crotalus viridis</i>	western rattlesnake
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Boidae

<i>Charina bottae</i>	rubber boa
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AMPHIBIANS

Bufonidae

<i>Bufo boreas*</i>	western toad
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Hylidae

<i>Pseudacris regilla</i>	Pacific chorus frog
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Pleobotidae

<i>Scaphiopus intermountanus</i>	Great Basin spadefoot
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MAMMALS

Soricidae

<i>Sorex merriami</i>	Merriam's shrew
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Talpidae

<i>Scapanus orarius</i>	coast mole
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Vespertilionidae (these taxa require extensive surveys to ascertain presence or absence)

<i>Antrozous pallidus*</i>	pallid bat
<i>Eptesicus fuscus</i>	big brown bat
<i>Myotis californicus</i>	California myotis
<i>Myotis ciliolabrum*</i>	western small-footed myotis
<i>Myotis evotis*</i>	long-eared myotis

Ochotonidae

<i>Ochotona princeps</i>	pika
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Leporidae

<i>Lepus californicus</i>	black-tailed jackrabbit
<i>Lepus townsendii</i>	white-tailed jackrabbit
<i>Sylvilagus nuttallii</i>	mountain cottontail

Sciuridae

Spermophilus beecheyi
Spermophilus beldingi
Tamias minimus

California ground squirrel
Belding's ground squirrel
Least chipmunk

Geomyidae

Thomomys talpides

northern pocket gopher

Heteromyidae

Dipodomys ordii
Perognathus parvus

Ord's kangaroo rat
Great Basin pocket mouse

Muridae

Lemmys curtatus
Neotoma cinerea
Onychomys leucogaster
Peromyscus crinitus
Peromyscus maniculatus
Peromyscus truei

sagebrush vole
bushy-tailed woodrat
northern grasshopper mouse
canyon mouse
deer mouse
pinyon mouse

Erethizontidae

Erethizon dorsatum

porcupine

Canidae

Canis latrans

coyote

Mustelidae

Mephitis mephitis
Mustela frenata
Spilogale gracilis
Taxidae taxus

striped skunk
long-tailed weasel
western spotted skunk
badger

Felidae

Lynx rufus

bobcat

Cervidae

Odocoileus hemionus
Cervus elaphus

mule deer
wapiti or elk

Geology

The proposed Haystack Butte Research Natural Area is located in two watersheds:
Crooked River Gorge/Crooked River National Grassland and Dry Canyon/Deschutes

South. The area is underlain by the John Day Formation (32-25 Million Years) which erupted from local vents east of the present day Cascade Range. Haystack Butte is capped by a light gray to red rhyolitic ash-flow tuff. Tuffaceous sedimentary rocks crop out on the lower slopes. The landform is primarily a plateau with dormant landslide terrain to the north, northwest, northeast and southeast, ranging in elevation from 3,600 to 4,000 feet. The heavier tuffs have a tendency to slip on the underlying clay sediments, forming large rotational landslides.

Capping the butte, mixed in with the soils, is ashfall from Mt. Mazama. The ashfall occurred roughly 6,900 years ago. The axis of the ashfall lies from Crater Lake (Mt. Mazama) to Lewiston, Idaho (Walker and MacLeod, 1991). Through time and weathering processes, the ash has moved to the draws on the leeward slopes. The ash-laden soils have a tendency toward developing debris flows and torrents on slopes greater than 30 percent where the shallow saturated soils slide on the underlying lithologies. Evidence of past small debris flows are visible on Haystack Butte. The ash is weathering to clay. The ash enhances the fertile environment of the residual soils, in an otherwise thin soil bedrock dominated terrain.

The summary of the geologic and landslide conditions for the Haystack Butte Research Natural Area is based on limited field observations, aerial photographic interpretation of the 1995 flight, geologic maps, the soil resource inventory map, and a literature search (Orr et al. 1992; Walker 1990; Walker and MacLeod 1991).

