IDAHO NATIONAL GUARD TRAINING AREA INVENTORY:

LITTLE MOUNTAIN TRAINING AREA

By

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SUMMARY

The Little Mountain Training Area lies 6 air miles northwest of Preston, and just south of Twin Lakes Reservoir. The area includes a portion of the west facing toeslopes of Little Mountain, and a portion of Deep Creek. The uplands are mostly dominated by Wyoming sagebrush communities, most degraded by livestock grazing and now having an understory of cheatgrass. The riparian zone is very disturbed and weedy, being dominated mostly by Russian olive. Two rare animals, rock squirrel and pinyon jay, and one rare plant species, Ute ladies tresses, were the target of searches during June and August 1997. No populations were discovered and no potential habitat was seen.

TABLE OF CONTENTS

LIST OF APPENDICES

INTRODUCTION

During April 1997, the Military Division of the State of Idaho entered into a Memorandum of Agreement (MOA) with the Idaho Department of Fish and Games's Conservation Data Center for the purpose of providing threatened and endangered, and sensitive species surveys on lands utilized for military training activities in the state. The Idaho National Guard utilizes 28 training areas throughout Idaho. Eight training areas were chosen for surveys during 1997, including the Little Mountain Training Area.

The Idaho Military Division (Idaho National Guard) is responsible for ensuring proper stewardship of natural resources under its jurisdiction through various federal laws and Army regulations. For the scope of work under the MOA, threatened, endangered and sensitive species include any species listed as threatened or endangered under federal or state jurisdiction, species proposed as candidates for listing, and other species deemed rare at local, state, regional or national levels.

The Conservation Data Center (CDC) is the central repository in Idaho for information related to rare plant and animal populations, as well as data on significant ecological sites in the state. These data are organized on maps, manual files, and a series of interrelated computerized data bases encompassed by our Biological and Conservation Data System. These data bases include species and community occurrences, extensive bibliographic material, site specific ecological and management data, ecological monitoring, and others.

The Idaho CDC is a node in an international network of Natural Heritage Programs and Conservation Data Centers that occur in all the United States and in many other areas of the western hemisphere. All Natural Heritage Programs manage data in a standardized format so that data can be aggregated upward in the network for regional-, national-, and continental-scale perspectives of biodiversity protection. The Idaho CDC cooperates with numerous state, federal, county, and municipal institutions, as well as private corporations, organizations, and individuals to accomplish its mission.

METHODS

We used a three-phase approach to field inventories of Guard training areas for rare species and habitats: (1) information gathering; (2) field inventory; and (3) documentation. Each of these phases is described below for this training area.

Information Gathering

As explained in the Introduction, the CDC is the central repository for rare species information in Idaho. CDC biologists collect rare species information and have considerable expertise about habitats in the state. We also have developed relationships with many cooperating institutions over the years who provide us distribution information. In other words, our data bases are being continually updated

with the best information available. The first step in the process involved reviewing our map and computer data bases with help from Fish and Game's nongame biologists. From this review, we developed a target list of rare plants and animals that may occur at each of the training areas. The next step was then to review the literature or expertise of appropriate biologists to develop an inventory protocol for each species.

For the Little Mountain Training Area the following target species were identified and inventory protocols developed:

GROUP	SPECIES	STATUS[1]	INVENTORY COMMENTS
Plants	Ute ladies tresses (*Spiranthes diluvialis*)	CDC: G2 S1 INPS: G2 USFWS: T	Listed Threatened. Not known from training area. Nearest populations ca. 90 miles to NE. Best surveyed at peak flowering, late August - September.
Animals	rock squirrel (*Spermophilus variegatus*)	CDC: G5 S1 IFG: SC USFWS: W BLM: S	Not known from training area. Nearest populations ca. 10 miles to E. Best surveyed during May - June.
	pinyon jay (*Gymnorhinus cyanocephalus*)	CDC: G5 S2? IFG: P	Not known from training area. Nearest populations ca. 10 miles to W. Best surveyed during May - June.

