

**FLORISTIC SURVEY  
OF THE SANGRE DE CRISTO WILDERNESS  
AND ENVIRONS**

Tim Hogan  
University of Colorado Herbarium  
350 UCB  
Boulder, CO 80309

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## SANGRE DE CRISTO WILDERNESS AREA SPECIES LIST

Nomenclature begins with Weber and Wittman (2001), but is informed by a variety of other sources including Hartman and Nelson (2001), Snow (2009) and Flora of North America (1993+); relevant synonymy is provided. Brief ecological notes pertaining to the species distribution and abundance in the study area are followed by a geographic circumscription.

*Lower elevation* generally refers to areas below 8500 feet characterized by piñon/juniper/oak woodlands; *Montane* is equivalent to the zone between 8500 and 10,000 feet marked by ponderosa pine and Douglas-fir; *Subalpine* ranges from 9500 to 12,500 feet (treeline) with spruce/fir; and *Alpine* is usually above 12,000 feet.

Qualitative abundance scale: abundant, common, not uncommon, scattered, uncommon, # of collection(s).

*Oroboreal* is a phytogeographic term describing a distribution stretching across the northern tier of North America and extending south along the western cordilleras and the eastern highlands.

### FERNS and FERN ALLIES

**Argyrochosma fendleri** (Kunze) Windham LIPFERN [*Notholaena f.*]. Specimens from Great Sand Dunes (Mosca Pass trail); rock crevices. Southern Rockies.

**Asplenium trichomanes-ramosum** L. SPLEENWORT [*A. viride*]. Uncommon; limestone at higher elevations. North America (oroboreal).

**Botrychium spathulatum** W.H. Wagner One specimen (Scott Smith 224) from calcareous talus field at Bushnell Lake, Fremont Co. North America (oroboreal).

**Botrychium tunux** Stevensvold & Farrar One specimen (Scott Smith 223) from calcareous talus field at Bushnell Lake, Fremont Co. Western N.A?

[*Botrychium* spp. Other species of *Botrychium* (*B. echo*, *B. minganense*, & *B. pinnatum*) have been collected by S. Smith south of the study area near Trinchera Peak at 11,000 ft. (Huerfano Co.) and might be expected in the Sangre de Cristo Wilderness.]

**Cheilanthes** *feei* T. Moore A couple specimens from margins of the study area. North America.

**Cheilanthes** *fendleri* Hooker One specimen from Great Sand Dunes (Mosca Pass Trail). Southwestern N.A.

**Cryptogramma acrostichoides** R. Brown ROCK BRAKE. [*C. crispa* var. *acrostichoides*]. Not uncommon among rocks at higher elevations. Western N.A. (Asia)

**Cystopteris fragilis** (L.) Bernhardi BRITTLEFERN. Common in shade of rocks and cliffs throughout the area. North America.

**Cystopteris reevesiana** Lellinger BRITTLEFERN. Common in shade of rocks and cliffs throughout the area. Southwestern N.A.

**Equisetum arvense** L. HORSETAIL. Common along watercourses below 10,000'. North America.

**Equisetum hyemale** L. var. *affine* (Engelmann) A. A. Eaton SCOURING-RUSH. [*Hippochaete hyemalis*]. Moist areas at middle elevations. North America.

**Equisetum laevigatum** A. Braun SCOURING-RUSH. [*Hippochaete laevigata*]. Moist sites at middle elevations; perhaps more common than *E. hyemale*. North America.

**Gymnocarpium dryopteris** (L.) Newman OAKFERN. One specimen (Elliot 8720a RM) from south of wilderness boundary; riparian habitat, 8600'; Costilla Co. North America.

**Polystichum lonchitis** (L.) Roth HOLLYFERN. One specimen (Yeatts 2170 COLO) from stand of *Picea pungens*, 11,000'; Huerfano Co. North America (oroboreal).

**Pteridium aquilinum** (L.) Kuhn subsp. *lanuginosum* BRACKEN One specimen (Hogan 4866) found on margin of study area in mixed forest at 8500'; Fremont Co. Cosmopolitan.