Soils

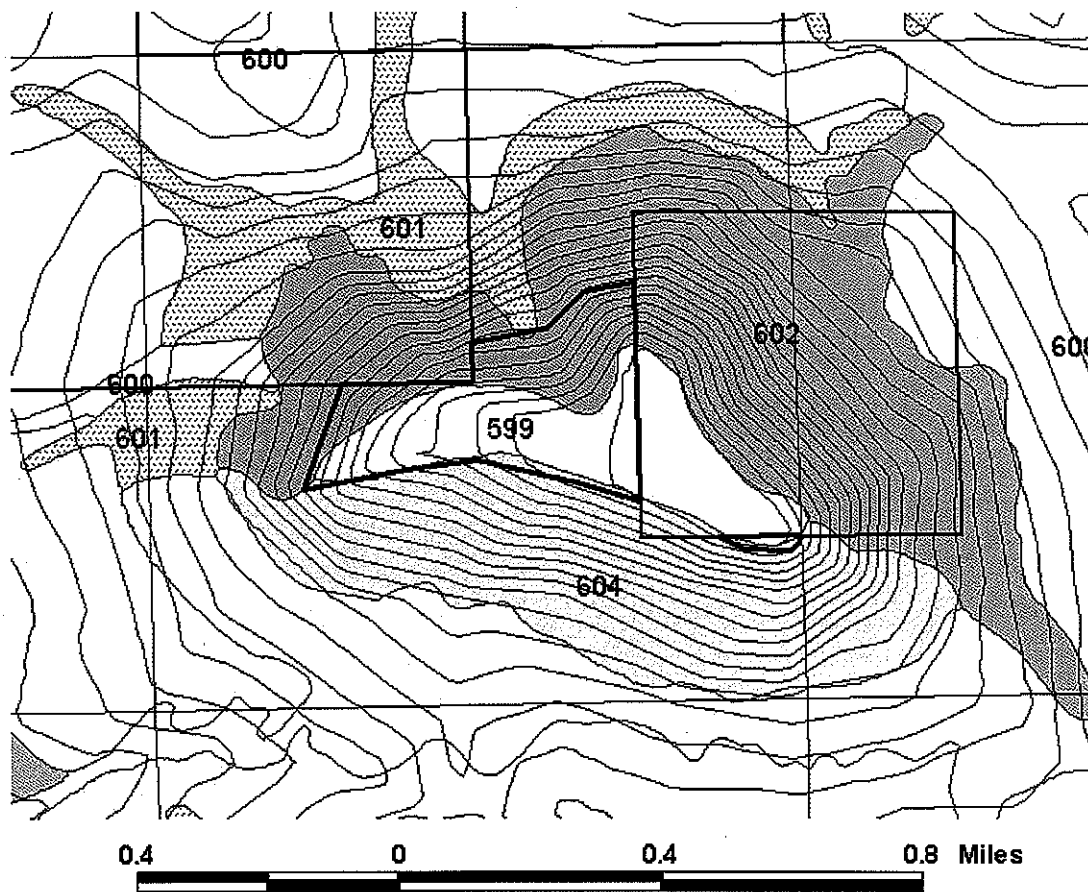
The soils in the RNA are derived from Mt. Mazama pumice and ash that overlay bare lava or soils derived from basaltic ash and lava. In general, the soils are very young, displaying little soil profile development. As a result, productivity at the site is relatively low. Soils on the north slopes within the RNA were formed primarily from the weathering of steep ridge faces and associated colluvium into a deep well-drained loam (Schrier-Tub complex) (Figure 4). The butte top and upper east and south slope support a shallower well-drained loam originating from weathered rhyolite and basalt (Licksillet-Redcliff complex).

Lands

All lands within Haystack Butte RNA are federally owned and managed by the Crooked River National Grassland, Ochoco National Forest. Lands to the north, west, and south of the RNA are also within the Crooked River National Grassland. A block of private land borders the RNA on the east and on the northwest. The federal lands adjacent to the RNA are managed as General Forage based on the Ochoco National Forest Plan (USDA 1989b) and contain an active grazing allotment.

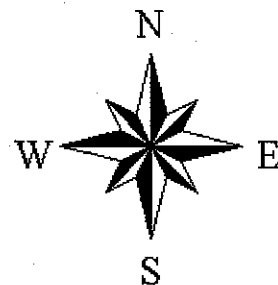
Figure 4. Soil types within Haystack Butte Research Natural Area (USDA Forest Service 1976; USDA NRCS 1992).

Haystack Butte RNA



Sri Soil Types

- 599 Licksillet - Redcliff complex (0-15% slope)
- 601 Schrier-Tub complex (15-30% north slopes)
- 602 Schrier-Tub complex (30-60% north slopes)
- 604 Licksillet - Redcliff complex (30-60% south slopes)



Cultural

There are no known cultural resources located within Haystack Butte RNA. A complete cultural inventory of the site has not been conducted to date.

IMPACTS AND POSSIBLE CONFLICTS

Mineral Resources

There are no reported hardrock mining claims within the Haystack Butte RNA. The RNA is within land open to oil and gas leasing, but there are not any active leases. If oil was discovered under the butte, we would request side-cast drilling from the bottom disturbed lands.

Grazing

The Crooked River National Grassland property surrounding the RNA is classified as Management Area G3 (General Forage) and is managed for livestock grazing. These lands are in the Juniper Butte Grazing Allotment and are actively utilized. The establishment of the RNA removes approximately 62 acres from grazing as provided in the Land and Resource Management Plan Part 2 Crooked River National Grassland of 1989 (USDA Forest Service 1989b).

Timber

There are no commercially valuable timber resources within Haystack Butte RNA.

Watershed Values

There are no significant watershed values present in Haystack Butte RNA.

Recreation Values

Due to the isolation of Haystack Butte, recreation use of Haystack Butte RNA area is minimal. Target shooting may be the major recreation in the RNA. Hunting may occur within the RNA. Casual recreation use has not seriously impacted the RNA to date.

No roads or trails lead to Haystack Butte and none will be constructed. There are currently no campsites on or near the RNA and none will be established. Based on the RNA's remoteness, there is no anticipation of increased recreation use. Recreation use

and identification of the site as an RNA on general forest recreation maps should be discouraged.

Wildlife and Plant Values

No threatened, endangered, or sensitive plant species have been located in the Haystack Butte RNA. However, the following animal species may possibly inhabit or use the RNA for breeding or foraging:

western toad (*Bufo boreas*) - State of Oregon - Vulnerable.

peregrine falcon (*Falco peregrinus*) - Federal - Endangered;
State - Endangered.

bald eagle (*Haliaeetus leucocephalus*) - Federal - Threatened;
State - Threatened.

burrowing owl (*Athene cunicularia*) - Federal - Species of Concern;
State - Sensitive Critical.

western bluebird (*Sialia mexicana*) - State - Vulnerable.

loggerhead shrike (*Lanius ludovicianus*) - State - Vulnerable.

