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.
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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 databases 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:

<table>
<thead>
<tr>
<th>GROUP</th>
<th>SPECIES</th>
<th>STATUS</th>
<th>INVENTORY COMMENTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Plants</td>
<td>Ute ladies tresses (&lt;em&gt;Spiranthes diluvialis&lt;/em&gt;)</td>
<td>CDC: G2 S1 INPS: G2 USFWS: T</td>
<td>Listed Threatened. Not known from training area. Nearest populations ca. 90 miles to NE. Best surveyed at peak flowering, late August - September.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Animals</td>
<td>rock squirrel (&lt;em&gt;Spermophilus variegatus&lt;/em&gt;)</td>
<td>CDC: G5 S1 IFG: SC USFWS: W BLM: S</td>
<td>Not known from training area. Nearest populations ca. 10 miles to E. Best surveyed during May - June.</td>
</tr>
<tr>
<td></td>
<td>pinyon jay (&lt;em&gt;Gymnorhinus cyanopechals&lt;/em&gt;)</td>
<td>CDC: G5 S2? IFG: P</td>
<td>Not known from training area. Nearest populations ca. 10 miles to W. Best surveyed during May - June.</td>
</tr>
</tbody>
</table>

<sup>1</sup>Conservation Status: **CDC**=Conservation Data Center/Heritage Network: G - Global/Rangewide Conservation Rank (1-5); S - State Conservation Rank (1-5). **INPS** = Idaho Native Plant Society: G2 - Global Priority 2. **IFG** = Idaho Fish and Game: SC - Species of Concern; P - Protected Nongame Species. **USFWS** = U.S. Fish and Wildlife Service/Endangered Species Act: T - Threatened; W - Watch. **BLM** = 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

**Field Inventory**

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.
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)
Managed Area Basic Record  
LITTLE MOUNTAIN TRAINING AREA  
# 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 on 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 Guard uses this area once a year for training (dry fire exercises). Moseley made species list of vascular plants and surveyed for potential habitat for rare plant and animal species during two visits in 1997.
**Elements**

*Plant Communities:*
  None

*Rare Species:*
  None

**References**


**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** rosy pussytoes
- **Antennaria microphylla**
- **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
- **Cannabinoidea andina** obscure evening-primrose
- **Castilleja chromosa** paintbrush
- **Chenopodium album** goosefoot
- **Chenopodium album**
- **Cirsium arvense** Canada thistle
- **Cirsium utahensis** Utah thistle
- **Cirsium vulgare** bull thistle
- **Chaenactis douglasii** false-yarrow
- **Comandra umbellata** bastard toad-flax
- **Crepis acuminate** hawksbeard
- **Cynoglosum officinale** houndstounge
- **Descurainia pinnata** tansy mustard
- **Equisetum hymenale** horsetail
- **Eriogonum ovalifolium** oval-leaf buckwheat
- **Eriogonum umbellatum** sulfur buckwheat
- **Eriophyllum lanatum** eriophyllum
- **Erzordium 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 humilis  low penstemon
Plantago patagonica  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
table:
*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 cinereus  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