**Selaginella densa** Rydberg Common *Selaginella* from lower elevations to alpine. Western N.A.

**Selaginella mutica** D. C. Eaton One specimen (Hartman 64881) from rocky site at 9,000', southern end of study area; Huerfano Co.. Southwestern N.A.  
**Selaginella scopulorum** Maxon One specimen (McHenry 04-14 COLO) from rocky site at 11,400', east side of wilderness; Custer Co. Western N.A.  
**Selaginella weatherbiana** Tryon Two specimens from Mosca Pass trail in Great Sand Dunes at 8,000'. Southern Rockies.  
**Woodsia oregana** D.C. Eaton ssp *cathcartiana* (Robbinson) Windham The common *Woodsia* from piñon/juniper to alpine. North America.

## GYMNOSPERMS

### CUPRESSACEAE Cypress Family

**Juniperus communis** L. var. *depressa* Pursh COMMON JUNIPER. Shrub of forest understory, common. North America.  
**Juniperus scopulorum** Sargent ROCKY MOUNTAIN JUNIPER. [*Sabina s.*]. Common at lower elevations in wilderness. Western N.A.

### PINACEAE Pine Family

**Abies balsamea** A. Murray SUBALPINE FIR. [*A. lasiocarpa*] Subdominant tree with *Picea engelmannii* in subalpine forests. Both varieties *arizonica* and *balsamea* occur, with var. *arizonica* perhaps tending toward lower elevations than var. *balsamea*. Western N.A.  
**Abies concolor** (Gordon & Glendower) Hildebrand WHITE FIR. Common near streams below 10,000'. Southwestern N.A.  
**Picea engelmannii** Parry ENGELMANN SPRUCE. Dominant tree in subalpine forests. Western N.A.  
**Picea pungens** Engelmann BLUE SPRUCE. Usually occurring along stream courses at moderate elevations, records from the alpine are suspect. Western N.A. (Rocky Mountains).  
**Pinus aristata** Engelmann BRISTLECONE PINE. Common at higher elevations to treeline. Southern Rockies.  
**Pinus contorta** Douglas var. *latifolia* Engelmann LODGEPOLE PINE. Scattered on east side of wilderness, largely absent on western side (one collection from upper Dorsey Creek); at southernmost end of its range in the Sangres. Western N.A. (Northwestern).  
**Pinus edulis** Engelm PÍÑON PINE. Dominant with *Juniperus scopulorum* at lowermost elevations in wilderness. Southwestern N.A.  
**Pinus flexilis** James LIMBER PINE. Common from mid-elevations to treeline. Western N.A.  
**Pinus ponderosa** Douglas var. *scopulorum* Engelmann PONDEROSA PINE. Scattered at lower elevations in wilderness; seldom if ever forming pure stands. Western N.A.  
**Pinus cf. strobus** Engelmann MEXICAN WHITE PINE. A problematic taxon in west side drainages at lower elevations; not always clearly distinguishable from *P. flexilis*, but recognized by many observers as "something different." Deserving closer study. Southwestern N.A.  
**Pseudotsuga menziesii** (Mirbel) Franco var. *glauca* DOUGLAS FIR. Dominant tree in lower subalpine, often mixed with *Populus tremuloides*. Western N.A.

## ANGIOSPERMS

### ACERACEAE Maple Family

**Acer glabrum** Torrey MOUNTAIN MAPLE. Streamsides and shaded slopes at middle elevations; common. Western N.A.

## AGAVACEAE Agave Family

***Yucca glauca*** Nuttall Rocky sites in lower elevation and montane forested zone. Great Plains.

## ALLIACEAE Onion Family

***Allium cernuum*** Roth NODDING ONION. Common wild onion of lower elevations. North America.  
***Allium geyeri*** S. Watson GEYER'S ONION. Common wild onion of higher elevations. Western N.A.

## AL SINACEAE (see Caryophyllaceae)

## AMARANTHACEAE Amaranth Family

***Amaranthus retroflexus*** L. One specimen near roadside proximate to wilderness (Elliot 4705). Alien.

## ANACARDIACEAE Sumac Family

***Rhus aromatica*** Aiton ssp. *trilobata* (Nuttall ex T. & G.) W. A. Weber SKUNKBRUSH. [*Rhus trilobata*].  
Scattered in piñon/juniper woodlands. Western N.A.