The RNA contains habitat that could support the bat species listed below. Surveys have not been conducted for these species.

pallid bat (*Antrozous pallidus*) - State - Vulnerable.

western small-footed myotis (*Myotis ciliolabrum*) - Federal - Species of Concern;
State - Sensitive Underdetermined Status.

long-eared myotis (*Myotis evotis*) - Federal - Species of Concern;
State - Sensitive Undetermined Status.

The establishment of the RNA should have no adverse effects on populations of any of the species listed above.

Special Management Area Values

Establishment of the RNA does not impact any congressionally designated areas.

Transportation Plans

There are no roads or trails to or within Haystack Butte RNA and none are planned. The RNA will be closed to motor vehicles. There are no conflicts with the Forest's Transportation Plans.

MANAGEMENT PRESCRIPTION

Standards and Guidelines (S&G) for RNAs, Management Area-G4, are found in the Land and Resource Management Plan, Part 2, Crooked River National Grassland (USDA Forest Service 1989b). Guidelines taken from the Land and Resource Management Plan are referred to below as (S&G).

Vegetation Management

- 1) Permit no grazing of domestic livestock within the RNA unless needed to maintain a specific vegetative type (S&G).
- 2) No fuelwood gathering will be allowed within the RNA (S&G).
- 3) Within the RNA, no firewood cutting or removal of vegetation will be allowed, except for approved research related activities (S&G).
- 4) Take no action to control insects or disease unless the outbreak drastically alters the natural ecological processes within the RNA (S&G).
- 5) Inventory the RNA for exotic plant species. If invasive plants become established and are threatening the integrity of the RNA, control and/or eradicate as soon as possible.

Fire Management

- 1) Suppress natural fires on Haystack Butte only if facilities or resources outside the RNA are threatened (S&G).
- 2) Use only water as a retardant (S&G).
- 3) Allow the use of managed or naturally occurring fire as needed to perpetuate the plant community the RNA is meant to represent (S&G).
- 4) When prescribed fire is used to perpetuate a plant community, it should mimic a natural fire but be managed prudently to avoid catastrophe (S&G).

- 5) Allow fuels to accumulate at natural rates unless they threaten the objectives of the management area (S&G).
- 6) Complete a fire management plan for the Haystack Butte RNA. It is recommended that fire suppression methods employing machinery not be used within the RNA.

Facilities

No administrative buildings or structures are allowed (S&G).

Minerals and Energy

- 1) Allow no occupancy or other surface disturbance (S&G).
- 2) Common mineral material sources should not be inventoried or developed (S&G).
- 3) Upon establishment, the RNA will be proposed for withdrawal from mineral exploration.

Recreation

- 1) Discourage recreational activities and uses, including overnight camping, and pack and saddle stock use (S&G).
- 2) Develop no interpretive or demonstration facilities (S&G).
- 3) Avoid publicity that would attract the public to the areas (S&G).
- 4) Construct no trails unless needed for research purposes (S&G).
- 5) Monitor recreation use. Management actions may be necessary if recreation use increases to levels that threaten the natural integrity of the RNA.

ADMINISTRATION RECORDS AND PROTECTION

Administration and protection of Haystack Butte RNA will be the responsibility of the Ochoco National Forest. The District Ranger, Crooked River National Grassland, 813 SW Hwy 97, Madras, OR 97741, has direct responsibility.

The Director of the Pacific Northwest Research Station, P.O. Box 3890, Portland, OR 97208-3890, will be responsible for any studies or research conducted in the area, and requests to conduct research in the RNA should be referred to her/him. The RNA

Scientist in the Research Station is designated as the lead contact person for all such requests. The Director will evaluate research proposals and coordinate all studies and research in the area with the District Ranger. All plant and animal specimens collected in the course of research conducted in the area will be properly preserved and maintained within university or federal agency herbaria and museums, approved by the Pacific Northwest Research Station.

Records for Haystack Butte RNA will be maintained in the following offices:

District Ranger, Crooked River National Grassland, 813 SW Hwy 97, Madras, Oregon 97741.

Forest Supervisor, Ochoco National Forest, 3160 NE 3rd Street, Prineville, Oregon 97754.

Director, Pacific Northwest Forest and Range Experiment Station, P.O. Box 3890, Portland, Oregon 97208

Region 6 Research Natural Area Database, Forest Science Databank, Forest Sciences Laboratory, Oregon State University, Corvallis, Oregon

Archiving

The Portland office of the Pacific Northwest Research Station will be responsible for maintaining the Haystack Butte RNA research data file and list of herbarium and species samples collected. The RNA Scientist has established a data base for maintaining research data and lists of species for all RNAs in the Region. Computerized files for the RNA will be maintained at the Region 6 Research Natural Area Database, associated with the Oregon State University Forest Science Databank in Corvallis, Oregon.

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Public Notices

8

NOTICE OF DECISION

On December 15, 2003, Forest Service, Regional Forester for the Pacific Northwest Region (Portland, Oregon) made a decision to establish the 62 acre Haystack Butte Research Natural Area (RNA) on the Crooked River National Grassland Ranger District of the Ochoco National Forest in Jefferson County, Oregon. This decision will be implemented after December 29, 2003.

A copy of the Decision Notice/Designation Order and finding of No Significant Impact is available upon request from the Regional Office, Environmental Coordination, P.O. Box 3623, Portland, Oregon 97208.

