MC009-MC010 Entered in NRM database

Scanned 9-13
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Survey ID _____

BOTANICAL FIELD RECONNAISSANCE REPORT
Helena-Lewis and Clark National Forest

Project: Moose Creek **District:**

Survey Area ID: 011507030403_MC009_010 **Survey Name:** Moose Creek #34+35

Survey Date(s): 9-1-16 **Surveyor/s:** Dumont, Martin

USGS Quad: **Location:** T R S 1/4 1/16

UTM: NAD 83 Zone E N **GPS unit/device** Trimble (Avenza) - Justine Other:_____ **Error +**

Location/Directions to Survey Area:

WSS, E → 12, N → 89, Left at Sheep Creek Rd, R @ Moose Creek, units on the R near private subdivision.

Survey type: Field Check; Cursory; General; (Intuitive Controlled); Complete

Describe survey route/effort taken:

Walked both units- mapped wet areas

Target Species: See table

Describe general habitat(s): Type, common species, plant associations, unique features, etc.:

lodgepole forest w/ douglas fir. Understory various. Mapped riparian and/or wet areas in unit. A few open meadows and aspen stands.

Management History/Current Uses:

Recommendation: Avoid areas of POPTRE regen - fence in S end of unit 35.

Seral Stage: early (mid) late

Slope/s: **Aspect/s:** variable **Elevation:** 5,800 - 6,500 **Soil/Bedrock:**

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SPECIAL STATUS PLANTS (federally listed, FS sensitive)
Any known/historical populations in the project area? (Include species and EO#)

No

Any new populations found in the project area? (Include species and EO#)

No

Presence of Suitable Habitat for Listed Species (Provide brief explanation of why habitat is unsuitable or where suitable habitat occurs)

SPECIES	STATUS	PRESENT IN PROJECT AREA	HABITAT PRESENT IN PROJECT AREA	HABITAT
Amerorchis rotundifolia Round-leaved Orchis	R1 Sensitive; S	No	Yes	Mossy seeps, sphagnum bogs, ponds, or along streams in wet to moist spruce forests with limestone-derived soils. 3350-5920ft elevation
Aquilegia brevistyla Short-styled Columbine	R1 Sensitive; S		Yes	Semi-open, moist drainage bottoms or toe slopes on alluvial or colluvial limestone substrates, at mid-elevation in the montane zone. Can be found along streambanks. Partial understory conifer shade is a common component. 5000-6200ft elevation
Astragalus lackschewitzii Lackschewitz' Milkvetch	R1 Sensitive; S		No	Generally restricted to open, gravelly and rocky slopes and ridgetops with calcareous soil and talus in alpine or subalpine zones. 7000-8120 ft elevation
Botrychium ascendens Upward-lobed Moonwort	R1 Sensitive; K		Yes	Stream floodplains of glaciated bottoms dominated by deciduous shrubs with lush cover by forbs, grasses, and mosses in NW Montana. Often associated with wetlands dominated by spruce and alder. Mostly found in subirrigated habitats 2700-6000 (9500) ft elevation
Botrychium crenulatum Wavy Moonwort	R1 Sensitive; K		Yes	Stream bottoms, around seeps, on the edges of marshes, and in wet roadside swales, often in soils influenced by precipitated calcium. Vegetation dominated by spruce, alders, and dogwood with high cover and diversity of forbs and graminoids. Reported from western red cedar habitat and also found in rough fescue/ID fescue grasslands in heavy litter, 2,400-7,700 ft elevation
Botrychium paradoxum Peculiar Moonwort	R1 Sensitive; K		Yes	Mesic meadows and bunchgrass communities associated with spruce and lodgepole pine forests in the montane and subalpine zones. Grows on glaciated slopes and ridgetops, glaciated lake basins, and stream bottoms and draws. 2,400-9,500 feet elevation