## APIACEAE/UMBELLIFERAES Parsley Family

***Aletes anisatus*** (A. Gray) Theobald & Tseng [*Cymopterus a.*; *Pteryxia a.*]. Uncommon at timberline in the wilderness (cited as *C. longilobus* by Elliot). Southern Rockies (Colorado).

***Angelica grayi*** (Coulter & Rose) Coulter & Rose GRAY'S ANGELICA. Not uncommon in mesic sites in subalpine and alpine. Southern Rockies.

***Cicuta douglasii*** (DC) Coulter & Rose One historical collection (Ramaley 15131) from vicinity of Orient Mine. Western N.A.

***Conioselinum scopulorum*** (A. Gray) Coulter & Rose HEMLOCK PARSLEY. Moist sites in the subalpine; late summer anthesis. Southern Rockies.

***Cymopterus acaulis*** (Pursh) Rafinesque Uncommon in piñon/juniper. Western N.A. (interior).

***Heracleum sphondylium*** L. var. *lanatum* (Michaux) Dorn COW PARSNIP [*H. lanatum*; *H. maximum*]. Moist sites and riparian in subalpine. North America (Asia).

***Ligusticum porteri*** Coulter & Rose OSHA. Common in aspen stands; a popular species amongst herbalists. Southern Rockies.

***Neoparrya lithophila*** Mathias [*Aletes l.*]. Two specimens collected from Methodist Mt., just north of wilderness (Hartman 66137; Elliot 9066). Southern Rockies.

***Oreoxis alpina*** (A. Gray) Coulter & Rose ALPINE PARSLEY [*Cymopterus a.*]. Dry tundra and upper subalpine. Southern Rockies.

***Oreoxis bakeri*** Coulter & Rose ALPINE PARSLEY [*Cymopterus b.*]. Common on dry tundra; a denizen of the Sangre de Cristo and San Juan mountains in Colorado and New Mexico. Southern Rockies.

***Osmorhiza chilensis*** Hooker & Arnott SWEET CICELY. Not as common as *O. depauperata*; mesic forested sites. Western N.A. [South America].

***Osmorhiza depauperata*** Philippi SWEET CICELY. [*O. obtusata*]. Common in forests throughout wilderness. Western N.A. (oreoboreal).

***Oxypolis fendleri*** (A. Gray) Heller COWBANE. Common in moist sites and streamsides in the subalpine. Southern Rockies.

***Pseudocymopterus montanus*** (A. Gray) Coulter & Rose MOUNTAIN PARSLEY [*Cymopterus lemmonii*]. The common yellow umbel of the mountains. Southern Rockies.

***Sanicula marilandica*** L. BLACK SNAKEROOT. One historical collection (Baltzell 186) from "7 miles west of Westcliffe". North America (eastern).

***Zizia aptera*** (A. Gray) Fernald A species of wet meadows in the Wet Mountain Valley; likely in similar sites on the east side of the wilderness. North America.

## APOCYNACEAE Dogbane Family

*Apocynum androsaemifolium* L. SPREADING DOGBANE. Mesica sites at lower elevations. North America.

## ARALIACEAE Ginseng Family

*Aralia nudicaulis* L. WILD SARSAPARILLA. Two collections from east side of wilderness in mesic sites at lower elevations (Elliot 8183; Nelson 44211). North America (eastern).

## ASTERACEAE/COMPOSITAE Sunflower Family

*Achillea millefolium* L. var. *lanulosa* (Nuttall) Piper YARROW. [*A. lanulosa*]. Very common from montane into the alpine. Western N.A.

*Agoseris aurantiaca* (Hooker) Greene FALSE DANDELION. [vars. *aurantiaca* and *purpurea*]. Not uncommon in subalpine and lower alpine. Western N.A.