This decision is subject to appeal pursuant to Forest Service Regulation 36 Code of Federal Regulation (CFR) Part 217. Any written Notice of Appeal must be fully consistent with 36 CFR 217.9 (Content of a Notice of Appeal) and must include reasons for appeal. Any written appeal must be postmarked or received by the Appeal Deciding Officer, Chief Dale Bosworth, USDA-Forest Service, ATTN: NFS Appeals, P.O. Box 96090, Washington, D.C. 20090-6090 within 45 days of the date of this legal newspaper notice.

For further information regarding Haystack Butte RNA contact Mark Lesko, Lookout Mountain Ranger District, Ochoco National Forest, P.O. Box 490, Prineville, Oregon 97753, phone (541) 416-6500.

DECISION NOTICE / DESIGNATION ORDER
FINDING OF NO SIGNIFICANT IMPACT

For

Haystack Butte Research Natural Area
(Forest and Grassland Plan Amendment No. 25)

Ochoco National Forest and Crooked River National Grassland
Crooked River National Grassland Ranger District
(Jefferson County, Oregon)

Introduction

Research natural areas (RNA's) are designated for research and educational opportunities, to maintain biological diversity on National Forest System lands, and are selected to complete a national network of ecological areas. Each RNA is designated based on three major objectives: (1) to preserve examples of all significant natural ecosystems for comparison with those areas influenced by humans; (2) to provide educational and research areas for ecological and environmental studies and monitoring; and (3) to preserve gene pools for typical and rare and endangered plants and animals.

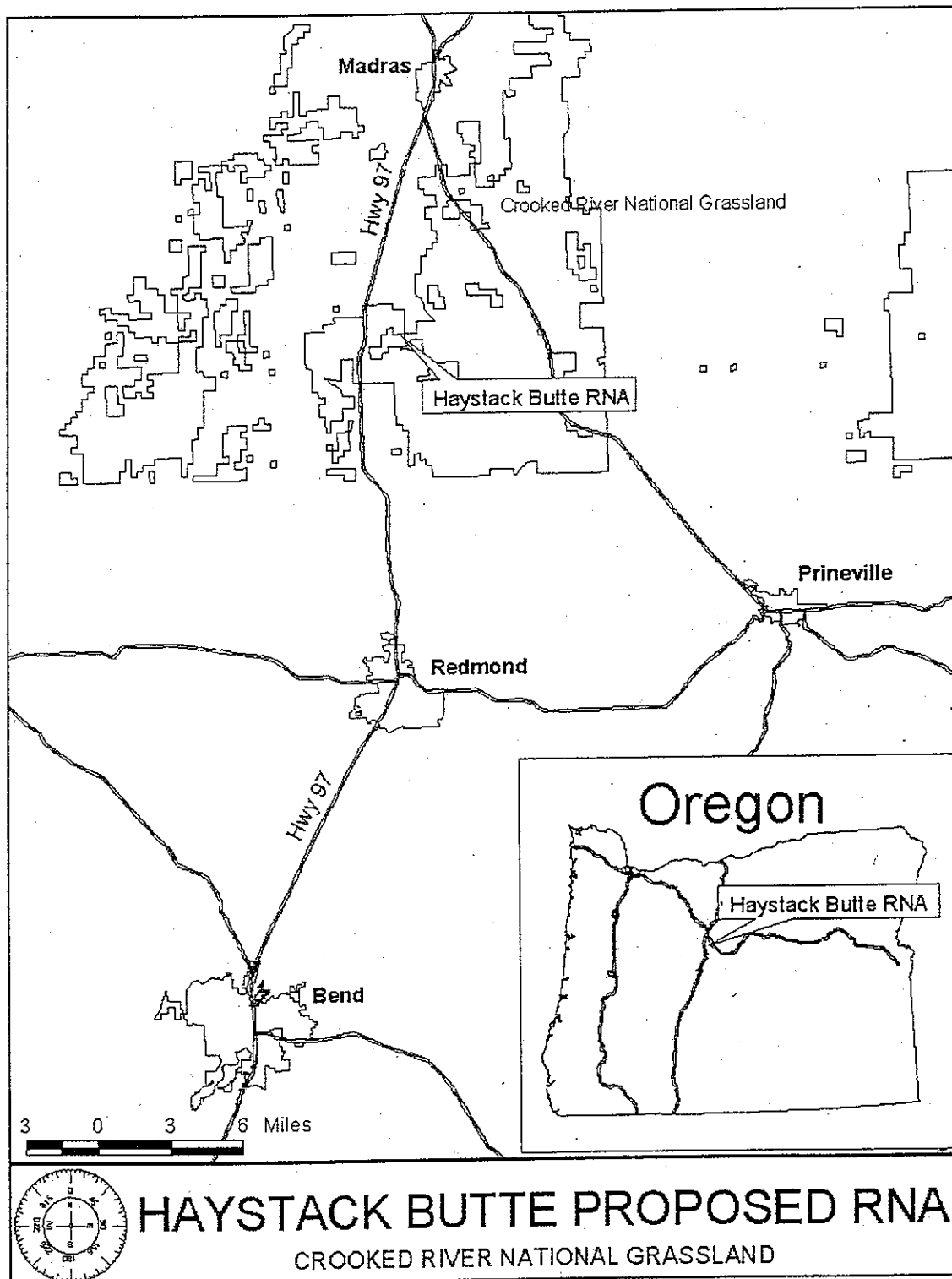
The proposed Haystack Butte RNA is located on the Grassland of the Ochoco National Forest approximately 12 miles (19 km) southwest of Madras, Oregon (see figure 1). I have reexamined this RNA to ensure that the environmental effects of establishing the area as a RNA have not changed since 1989. This analysis is documented in the attached environmental assessment (EA). Based on the analysis Haystack Butte RNA would contribute to this network of RNA's by providing an example of western juniper/big sagbrush/Idaho fescue woodland (*Juniperus occidentalis/Artemisia tridentate/Festuca idahoensis*) identified by the Oregon Natural Heritage Advisory Council. An evaluation by the Regional RNA Committee identified the vegetation type as suitable and desirable for inclusion in the national network. Establishment of this RNA will provide long-term protection and recognition of this vegetation type.