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SPECIES	STATUS	PRESENT IN PROJECT AREA	HABITAT PRESENT IN PROJECT AREA	HABITAT
Cypripedium parviflorum Small Yellow Lady's Slipper	R1 Sensitive; S	No	Yes	Along ecotonal margins of spruce habitat types (damp, mossy woods) with wetland features such as fens, seeps, springs, streamsides, and moist forest meadow ecotones in the valley to lower montane zones. Generally associated with high water table features that provide stable, cool groundwater discharge and cool, moist, calcareous soils 2500-6200 feet elevation
Cypripedium passerinum Sparrow's Egg Lady's Slipper	R1 Sensitive; S		Yes	Moist, mossy, seepy areas, riparian zones, ecotonal margins of sphagnum bogs, often in full or partial shade of conifers. Preferred habitat is associated with spruce, but will associate with lodgepole. On the Lewis and Clark, found on calcareous substrates derived from the Madison Limestone Formation. Also associated with semi-permanent water seepage near the surface. 3000-5700 feet elevation
Drosera anglica English Sundew	R1 Sensitive; K		No	Sphagnum moss in wet, organic soils of fens and meadows in the montane zone. Commonly associated with open water, wetlands, or riparian systems.
Drosera linearis Slenderleaf Sundew	R1 Sensitive; K		No	Wet, organic soil of nutrient-poor fens in the montane zone. Commonly associated with open water, wetlands, or riparian systems
Elymus innovatus Northern wildrye	R1 Sensitive; K		Yes	Primarily sandy meadows, along stream banks, on rock hillsides with partial shade, and in open stands of lodgepole or spruce. Primarily in the upper montane zone on slopes adjoining the major valley bottoms. Also in well-drained alluvial benches in flood plains 4600 – 5200 ft elevation
Epipactis gigantea Giant Helleborne	R1 Sensitive; K		Yes	Widely varied. One consistent requirement is a permanent source of thermally-influenced water at the root level. Stream banks, lake margins, fens with seeps and springs, shrub dominated wetland, and riparian areas 2500 – 6000 feet elevation
Erigeron lackschewitzii Lackschewitz's fleabane	R1 Sensitive; K		No	Grows exclusively in exposed alpine settings (gravelly talus) with water-retaining calcareous soil derived from a dolomite substrate, rock-covered surfaces impeding water loss from shallow soil beneath, exposed, windy sites (saddles, protruding outcrops, crests of updraft chutes), and areas with first snowmelt and late soil recharge above 6000 ft.
Gentianopsis macounii Macoun's gentian	R1 Sensitive; K		No	Wet, organic soil of calcareous fens or wet meadows with standing water in the valley and foothill zones 3500-5500 ft elevation.

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SPECIES	STATUS	PRESENT IN PROJECT AREA	HABITAT PRESENT IN PROJECT AREA	HABITAT
Goodyera repens Nothern Rattlesnake-plantain	R1 Sensitive; S	No -	Yes	Cool, moist, north-facing sites consisting of spruce/ twinflower and subalpine fir/ twinflower habitat types with well-developed organic duff, moss layers at mid-elevations, and shade from late successional forests 5000-6800 feet elevation
Grindelia howellii Howell's Gumweed	R1 Sensitive; S		No	Vernally moist, lightly disturbed soil adjacent to ponds and marshes, as well as similar human-created habitats, such as roadsides and grazed pastures 3000-5500 feet elevation
Juncus hallii *Hall's Rush*	R1 Sensitive; K		Yes	Moist grassland and sedge meadows from the montane to alpine zones. Flats or benches on the gentle to mid-upper slopes (3500) 6000-8800 feet elevation
Micranthes tempestiva Storm Saxifrage	R1 Sensitive; S		No	Vernally moist, open soil in meadows and on rock ledges in the subalpine and alpine zones 7500-9500 feet elevation
Oxytropis podocarpa Stalked-pod Lococweed	R1 Sensitive; S		No	Gravelly ridges and slopes, often on limestone, and in the alpine zone. Populations are situated in basins or on steep slopes and ridges with limestone-derived soils, in the alpine zone 6500-8500 feet elevation
Phlox kelseyi var missoulensis Missoula Phlox	R1 Sensitive; K		No	Open, exposed, limestone-derived slopes in the foothills to exposed, windswept ridges in the subalpine zone 5800-8500 feet elevation
Pinus albicaulis White-bark Pine	Candidate; K		Yes	Tolerates poor soils, steep slopes, windy exposures, and tree-line environments. Often found on warm, dry exposures in subalpine and alpine habitats.
Polygonum. austinae Austin's Knotweed	R1 Sensitive; K		No	Open, gravelly, sparsely-vegetated (mostly barren or easily eroded) slopes with shale-derived soils. Associated with ponderosa and bluebunch wheatgrass habitat types with little vegetation cover 4000-9000 feet elevation
Potamogeton obtusifolius Blunt-leaved pondweed	R1 Sensitive; K		Yes	Shallow water of lakes, ponds, and sloughs and lotic streams in the valley, foothill, and montane zones
Potentilla nivea var. pentaphylla Five-leaved cinquefoil	R1 Sensitive; K		No	Dry, shallow, gravelly soil or talus and scree of exposed ridges, slopes, and summits in the montane to alpine zones 4600-10000 ft elevation
Salix barrattiana Barratt's willow	R1 Sensitive; S		No	Alpine habitat, sessile catkins, and sticky twigs will distinguish this willow from other species. Leaves and mature female catkins are necessary for positive identification 6500 – 9500 ft elevation