*Agoseris glauca* (Pursh) Rafinesque var. *dasycephala* (Torrey & Gray) Jepson FALSE DANDELION. Not uncommon in montane and subalpine. Western N.A.

*Agoseris glauca* (Pursh) Rafinesque var. *laciniata* (D.C. Eaton) Smiley FALSE DANDELION. [*A. parviflora*]. A few collections from lower elevations at the north end of the wilderness area. Western N.A.

*Anaphalis margaritacea* (L.) Bentham & Hooker PEARLY EVERLASTING. A late season composite of meadows and forest openings in the montane; seldom collected in study area. North America.

*Antennaria anaphaloides* Rydberg [*Antennaria pulcherrima* ssp *anaphaloides*]. Scattered collections from lower alpine. Western N.A.

*Antennaria marginata* Greene This *Antennaria* without tomentum on the upper leaf surface can be difficult to distinguish from *A. neglecta* and *A. howellii*. One or more of these green leafed taxa are frequent in the montane and lower subalpine in the study area. North America.

*Antennaria media* Greene [*A. alpina*]. A species of the alpine and subalpine. Western N.A.

*Antennaria microphylla* Rydberg A common *Antennaria* from lower elevations to upper subalpine. Western N.A.

*Antennaria parvifolia* Nuttall Very common throughout the forested zones of the wilderness. Western N.A.

*Antennaria rosea* Greene Common throughout the wilderness area, into the alpine. Western N.A.

*Antennaria rosulata* Rydberg Two historical collections at COLO from 9,000' near La Veta and Poncha passes. Southwestern N.A.

*Antennaria umbrinella* Rydberg Common alpine *Antennaria*. Western N.A.

*Arnica cordifolia* Hooker HEARTLEAF ARNICA. Very common *Arnica* of drier forests. Western N.A.

*Arnica mollis* Hooker HAIRY ARNICA. Common subalpine *Arnica*. Western N.A.

*Arnica parryi* A. Gray Two collections (Hogan 5084, Elliot 8940) from moist subalpine site in upper Sand Creek; Saguache Co., Western N.A.

*Artemisia* [see also *Oligosporus*; *Seriphidium*]

*Artemisia franseroides* Greene Common in montane and lower subalpine forests. Southwestern N.A.

*Artemisia frigida* Willdenow FRINGED SAGE. Lower elevations, often associated with disturbed habitat. Circumboreal.

*Artemisia laciniata* Willdenow ssp *parryi* (A. Gray) W. A. Weber [*A. parryi*] Two collections (Hogan 5072, Elliot 5485) from gravelly sites proximate to upper Sand Creek and S. Colony Creek in subalpine. Western N.A. (Rocky Mountains).

*Artemisia ludoviciana* Nuttall Not uncommon throughout the elevational gradient. North America.

*Artemisia michauxiana* Besser Two records from wilderness area at higher elevations on east side. Western N.A.

*Artemisia scopulorum* A. Gray ALPINE SAGE. Common sage of the tundra. Western N.A.

*Aster* [see *Sympyotrichum*]

*Bahia dissecta* (A. Gray) Britton [*Amauriopsis d.*]. Drier sites at lower elevations; scattered. Southwestern N.A.

*Brickellia grandiflora* (Hooker) Nuttall Blooms in late summer at middle elevations; scattered. Western N.A.

*Chaenactis alpina* (A. Gray) Jones [*C. douglasii* var. *alpina*]. Uncommon (overlooked?) on alpine scree. Western N.A.

*Chaenactis douglasii* (Hooker) Hooker & Arnott [*C. douglasii* var. *douglasii*]. Scattered along the margins of the wilderness at lower elevations. Western N.A.

*Chrysothamnus* [see also *Ericameria*]

***Chrysothamnus viscidiflorus*** (Hooker) Nuttall Not uncommon in piñon/juniper/oak woodlands at lower elevations of study area. Western N.A.

***Cirsium arvense*** (L.) Scopoli CANADIAN THISTLE. [*Breea a.*]. A few collections from lower elevations at margin of wilderness. Non-native.

***Cirsium canescens*** Nuttall PRAIRIE THISTLE. Several collections from lower elevations at margin of wilderness. Great Plains.