Haystack Butte RNA was proposed as a candidate RNA in the 1989 final environment impact statement for the Ochoco National Forest and Crooked River National Grassland, Crooked River National Grassland Land and Resource Management Plan (Grassland LRMP), and the Record of Decision.

Decision

An Establishment Record has been prepared and completed for Haystack Butte RNA. It now remains to formally convert this RNA from candidate to established status. This conversion is accomplished by amending the Grassland LRMP through a Decision Notice and Designation Order. The purpose of amending the Grassland LRMP is to formally establish this RNA as a part of the RNA system.

Figure 1. Location map for Haystack Butte Research Natural Area, Crooked River National Grassland.



By virtue of the authority vested in me by the Chief of the Forest Service, in Forest Service Manual 4063, I hereby select alternative 2 and establish the 62 acres (25 hectare) Haystack Butte RNA [see figure 2]. The Grassland LRMP is hereby amended to change the Haystack Butte RNA from a "proposed" RNA to an "established" RNA. This is a non-significant (Amendment No. 25) to the 1989 Ochoco National Forest and Crooked River National Grassland Land and Resource Management Plan.

Alternative 2 is selected because--it protects the ecological integrity of the western juniper/big sagbrush/Idaho fescue woodland plant community in the RNA; it provides a reference area for determining long-term intrinsic ecological changes; and it serves as a benchmark for comparison with intensively used or managed sites supporting similar vegetation. This plant community is a cell or element lacking adequate representation in the High Lava Plains ecoregion. The plant community occurs in a high quality condition within the RNA boundaries.

As grazing has been limited by topography, the force that both change and maintain the plant communities located in the RNA are closer to those occurring naturally than can be found on most public land in the High Lava Plains Physiographic Province. The absence of significant non-native plant infestations within the Haystack Butte RNA is another factor contributing to the desirability of this area as a source of baseline information for comparison to exotics-occupied lands supporting similar plant communities.

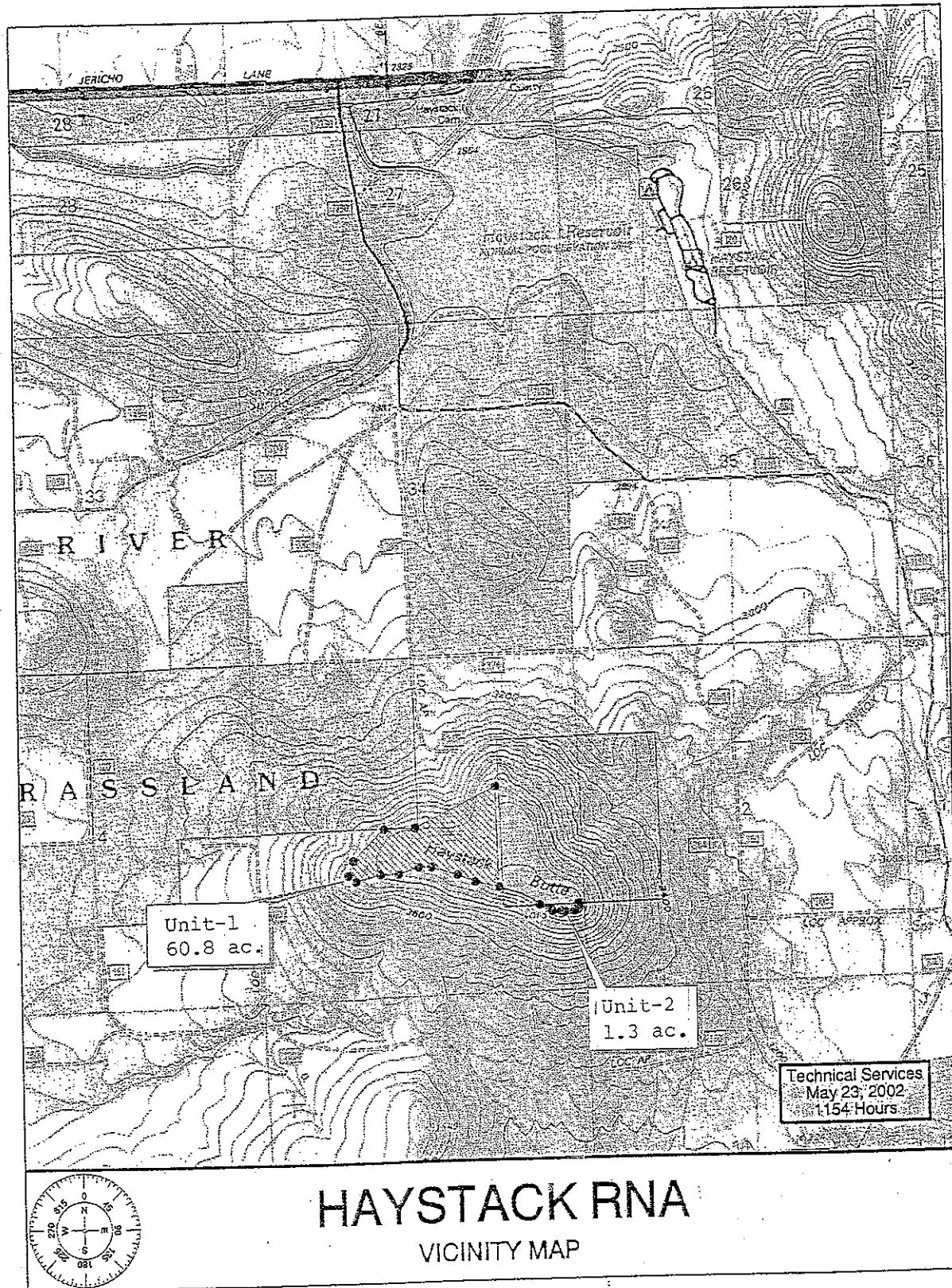
The establishment of the RNA removes approximately 62 acres from grazing as provided in the Grassland LRMP. No reported hard rock mining claims exist within the RNA. The RNA is within land open to oil and gas leasing, but there are no active leases. There are no commercial timber resources within the RNA. Due to the isolation of Haystack Butte, recreation use of RNA is minimal. To date, casual recreation use has not seriously affected the RNA. No roads or trails lead to the RNA and none will be constructed.