[1]Conservation Status: <u>CDC</u>=Conservation Data Center/Heritage Network: G - Global/Rangewide Conservation Rank (1-5); S - State Conservation Rank (1-5). <u>INPS</u> = Idaho Native Plant Society: G2 - Global Priority 2. <u>IFG</u> = Idaho Fish and Game: SC - Species of Concern; P - Protected Nongame Species. <u>USFWS</u> = U.S. Fish and Wildlife Service/Endangered Species Act: T - Threatened; W - Watch. <u>BLM</u> = Bureau of Land Management: S - Sensitive Species. Up-to-date status information and definitions of these categories can be found on the CDC home page: www.state.id.us/fishgame/cdchome.htm

<u>Field Inventory</u>

Field inventories were conducted during the appropriate time of the year, depending on the phenology or natural history of the target species. The training areas are small enough that a complete inventory can be made of the sites. The following types of information were collected during the inventories:

Habitat: If native habitats existed on the training area, the plant association(s) were identified using the *Natural Plant Communities of Idaho* catalog compiled by the CDC. An *Idaho Plant Community Observation Form* was filled out for each occurrence of the plant association at the site. Information collected on this form includes location, size, site quality, land use, community description, successional and structural conditions, and species composition.

Rare Plant or Animal: If a rare species was encountered, an *Idaho Rare Animal Observation Form* or *Idaho Rare Plant Observation Form* was filled out for each occurrence at the site. Information collected on these forms include location, population size and quality, land use, and habitat description. The location was

mapped on a USGS 7.5' quadrangle.

Vascular Plant Species: A complete list of vascular plants was made during the inventory. No voucher specimens were collected, but most species were identified using technical floras.

In the case of the Little Mountain Training Area, June was chosen as the optimum time to conduct the inventory for pinyon jay and rock squirrel. August is optimum for Ute ladies tresses. Inventories were conducted June 12 and August 29, 1997. Two days proved sufficient to inventory for all elements over the entire site. An early morning visit was determined to be the best time to observe pinyon jay and rock squirrel activity.

Documentation

The first step in documenting the field surveys is to process the field data into various modules of the Biological and Conservation Data System (BCD) of the CDC. Here they contribute to the centralized information base about rare species, habitats, and managed areas in the state. The pertinent modules are described below.

Training Area: General training area information is entered into the *Managed Area* module of BCD. Information on location, ownership and management responsibility, site description, land use, references, and management description are included in this computerized record. The boundaries of the area are mapped on the CDC's base set of USGS quads for the state. They are also digitized and added to the Managed Area layer in the Department's GIS.

Habitats: Similar to rare species populations, occurrences of plant associations are entered into the *Element Occurrence* module (both species and communities are "elements" of biodiversity, hence the generic name element occurrence). Using field data from the Plant Community Observation Form, information for each plant association occurrence is kept on map, computer, and manual files. The computer file contains numerous fields under such headings as Location, Status (quality, dates of observation, etc.), Description, Protection, Ownership, and Documentation (sources of information about an occurrence).

Rare Species: As described above, populations of rare species are also cataloged in the *Element Occurrence* module of BCD, with similar information to natural communities. Field data from the Rare Animal or Rare Plant observation forms are used to populate the data base records.

Characterization Abstracts are used to produce status reports for each rare species encountered. Status information for vertebrate animals is abstracted in the *Vertebrate Characterization Abstract* (VCA), while the plant abstract module is referred to as the *Plant Characterization Abstract* (PCA). Each characterization abstract record contains both global (rangewide) as well as state-specific information. The exception is if the species is endemic to Idaho, in which case only global information is used.

3

The next step is to use these data bases, supplemented with other information and personal knowledge, to generate this summary report of the inventory.