***Cirsium eatonii*** (A. Gray) B.L. Robinson var. *eriocephalum* MOUNTAIN THISTLE. [*C. scopulorum*]. Common and dramatic thistle of the subalpine and lower alpine. Western N.A. (northern Rockies).

***Cirsium parryi*** (A. Gray) Petrik Common thistle of the montane and subalpine. Southern Rockies.

***Cirsium undulatum*** (Nutt.) Sprengel A few collections from lower elevations at margin of wilderness. Western N.A.

***Crepis nana*** Richardson ALPINE HAWKSBEARD. [*Askellia n.*]. One specimen at COLO (Gillett 12134) from "above Rainbow Lakes." Western N.A. (oroboreal).

***Dugaldia hoopesii*** (A. Gray) Rydberg SNEEZEWEED. [*Hymenoxys h.*; *Helenium h.*]. Moist sites in the subalpine. Western N.A.

***Ericameria discoidea*** (Nuttall) Nesom [*Macronema d.*]. Several specimens from northeastern aspect of wilderness around 11,000'. Western N.A.

***Ericameria nauseosa*** (Pallas ex Pursh) G.L. Nesom & Baird [*Chrysothamnus n.*]. Margins of the wilderness at lower elevations, several purported varieties present. Western N.A.

***Ericameria parryi*** (A. Gray) G.L. Nesom & Baird [*Chrysothamnus p.*]. Margins of the wilderness at lower elevations, several purported varieties present. Western N.A.

***Erigeron canus*** A. Gray A couple records from lower elevations. Great Plains.

***Erigeron compositus*** Pursh Not uncommon in the subalpine and lower alpine. Western N.A. (oroboreal).

***Erigeron coulteri*** Porter Common fleabane of subalpine forests and meadows, blooming in late summer. Western N.A.

***Erigeron divergens*** Torrey & Gray Seldom collected, lower elevations. Western N.A.

***Erigeron elatior*** (A. Gray) Greene Moist, subalpine forests; scattered. Southern Rockies.

***Erigeron eximius*** Greene Not uncommon in montane zone. Southern Rockies.

***Erigeron flagellaris*** A. Gray Very common in drier sites below 10,000'. Western N.A.

***Erigeron formosissimus*** Greene Scattered in drier sites below treeline. Western N.A. (Rocky Mountains).

***Erigeron grandiflorus*** Hooker Alpine tundra. Western N.A. (Rocky Mountains).

***Erigeron lelomerus*** A. Gray Scattered, typically upon unstable scree and rockslides. Western N.A. (Rocky Mountains).

***Erigeron melanocephalus*** (A. Nelson) A. Nelson Moist sites in alpine and upper subalpine. Southern Rockies.

***Erigeron nivalis*** Nuttall [*E. acris* ssp. *debilis*; *Trimorpha elongata*]. Two records reported by Hartman (63956, 66179) from margin of study area. Western N.A.

***Erigeron peregrinus*** (Banks ex Pursh) Greene ssp *callianthemus* [*Erigeron glacialis* var. *glacialis*]. Common in moist subalpine meadows. Western N.A.

***Erigeron pinnatisectus*** (A. Gray) A. Nelson Common in drier alpine sites. Southern Rockies.

***Erigeron pumilus*** Nuttall Lower elevations of wilderness. Western N.A.

***Erigeron simplex*** Greene Here treated as distinct from *E. grandiflorus* in which it has been subsumed in recent treatments (FNA); more common and in similar habitats. Western N.A.

***Erigeron speciosus*** (Lindley) DC. Only a couple collections from vicinity of study area, perhaps reflecting its close relationship to *E. subtrinervis*. Western N.A.

***Erigeron subtrinervis*** Rydberg Common in drier, forested sites in the montane and subalpine. Western N.A.

***Erigeron vagus*** Payson One specimen (Elliot 10937) from Mt. Lindsey; alpine. Western N.A.

***Erigeron vetensis*** Rydberg Very common on dry sites from lower elevation to subalpine. Southern Rockies.

***Erigeron vreelandii*** Greene One specimen (Hogan 1470) from mixed forest at 9,000' near Crestone. A taxon suspiciously close to the more common *E. subtrinervis*. Southwestern N.A.