Public Involvement

The proposal to establish the Haystack Butte RNA was considered during the development of the 1989 final Ochoco National Forest and Crooked River National Grassland LRMP, which was available to the public.

On May 24, 2002, public participation in this project began when a scoping letter and map were mailed to over 250 members of the public and Tribal governments. On July 1, 2002, an article about this RNA establishment was published in *The Bulletin* (Bend, Oregon) newspaper. Seven letters, one electronic mail message, and one FAX message were received. All comments were supportive of the proposed action. There were concerns expressed regarding: the small size of the RNA; the desirability of fencing; root gathering from local Native American Tribes; and recreational effects on nearby Haystack Reservoir. In 2002, the Oregon Natural Heritage specialist participated in preparing the Establishment Record.

Figure 2. Boundaries and locations of two units comprising Haystack Butte Research Natural Area.



Other Alternatives Considered

Alternative 1-No Action. Under the no action alternative, the candidate area would continue to be managed as a proposed RNA as directed in the Grassland LRMP. Management direction would continue until the Grassland LRMP was revised. This alternative was not selected because it would not provide the long-term protection of the area's unique features.

Finding of No Significant Impact

Based upon the environmental analysis documented in this environmental assessment, this decision is not a major federal action that would affect the quality of the human environment. Therefore, an environment impact statement is not required. This determination is based on the following factors (40 CFR 1508.27)—

Context

*Although this is an addition to the national network of RNS's both short-term and long-term physical and biological are limited to the local area (Establishment Record pp. 8-24). This decision requires a non-significant amendment to the Grassland LRMP [36 CFR 219.10(f)].

Intensity

*There are no known effects on public health and safety.

*There are no known effects on historical or cultural resources, actual or eligible National Register of Historic Places, park lands, prime farm lands, wetlands, wild and scenic rivers. Effects on ecologically critical areas are minimal. [Establishment Record pp. 9-22].

*Effects on the human environment are not uncertain, do not involve unique or unknown risks, and are not likely to be highly controversial.

*The action is not likely to establish a precedent for future actions with significant effects.

*No significant direct, indirect or cumulative impacts to natural resources or other components of the human environment are anticipated. [Establishment Record pp. 22-26].

*The proposed action will not adversely affect any federally listed or proposed endangered or threatened species or associated critical habitat, nor will it affect any regionally sensitive plant or animal species [Establishment Record pp. 9-20].

*The proposed action is consistent with Federal, State, and local laws and requirements for the protection of the environment.

Implementation

Implementation of this decision shall not occur within seven days following publication of the legal notice of the decision in the newspaper of record—*The Oregonian*. The Forest Supervisor of the Ochoco National Forest and Crooked River National Grassland will notify the public of this decision and mail a copy of the Decision Notice/Designation Order to all persons interested in or affected by the decision.

Appeal Opportunities

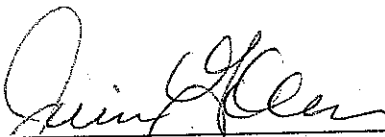
This decision is subject to appeal pursuant to 35 CFR Part 217. A copy of the Notice of Appeal must be in writing and submitted to:

Chief, USDA – Forest Service
14th & Independence Avenue, S.W.
P. O. Box 96090
Washington, D.C. 20090-6090

Any written Notice of Appeal of this decision must be fully consistent with 36 CFR 217.9 [Content of a Notice of Appeal] and must include the reasons for appeal and be submitted within 45 days from the date of legal notice of this decision in *The Oregonian*.

Contact Person

For further information, contact Mark Lesko, Lookout Mountain Ranger District, Ochoco National Forest, P. O. Box 490, Prineville, Oregon 97753, phone [541] 416-6500.