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SPECIES	STATUS	PRESENT IN PROJECT AREA	HABITAT PRESENT IN PROJECT AREA	HABITAT
Schoenoplectus subterminalis Water Bulrush	R1 Sensitive; K	No	No	Shallow (0.1 - 3.0 m / < 10 ft depth) open water and boggy margins of ponds, lakes, and sloughs at 0.1-3.0 m depth, in the valley, foothill, and montane zone. Stems float on the water's surface.
Spiranthes diluvialis Ute Ladies Tresses	Threatened; S*		No	Alkaline wetlands, swales and old, meandering channels often on the edge of wetlands or areas that are dry by mid-summer 2700-4700 feet elevation
Thalictrum alpinum Alpine Meadowrue	R1 Sensitive; S		No	Typically moist meadows or stony slopes in montane and lower subalpine areas. Can occur on drier, upper portions of hummocks. Sometimes occurs along stream channels 4500-8500 feet elevation
Trichophorum cespitosum Tufted club-rush	R1 Sensitive; K		No	Sphagnum-dominated fens and wet meadows in the montane to alpine zones. Rare in Montana— known from populations in the mountainous portions of western Montana 2500-9000 ft elevation
Veratrum californicum California False-helleborne	R1 Sensitive; S		Yes	Wet meadows and streambanks in the montane and subalpine zones 5500-8000 feet elevation

SPECIAL HABITATS (fens, sphagnum-peat community, meadows, old growth, whitebark pine, etc)

Wet marshy areas within the lodgepole / Douglas fir

DISTURBANCE/RISK OF INVASION (circle all that apply)*:

timber harvest,	reforestation,	adjacent to urban	trails,	hydroelectric,
fuels reduction,	vegetation mgt	mining,	erosion,	other disturbance:
recent fire,	lack of vegetation,	recreation use,	invasive species,	
	rangeland use,	roads,	wasteland/fill site,	

Explain in greater detail any disturbance noted above:

Any new infestations found in the project area? (Include species; describe and provide GIS/GPS data for infestation)

*****Attach a complete species list and a map with route surveyed.**

SPECIES LIST AND LOCATION MAP(S)

Trees/Shrubs

PICO
PSME
Juniperus communis
Spirea betulosa
Berberis repens
Rosa woodsii
Rubus ideaus
Symphocarpus albus
Needle pine
Populus tremeloides
Juniperus horizontalis
Picea engelmannia
Ribes sp.
Ribes lacrustre
Apocynum Androsaemifolium
Ceanothus velutinus

Forbs/Grass

Calamagrostis rubescens
Heuchera - lily-yellow
Lupinus sericeus
Heracleum cylindrica
Fragaria virginatia
Campanula rotundifolia
Galium boreale
Vaccinium sp.
Arnica cordifolia
Vaccinium scoparium
Achillea millefolium
Allium cernuum
Festuca scabrous
Carex geyeri
Solidago - lvs biggest bottom not reduced at top
Polytrichum - moss
Elymus elymoides
Penstemon sp.
Antennaria sp.
Osmoriza chilensis
Chimophyola umbellatum
Poa pratensis
Cinna latifolia
Goodyera oblongifolia
Pyrola sp.
Taraxacum officinale
Gentiana brennis
Heuchera - white
SEDE - clubmoss
Othillia secunda
Epilobium sp.
Trifolium - longipes
Peridridia
Potentilla gracilis
Festuca idahoensis

Wet

Thalictrum
Epilobium ciliatum
Carex utriculata
Salix sp.
Juncus
Glyceria grandis
Chickweed?
Geum macrophyllum
Viola
Gentiana
Angelica arguta
Marchantia polymorpha
Veronica americana
Mimulus yellow
Senecio triangularis
Veratrum viride
Sambucus sp.
Galium trifidum
Ranunculus sp.
Equisetum arvenses
Iris missouriensis

Castilleja minorita
Elymus glaucus
Antennaria racemosa
Symphotrychium laeve
Danthonia intermedia
Prunella vulgaris
Geranium viscossimum
Vicia americana
Agropyron sp.
Arabis sp.
Phacelia hisuta
Agrostis glauca
Asclepias marginitocea
Stipa nelsonia
Linnia borealis
Herospora andromeda
Ralarthrea

Weeds

Phleum pratense
Cirsium vulgare
Cirsium arvense