***Gaillardia aristata*** Pursh BLANKETFLOWER. Scattered on open sites in lower elevation forests. Western N.A. (interior).

***Gutierrezia sarothrae*** (Pursh) Britton & Rusby SNAKEWEED. Lower elevations on margins of study area. Western N.A.

[***Helianthella parryi*** Gray Not collected, but to be expected in coniferous forests. Southern Rockies.]

***Helianthella quinquenervis*** (Hooker) A. Gray Not uncommon in montane and subalpine. Western N.A.

***Helianthus petiolaris*** Nuttall Common at lower elevations in sandy soils on west side of study area. Western N.A.

**Helianthus pumilus** Nuttall Not uncommon in lower elevation woodlands and forests. Southern Rockies.

**Helianthus rigidus** (Cassini) Desfontaines ssp **subrhomboideus** [*H. pauciflorus* ssp. *subrhomboideus*]. One specimen (Hogan 4720) from mixed forest at 9,000' on east side. Great Plains.

**Heliomeris multiflora** Nuttall Common at lower elevations sites; flowering in late summer. Western N.A.

**Heterotheca pumila** (Greene) Semple Alpine and subalpine meadows and tundra. Southern Rockies.

**Heterotheca villosa** (Pursh) Shinners [*sensu lato*]. A taxon of bewildering variability to which numerous names have been attached (*H. foliosa*; *H. horrida*). Common and widely scattered in the wilderness and surrounds. Western N.A.

**Hieracium albiflorum** Hooker [*Chlorocrepis albiflora*]. One specimen (Elliot 8171) from east side of Hayden Pass in mixed stand of aspen and *Pseudotsuga*. Western N.A. (oroboreal).

**Hieracium triste** Willdenow ex Sprengel [*Chlorocrepis tristis*; *Hieracium gracile*]. Not uncommon in subalpine forests. Western N.A.

**Hymenopappus filifolius** Hooker [Includes vars. *cineratus* and *polycephalus*]. Common at lower elevations in piñon/juniper and montane. Great Plains (southern).

**Hymenopappus flavescens** A. Gray var. *flavescens* One specimen (Elliot 4725) from piñon/juniper woodland at 8,000' near Zapata Falls. Great Plains (southern).

**Hymenoxyx** [see *Dugaldia*; *Rydbergia*; *Tetraneurus*; *Picradenia*]

[**Krigia biflora** (Walter) S. F. Blake An eastern species; rare in Colorado. Two specimens at COLO: "six miles SW of Westcliffe, moist open mesa, 7,900';" and "seven miles W of Westcliffe, low area, 8,300'." Custer Co. To be looked for in wilderness. Eastern N.A.]

**Lactuca canadensis** L. LETTUCE. One specimen (Elliot 4547) from mixed conifers along Rainbow Trail on east side of study area. North America.

**Lactuca tatarica** (L.) Meyer ssp. *pulchella* [*Mulgedium pulchellum*]. A few specimens from the margins of the study area at lower elevations. North America.

**Liatris punctata** Hooker Uncommon in study area; a specimen (Hogan 3780) from piñon/juniper/oak woodland at 9,000' in Hot Springs Canyon. Great Plains.

[**Ligularia** spp. This genus is treated as the infrageneric *Amplexens* group in FNA (2006), and may not be the final taxonomic word on the taxa of *Senecio* with nodding heads. I have chosen to retain *Ligularia* offered provisionally by Weber and Wittmann (2001) because it is such a distinctive and important group in the Rocky Mt. flora.]

**Ligularia amplexens** (A. Gray) W. A. Weber var. *amplectens* [*Senecio amplexens* var. *amplectens*]. Common *Ligularia* of subalpine and lower alpine. Southern Rockies.

**Ligularia bigelovii** (A. Gray) W. A. Weber var. *hallii* [*Senecio bigelovii*]. Common in the subalpine zone. Southern Rockies.

