

Common Name	Scientific Name	Flowering Period	Habitat
Aase's Onion	<i>Allium aaseae</i>	Flowering as early as late February through April, depending on elevation and seasonal weather patterns.	Sagebrush-Grassland
Mulford's Milkvetch	<i>Astragalus mulfordiae</i>	May and June	Grassland
Earth Lichen	<i>Catapyrenium congestum</i>	NA	Sagebrush-steppe
Shining Flatsedge	<i>Cyperus bipartitus</i>	Fruits in summer	Riparian shoreline; Disturbed places
Slick Spot Peppergrass	<i>Lepidium papilliferum</i>	May through June	Slick spots within Sagebrush

### Aase's Onion

Aase's onion is endemic to Idaho in the lower foothills from the Boise to Weiser areas. It typically grows in coarse sandy soil on steep southerly exposures on or near ridge tops in sagebrush-grass communities, often with three-awn grass and bitter brush, from 800-1500 m elevation. Flowers bloom between late February and April (Debolt and Rosentreter 1998). Because Aase's onion typically grows on steep slopes near ridge tops its habitat has experienced less soil surface disturbance from livestock or agriculture.



Populations of Aase's onion are found on many of the undeveloped, sandy south-facing slopes. These populations can be quite dense, but the total area occupied by the onion is relatively small. Habitat loss and degradation caused by development and other activities are the main threats to this species (Moseley et al. 1992). See Map 8 for the locations of Aase's onion populations within the project area that were identified in the IDCDC data of ECS site surveys.

### Mulford's Milkvetch

Mulford's milkvetch is a deep-rooted member of the pea family found in three widely separated areas in southwestern Idaho and adjacent Oregon. It generally occurs on sandy slopes and ridges with needle-and-thread grass, Indian ricegrass and bitterbrush mostly on south facing exposures, from 650-850 m elevation. Mulford's milkvetch flowers from May to June (Debolt and Rosentreter 1998). Habitat loss and degradation caused by development and other activities are the main threats to this species (Moseley et al. 1992). See Map 8 for the locations of Mulford's milkvetch populations in the project area.



## Earth Lichen

*Catapyrenium congestum* is a squamulose lichen, medium-dark brown in colors with squamules <2 mm diameter, densely clustered, often forming hemispherical mounds. It reproduces by perithecia that appear as small black dots on the surface of the squamules. *Catapyrenium congestum* inhabits sagebrush or shadscale steppe and is restricted to barren, slightly natric soil sites associated with *Poa sandburgii*, *Phlox hoodii*, *Castilleja*, *Stipa comata*, and *Chrysothamnus*. (USDI 2006).



## Shining Flatsedge

Shining flatsedge (*Cyperus bipartitus*) is an obligate wetland grass-like species with few stems known to occur in wetland areas around southern Idaho. The flowers consist of a small, blunt scale with a pale, 2-3 mm long midrib, which subtends a single stamen and ovary. Its fruit matures in August to September. Recent habitat studies around the Boise, Payette, and Snake Rivers have found that this species is more common than previously thought (Mancuso 2000).



## Slick Spot Peppergrass

Slickspot peppergrass is restricted to microhabitats known as slickspots and also referred to as mini-playas, or nitric sites. Slickspots appear sporadically in low spots of the landscape, collecting water as shallow basins throughout the wet season. These sites are physically and biologically distinct from the surrounding sagebrush-steppe community. Ranging in size from about 1 to 12 square meters, slickspots display soils that are high in both clay and salts (Fisher et al. 1996), with properties more hydric than the surrounding arid soils. In terms of biologic production, these sites have low output compared to the surrounding habitats. Due to their low productivity, slickspot soils accumulate relatively little organic matter and nutrients.



Slick-spot peppergrass is one of Idaho's highest priority plant conservation concerns. This small annual and biennial plant species in the mustard family, endemic to southwestern Idaho, was thought to be extinct until the rediscovery in the Foothills in 1972. Its primary range is the western Snake River Plain and adjacent Foothills. Much of the native habitat has been destroyed or seriously degraded by agricultural conversions, housing developments, weed invasions, wild fires, and pasture seeding (Mancuso et al. 1998).