RESULTS

Training Area

The following description was adapted from the Managed Area record for the Little Mountain Training Area (BCD record M.281; Appendix 1):

The area is located about six air miles northwest of Preston, and just south of Twin Lakes Reservoir. The area includes a portion of the west facing toeslopes of Little Mountain, and a portion of Deep Creek. The west side of the training area is composed of mostly sandy alluvial or lacustrine deposits. Deep Creek cuts a shallow canyon through the deposits and terraces border the canyon on the east and west. The slopes and bench of the eastern half is underlain by sedimentary bedrock of Little Mountain. The uplands are mostly dominated by *Artemisia tridentata* var. *wyomingensis* communities, most degraded by livestock grazing and now having an understory of cheatgrass. The riparian zone is very disturbed and weedy, being dominated mostly by Russian olive. Deep Creek through the area is more or less used as an irrigation ditch. Stands of tall shrubs occur around seeps on the canyon wall west of Deep Creek. These seeps are probably created by irrigation on the bench to the west.

Habitats

As mentioned above, most of the training area has been disturbed by livestock grazing and is now largely dominated by exotic species. Structurally, however, there is still good cover of sagebrush, although the understory is weedy. No high quality native habitats remain.

Rare Species

No Ute ladies tresses was found on the site and no potential habitat was observed along Deep Creek. No populations of the two rare animal species were found either. There are no juniper woodlands on the site to support pinyon jay populations and no rock outcrops for rock squirrels.

Vascular Plant Species

I observed 93 vascular plant species at the training area during June and August 1997, including trees, shrubs, forbs, and grasses and sedges. The list appears in Appendix 2.

Appendix 1

Managed Area Basic Record

Little Mountain Training Area (M.281)

Location

County: Franklin
Quadrangle: Banida
Township, Range, Section:
    014S 038E   25   S2SE4
    014S 038E   36   N2N2, SW4NW4, NW4SW4

Description

About 6 air miles NW of Preston, and just south of Twin Lakes Reservoir. Area includes a portion of the west facing toeslopes of Little Mountain, and a portion of Deep Creek.   The west side of the training area is composed of mostly sandy alluvial or lacustrine deposits. Deep Creek cuts a shallow canyon through the deposits and terraces border the canyon on the east and wet. The slopes and bench of the eastern half is underlain by sedimentary bedrock of Little Mountain. The uplands are mostly dominated by Artemisia tridentata var. wyomingensis communities, most degraded by livestock grazing and now having an understory of cheatgrass. The riparian zone is very disturbed and weedy, being dominated mostly by Russian olive. Deep Creek through the area is more or less used as an irrigation ditch. Stands of tall shrubs occur around seeps onin some the canyon wall west of Deep Creek. These seeps are probably created by irrigation on the bench to the west.
Acres: 280.00

Stewardship

Manager:
    Upper Snake River Districts BLM
    Pocatello RA
    1111 N 8th Ave
    Pocatello, ID   83201-5789
    (208) 236-6860

Cooperating Institution:
    Idaho Army National Guard
    SSG Richard Elgan
    594 N. State Street
    Preston, ID 83263
    (208) 852-1261

Comments:

The Idaho National Guard has an agreement with the BLM and the State of Idaho for use of this land. Access from N: turn off US 91 in Red Rocks Pass onto County Road D1 (a.k.a. West Side Hwy, a.k.a. Main Hwy, a.k.a. Oxford Hwy) and proceed 14.8 miles S to the 4000 N Road (about 0.6 miles past Clifton P.O.). Proceed east on the 4000 N road for 0.5 mile and then take a road through a farm (apparently public access) to the western edge of the training area. Acreage figure from Guard says 240 acres, but mapped location is 280 acres. 200 acres are State of Idaho endowment lands, the remaining 80 acres are BLM.

Management:

The area is grazed by cattle and horses. The Idaho National Gurad uses this are once a year for training (dry fire exercises). Moseley made species list of vascular plants and surveyd for potential habitat for rare plant and animal species during two visits in 1997.

Elements

Plant Communities:
   None

Rare Species:
   None

References

Moseley, B. 1997. Field notes for the Little Mountain Training Area (M.USIDHP*281).

Record Maintenance

Edition: 97-10-23

Edition Author: B. Moseley

File Note: A managed area file is maintained at the Idaho Conservation Data Center, Department of Fish and Game, Boise.

Appendix 2

Vascular Plant Species List

Little Mountain Training Area

Vascular plant species observed by Bob Moseley, June and August 1997.

