

# Site Basic Report

7/11/2006

**Site Code BCD** S.USIDHP\*151

**Site Class** Standard site

**Name** MAHOGANY CREEK

**Defining Managed Area** MAHOGANY CREEK RNA

**State/Province** Idaho

**Directions** Mahogany Creek RNA is located on the east slope of the Lost River Range, ca 1 air mile (1.6 km) north of Borah Peak and about 33 air miles (53 km) southeast of Challis, Idaho. | From U.S. Route 93, 46 miles (74.5 km) north of Arco, Idaho, or 32 miles (52 km) south of Challis, Idaho, take FS Road 116 northeastward over Doublespring Pass for 10 miles (16 km) to the turnoff of FS Road 117. Take 117 over Horseheaven Pass for 6 miles (9.7 km) to the junction with FS Road 118. Follow FS Road 118 up the West Fork Pahsimeroi River for 1.7 miles (2.7 km) to its junction with FS Road 318 (crossing a fork of Mahogany Creek). Turn west on 318 for approximately 2.1 miles (3.4 km) to the boundary of the RNA.

<b>Minimum Elevation:</b>	8,310	<b>Feet</b>	2,533	<b>Meters</b>
<b>Maximum Elevation:</b>	11,828	<b>Feet</b>	3,605	<b>Meters</b>

**Site Description** Mahogany Creek RNA is a high elevation basin in the Lost River Range, less than one mile north of Borah Peak, Idaho's highest mountain. The area occurs on base rocks of largely Paleozoic limestones and dolomites and contains outstanding geologic features including folded rock strata and glacial topography. Elevations in the RNA range from about 8310 feet (2533 m) where Mahogany Creek leaves the RNA on the eastern boundary (fenceline) to the peak of 11,828 feet (3605 m) on the southern boundary. The area contains extensive stands of mountain mahogany (*Cercocarpus ledifolius*) in various associations. The occurrence of limber pine (*Pinus flexilis*) with whitebark pine (*Pinus albicaulis*) is unusual for this latitude and elevation. Common juniper (*Juniperus communis*) is abundant in the area. Its occurrence in habitat types with limber pine and whitebark pine is uncommon. Middle elevations support forests of Douglas-fir (*Pseudotsuga menziesii*) and limber pine with openings of mountain big sagebrush/Idaho fescue (*Artemisia tridentata* ssp. *vaseyana*/*Festuca idahoensis*). Higher elevations are occupied by Engelmann spruce (*Picea engelmannii*) and subalpine fir (*Abies lasiocarpa*) with limber pine, whitebark pine, and Engelmann spruce at timberline. Alpine talus and grassland communities occur above timberline. Three rare plant species are found within the area: *Cymopterus douglassii*, *Cymopterus ibapensis*, and *Coryphantha missouriensis*.

**Key Environmental Factors** The area is underlain by dolomite and limestone. The substrate, coupled with the somewhat arid climate of the area, results in vegetation at the dry end of the spectrum.

**Climate Description** The Lost River Range is located such that it is on the periphery of storm systems originating over the Pacific Ocean and Gulf of Mexico. As a result, this mountain range, which contains the highest peaks in Idaho, is relatively dry, and the valleys are some of the driest in Idaho. Precipitation is highest between April and October.

**Land Use History** Mahogany Creek is in a cattle-grazing allotment and there is a history of grazing in the lower portion of the RNA. A fence was constructed in 1985 (where a portion of the current eastern boundary is) to protect the stream and elk range from cattle use.

**Cultural Features** There are no known presettlement cultural features within the site.

**Site Mapped** Y - Yes

**Mapped Date**

**Designer** Wellner, C. A.

**Boundary Justification** The boundary largely follows ridgelines to encompass the upper Mahogany Creek basin. The lower boundary of the RNA is a fence built to exclude cattle from the area.

**Primary and Secondary Area** 3,650.00 Acres 1,477.11 Hectares

**Primary Area**

3,588.42 Acres

1,452.19 Hectares

**Site Comments**

**Biodiversity Significance**

B2 - Very high

**Biodiversity Significance Comments**

The site supports three rare plant species: *Cymopterus douglassii* and *Cymopterus ibapensis*, both Forest Service Region 4 Sensitive species; and *Coryphantha missouriensis*, a state Monitor species. The lower portion of Mahogany Creek in the RNA probably supports bull trout (*Salvelinus confluentus*), a Candidate and Forest Service Sensitive species.

**Other Values**

**Other Values Comments**

The site supports a diversity of habitat types, including several types that are unusual for the area. The area also contains an incredible array of geologic features, resulting from glaciation of the limestone substrate, and outstanding scenic values.

**Protection Urgency**

P5 - No action to be taken on this site

**Protection Urgency Comments**

The site is an established Research Natural Area.

**Management Urgency**

M4 - Not needed now; no current threats; may need in future

**Management Urgency Comments**

There is some concern regarding maintenance of the fence along the lower boundary of the RNA and closure of the road into the RNA.