LINDA GOODMAN
Regional Forester
Pacific Northwest Region

12/15/03

Date

HAYSTACK BUTTE RESEARCH NATURAL AREA

ENVIRONMENTAL ASSESSMENT

USDA, Forest Service
Ochoco National Forest
Crooked River National Grasslands
Jefferson County, Oregon

Lead Agency:

USDA Forest Service
P.O. Box 3623
Portland, OR 97208

Responsible Official:

Regional Forester
Pacific Northwest Region
P.O. Box 3623
Portland, OR 97208

PURPOSE AND NEED FOR ACTION

Need

This environmental assessment evaluates the proposal to amend the Ochoco National Forest Land and Resource Management Plan, Part 2, Crooked River National Grassland, to change the status of the Proposed Haystack Butte Research Natural Area (RNA) on the Crooked River National Grassland to an established status. This assessment will document the analysis of the Proposed Action and one Alternative.

The purpose of formally establishing Haystack Butte RNA is to contribute to a series of RNAs designated to "illustrate adequately or typify for research or education purposes, the important forest and range types in each forest region, as well as other plant communities that have special or unique characteristics of scientific interest and importance" (36 CFR 251.23). The proposed Haystack Butte RNA contributes to this series of RNAs by providing an example of western juniper/sagebrush/Idaho fescue woodland (*Juniperus occidentalis/Artemisia tridentata/Festuca idahoensis*) identified by the Oregon Natural Heritage Advisory Council (Oregon Natural Heritage Advisory Council 1998). An evaluation by the Regional RNA Committee, pursuant to direction in the Forest Service Manual (FSM) 4063.04b, identified this vegetation type as suitable and desirable for inclusion in the national network. Establishment of this RNA will provide long-term protection and recognition of this vegetation type.

Haystack Butte RNA was proposed as a candidate RNA in the 1989 Final Environmental Impact Statement for the Ochoco National Forest and Crooked River National Grassland, the 1989 Crooked River National Grassland Land and Resource Management Plan (Grassland LRMP), and the 1989 Land and Resource Management Plan Record of Decision (USDA Forest Service 1989a, 1989b, 1989c).

Site conditions have not significantly changed since the RNA was proposed during the land management planning process.

An Establishment Record has been prepared and completed for Haystack Butte RNA. It now remains to formally convert this RNA from candidate to established status. This conversion is accomplished by amending the Grassland LRMP through a Decision Notice and Designation Order. The purpose of amending the Grassland LRMP is to formally establish this RNA as a part of the Research Natural Area System.

Proposed Action

The proposed action is to formally establish Haystack Butte RNA, which was a proposed RNA in the Grassland LRMP. This RNA will be managed according to

the direction provided in the management plan (Chapter 4, Section 2, MA-G4, pages 4-26 and 4-27). This proposed action, formal designation of the RNA by the Regional Forester, will amend the Forest/Grassland Plan.