* = non-native species

TREES
Acer negundo	boxelder
Elaeagnus angustifolia	Russian olive
Juniperus scopulorum	Rocky Mountain juniper
Populus tremuloides	aspen

SHRUBS
Artemisia tridentata var. *wyomingensis*	Wyoming sagebrush
Betula occidentalis	water birch
Chrysothamnus nauseosus	gray rabbitbrush
Chrysothamnus viscidiflorus	green rabbitbrush
Crataegus douglasii	hawthorn
Eriogonum microthecum	slenderbush buckwheat
Leptodactylon pungens	prickly phlox
Prunus virginiana	chokecherry
Purshia tridentata	bitterbrush
Rhus trilobata	sumac
Ribes aureum	golden currant
Salix exigua	sandbar willow
Tetradymia canescens	horsebrush

FORBS
Achillea millefolium	yarrow
Allium acuminatum	taper-tip onion
Antennaria dimorpha	pussytoes
Antennaria microphylla	rosy pussytoes
Arctium minus	burdock
Artemisia dracunculus	tarragon
Artemisia ludoviciana	Louisiana wormwood
Astragalus lentiginosus	freckled milkvetch
Astragalus utahensis	Utah milkvetch
Balsamorhiza sagittata	arrowleaf balsamroot
Calochortus nuttallii	mariposa lily
Camelina microcarpa	falseflax
Cammisonia andina	obscure evening-primrose
Castilleja chromosa	paintbrush
Chenopodium album	goosefoot
Cirsium arvense	Canada thistle
Cirsium utahensis	Utah thistle
Cirsium vulgare	bull thistle
Chaenactis douglasii	false-yarrow
Comandra umbellata	bastard toad-flax
Crepis accuminata	hawksbeard
Cynoglosum officinale	houndstounge
Descurainia pinnata	tansymustard
Equisetum hymenale	horsetail
Eriogonum ovalifolium	oval-leaf buckwheat
Eriogonum umbellatum	sulfur buckwheat
Eriophyllum lanatum	eriophyllum
Erodium cicutarium	filaree
Geum macrophyllum	bigleaf avens

Glycyrrhiza lepidota	licorice root
Grindelia squarrosa	curlycup gumweed
*Lactuca seriola	prickly lettuce
Lappula redowskii	western stickseed
Lepidium virginicum	tall peppergrass
Lithophragma ruderale	stoneseed
Lomatium triternatum	nine-leaf lomatium
Machaeranthera canescens	hoary aster
Mentzelia albicaulis	stickleaf
Oenothera caespitosa	tufted evening-primrose
Oenothera pallida	evening-primrose
Opuntia polyacantha	prickly-pear cactus
Phacelia hastata	phacelia
Phacelia linearis	threadleaf phacelia
Phlox hoodii	Hood's phlox
Penstemon humilus	low penstemon
Plantago patigonica	plantain
*Rumex crispus	curly dock
*Salsola kali	Russian thistle
Senecio multilobatus	cut-leaf butterweed
**Sisymbrium altissimum*	tumbling mustard
Sphaeralcea munroana	globe-mallow
**Solanum dulcamara*	nightshade
**Taraxacum officinale*	dandelion
**Tragopogon dubius*	salsify
Typha latifolia	cattail
**Verbascum blattaria*	moth mullein
Verbena bracteata	verbena
Zigadenus paniculatus	death camas

GRAMINOIDS

**Agropyron cristatum*	crested wheatgrass
**Agropyron intermedium*	intermediate wheatgrass
Agropyron smithii	western wheatgrass
Agropyron spicatum	bluebunch wheatgrass
Aristida longiseta	three-awn
*Bromus inermis	smooth brome
*Bromus tectorum	cheatgrass
Eleocharis palustris	spike-rush
Elymus cinerius	basin wildrye
Juncus balticus	Baltic rush
Koelaria cristata	junegrass
Phalaris arundinacea	reed canarygrass
*Poa pratensis	Kentucky bluegrass
Poa secunda	Sandberg bluegrass
Oryzopsis hymenoides	Indian ricegrass
Scirpus pungens	bulrush
Sborobolus cryptandrus	sand dropseed
Stipa comata	needle-and-thread grass