**Conservation Intentions**

The site has been protected by designation as a Forest Service Research Natural Area.

**Protection Comments**

The site is an established Research Natural Area.

**Land Use Comments**

Mahogany Creek RNA is listed as a Special Management Area in the Challis National Forest Land Resource Management Plan (1987) for its values as an RNA. The RNA is in the proposed Borah Peak Wilderness, which is managed to protect wilderness attributes. The area receives some light recreational use by hikers and hunters.

**Natural Hazard Comments**

Steep slopes and cliffs are potential hazards.

**Exotics Comments**

**Offsite**

The site is entirely surrounded by Forest Service lands within Management Area 16, Borah Peak, and the proposed Borah Peak Wilderness. The area is managed to protect wilderness attributes. Cattle grazing occurs near the lower boundary of the RNA.

**Information Needs**

**Management Needs**

The fence at the lower end of the RNA needs to be maintained.

**Managed Area Relations**

Mahogany Creek RNA is located within the Challis NF, Challis RD, and the proposed Borah Peak Wilderness.

<u>Element ID</u>	<u>Scientific Name</u>	<u>Common Name</u>	<u>G-Rank</u>	<u>S-Rank</u>
7192	<i>Pinus flexilis/Leucopoa kingii</i>	limber pine/spike-fescue	G3	S3
6443	<i>Cymopterus douglassii</i>	Douglass' Wavewing	G3	S3
7208	<i>Pseudotsuga menziesii/Festuca idahoensis</i>	Douglas fir/Idaho fescue	G4	S3
7065	<i>Abies lasiocarpa/Ribes montigenum</i>	subalpine fir/mountain gooseberry	G5	S5
6443	<i>Cymopterus douglassii</i>	Douglass' Wavewing	G3	S3
7187	<i>Pinus albicaulis/Juniperus communis</i>	whitebark pine/common juniper	G4?	S2
7191	<i>Pinus flexilis/Juniperus communis</i>	limber pine/common juniper	G5	S3
7221	<i>Cercocarpus ledifolius/Agropyron spicatum</i>	curl-leaf mountain mahogany/bluebunch wheatgrass	G4Q	S4
7189	<i>Pinus flexilis/Cercocarpus ledifolius</i>	limber pine/curl-leaf mountain mahogany	G3G4	S3
7190	<i>Pinus flexilis/Festuca idahoensis</i>	limber pine/Idaho fescue	G5	S2
7046	<i>Abies lasiocarpa/Arnica cordifolia</i>	subalpine fir/heartleaf arnica	G5	S4
7087	<i>Pseudotsuga menziesii/Arnica cordifolia</i>	Douglas fir/heartleaf arnica	G4	S3
7206	<i>Pseudotsuga menziesii/Cercocarpus ledifolius</i>	Douglas fir/curl-leaf mountain mahogany	G4?	S3
7081	<i>Picea engelmannii/Juniperus communis</i>	Engelmann spruce/common juniper	G3	S2
7374	<i>Artemisia tridentata vaseyana/Festuca idahoensis</i>	mountain big sagebrush/Idaho fescue	G5	S4
7186	<i>Pinus albicaulis/Festuca idahoensis</i>	whitebark pine/Idaho fescue	G4	S4?
7213	<i>Abies lasiocarpa/Juniperus communis</i>	subalpine fir/common juniper	G5	SNA
7090	<i>Pseudotsuga menziesii/Juniperus communis</i>	Douglas fir/common juniper	G4	S3

**Reference Code**

**Full Citation**

U91WEL08IDUS	Wellner, C. A. 1991. Establishment record for Mahogany Creek Research Natural Area within Challis National Forest, Custer County, Idaho. USDA Forest Service. 25 pp.
U86WEL11IDUS	Wellner, C. A. 1986. Letter dated 22 August to Jack C. Griswold, Supervisor, Challis National Forest, regarding visits to proposed and established research natural areas on the Forest. 2 pp.
M79REM04IDUS	Rember, W. C., and E. H. Bennett, compilers. 1979. Geologic map of the Dubois Quadrangle, Idaho. Idaho Bureau of Mines and Geology, Moscow.
U76WEL03IDUS	Wellner, C. A. 1976. Letter of August 18 to the assistant director of Intermountain Forest and Range Experiment Station discussing possible RNA's on the Caribou, Targhee and Salmon National Forests.
A47ROS01IDUS	Ross, C. P. 1947. Geology of the Borah Peak Quadrangle, Idaho. Bulletin of the Geological Society of America 58: 1085-1160.

**Imagery Comments**

Aerial photos and a photographic record are on file with the Establishment Record at the Idaho Conservation Data Center in Boise. The following aerial photography provides coverage of the Mahogany Creek area: (all are USDA photos taken 8-4-79) 16 614060 779-8 through 779-12 and 16 614060 679-203 through 679-207.