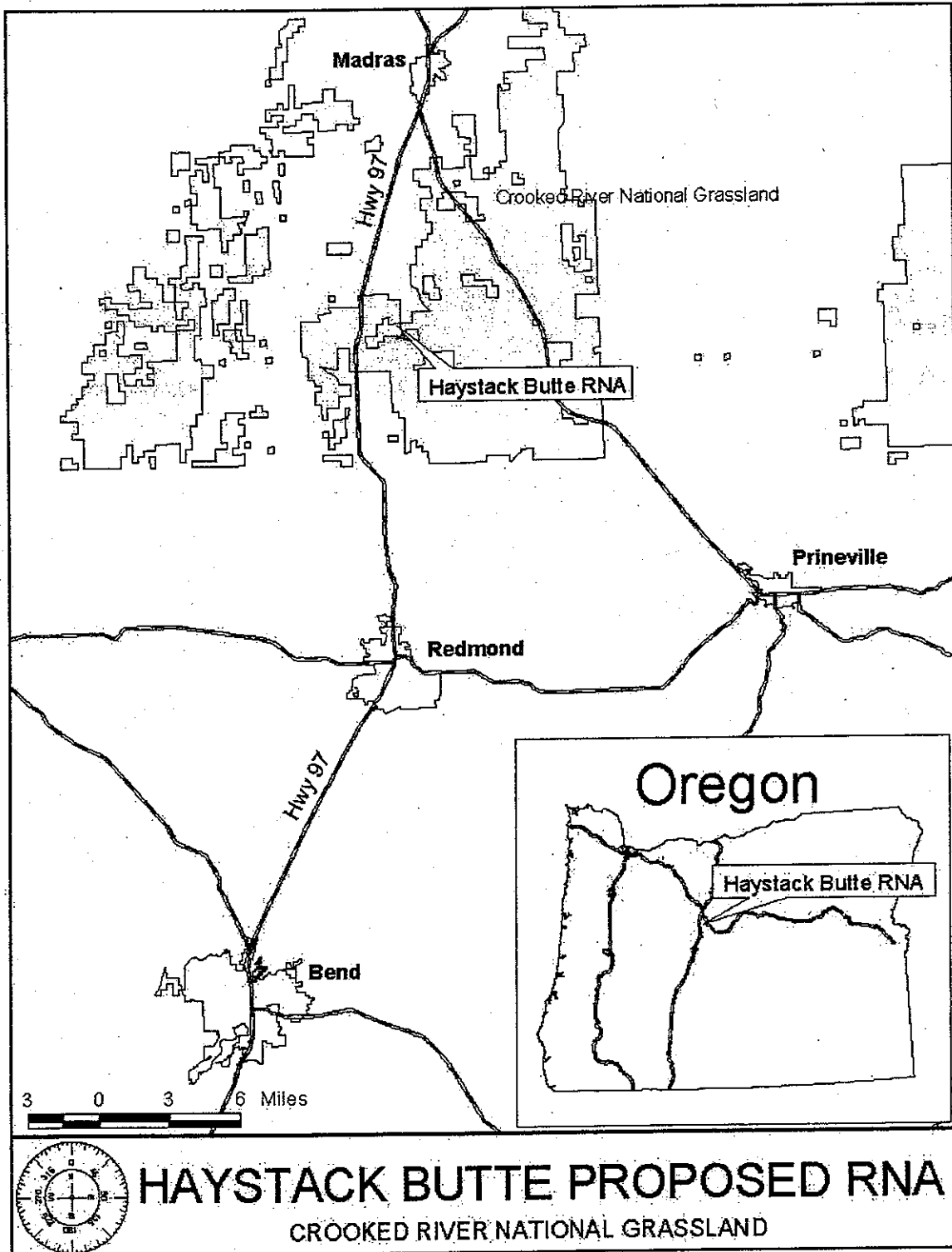
Environmental Setting

Haystack Butte RNA is located on the Crooked River National Grassland of the Ochoco National Forest approximately 12 miles (19 km) southwest of Madras, Oregon (Figure 1). The RNA is composed of intact plant communities that, when protected, can serve as benchmarks for comparison with areas of similar vegetation that are intensively used. A full description of the Haystack Butte RNA is found in the Establishment Record.

Issues

Public participation in this project began when a scoping letter and map were mailed to over 250 members of the public and to Tribal governments on May 24, 2002. An article was also published in *The Bulletin* (Bend, Oregon) newspaper on July 1, 2002. Seven letters, one electronic mail message, and one FAX message were received. All comments were supportive of the proposed action, though concerns were expressed regarding the small size of the RNA, the desirability of fencing, root gathering from local Native American Tribes, and recreational effects on nearby Haystack Reservoir. Additionally, The Oregon Natural Heritage specialists participated in preparing a draft Establishment Record in 2000.

Figure 1. Location map for Haystack Butte Research Natural Area, Crooked River National Grassland.



ALTERNATIVES

Alternative 1: No Action

Under the No Action Alternative, the candidate area would continue to be managed as a proposed RNA as directed in the Grassland LRMP. Management direction will continue until the Grassland LRMP is revised or replaced.

Alternative 2: Proposed Action

The Proposed Action would designate in perpetuity approximately 62 acres on the Crooked River National Grassland, Ochoco National Forest as the Haystack Butte RNA (see the Establishment Record Figure 2 and section titled Location and Boundaries, pages 3-5, USDA Forest Service 2003). Once established, a management plan specific to Haystack Butte RNA will be written. Interim management of the area will be followed as outlined in the Grassland LRMP, pages 4-26 and 4-27 (USDA Forest Service 1989b). The objective is to maintain the natural condition of the area. No livestock grazing will be allowed; no fuelwood, timber products, or minerals will be removed; fire suppression will be limited; recreational use will be discouraged; and no roads or rails will be constructed.

ENVIRONMENTAL EFFECTS

Amending the Grassland LRMP to formally establish Haystack Butte RNA is an administrative action lacking environmental effects. Consequently, neither alternative will have an effect on public health, safety, cultural resources, park lands, prime farmlands, wetlands, wild and scenic rivers areas deemed ecologically critical, sites listed or eligible for listing in the National Register of Historic Places, endangered or threatened species or its habitat determined to be critical under the ESA of 1973, or threaten a violation of Federal, State, or local law imposed for the protection of the environment. The Proposed Action is not highly controversial as evidenced by the number and tone of the responses received from the public during the scoping phase of the process. The Action being proposed does not involve unique or unknown risks. It does not establish a precedent as Research Natural Areas have been established elsewhere in Region 6. Since this is an administrative action, there will be no cumulatively significant impacts on the environment.

In addition there are no known significant mineral resources within the area. The RNA is within land open to oil and gas leasing, but there are not any active leases. If oil was discovered under the butte, we would request side-cast drilling from the bottom disturbed lands, therefore, not disturbing habitats within the RNA. Recreation use is minimal and is expected to remain so. As there are no commercially valuable timber resources in the area, no loss of timber utilization is

anticipated. No threatened or endangered plants or animals are known to be present within the area. No roads or trails are established within the area nor is there a need for such. Environmental consequences disclosed in the Forest plan Final Environmental Impact Statement are still valid, and conditions and effects have not changed. The only difference between the two alternatives is that the Proposed Action gives the designation more permanency. This could foreclose future options in the unlikely event of something new becoming known. See the Establishment Record, Impacts and Possible Conflicts, pp. 21 – 25 for more details (USDA Forest Service 2003).

REFERENCES

Oregon Natural Heritage Advisory Council. 1998. Oregon Natural Heritage Plan. State Land Board, State of Oregon, Salem, Oregon. 138 pp.

USDA Forest Service. 1989a. Final Environmental Impact Statement for the Ochoco National Forest and Crooked River National Grassland. Prineville, Oregon.

USDA Forest Service. 1989b. Crooked River National Grassland Land and Resource Management Plan. Prineville, Oregon.

USDA Forest Service. 1989c. Ochoco National Forest and Crooked River National Grassland Land and Resource Management Plan Record of Decision. Prineville, Oregon.

USDA Forest Service. 2003. Establishment Record for Haystack Butte Research Natural Area. Crooked River National Grassland, Jefferson County, Oregon.