**Ligularia holmii** (Greene) W. A. Weber [*Senecio amplexens* var. *holmii*]. Not uncommon on tundra and scree. Western N.A. (Rocky Mountains).

**Ligularia pudica** (Greene) W. A. Weber [*Senecio pudicus*]. Scattered throughout montane zone. Southern Rockies.

**Ligularia taraxacoides** (A. Gray) W. A. Weber [*Senecio taraxacoides*]. Uncommon on the highest peaks. Southern Rockies.

**Machaeranthera bigelovii** (A. Gray) Greene TANSY ASTER [*Dieteria bigelovii*]. This is a problematic genus with numerous circumscriptions and attendant synonymy – more recent treatments place many of the taxa into *Dieteria* and *Xanthisma* (FNA). Treated here in the broader sense to include *M. pattersonii*, this taxon is scattered throughout the study area, with most collections from lower elevations. Southern Rockies.

**Machaeranthera pinnatifida** (Hooker) Shinners [*Xanthisma spinulosum*]. A species of lower elevation in the wilderness. Great Plains.

**Microseris nutans** (Hooker) Sch. Bip. One specimen (Elliot 4744) from piñon/juniper woodland at 8,000' near Zapata Falls. Western N.A.

**Oligosporus dracunculus** (L.) Poljakov WILD TARRAGON. [*Artemisia dracunculus*]. A sage of lower elevations. Western N.A. (oroboreal).

**Oligosporus groenlandicus** (Hornemann) Löve & Löve [*Artemisia borealis*; *A. campestris* var. *purshii*]. An alpine sage, not as common as *Artemisia scopulorum*. North America (oroboreal).

**Oligosporus pacificus** (Nuttall) Poljakov WESTERN SAGEWORT. [*Artemisia campestris* var. *pacifica*]. A sage of lower elevations. Western N.A.

**Oreochrysum parryi** (A. Gray) Rydberg PARRY'S GOLDENROD. [*Haplopappus p.*; *Solidago p.*]. Common understory plant throughout the forested zone. Southern Rockies.

- Packera crocata** (Rydberg) Weber & Löve [*Senecio c.*]. Scattered in moist sites at higher elevations. Western N.A. (Rocky Mountains).
- Packera dimorphophylla** (Greene) Weber & Löve var. **dimorphophylla** [*Senecio d.*]. Scattered in dry sites at higher elevations. Western N.A. (Rocky Mountains).
- Packera fendleri** (A. Gray) Weber & Löve [*Senecio f.*]. Common in dry sites throughout the montane and subalpine. Southern Rockies.
- Packera neomexicana** (Gray) Weber & Löve var. **mutabilis** [*Senecio n.*]. Scattered throughout montane forests. Southern Rockies.
- Packera oödes** (Rydberg) Weber [*Senecio o.*]. Scattered throughout montane forests. Western N.A. (Rocky Mountains).
- Packera pseudaura** (Rydberg) Weber & Löve var. **flavula** [*Senecio p.*]. Moist sites at lower elevations. Southern Rockies.
- Packera streptanthifolia** (Greene) Weber & Å. Löve [*Senecio s.*]. A few specimens from montane forests. Western N.A.
- Packera tridenticulata** (Rydberg) Weber & Löve [*Senecio t.*]. Common at lower elevations in the wilderness. Great Plains.
- Packera werneriiifolia** (Gray) Weber & Löve [*Senecio w.*]. A variable taxon, widespread, but more common at higher elevations. Western N.A.
- Pericome caudata** A. Gray Two specimens (Hogan 3775, 5099) from rocky sites in forested zones of Saguache Co. Southwestern N.A.
- Picradenia helenioides** Rydberg [*Hymenoxys helenioides*]. A few records of this uncommon species from the margins of the study area (one from Mosca Pass trail). Southwestern N.A.
- Picradenia richardsonii** Hooker ssp. **floribunda** [*Hymenoxys richardsonii*]. Lower elevation woodlands and shrublands. Southwestern N.A.
- Rudbeckia ampla** A. Nelson [*Rudbeckia laciniata* L. var. *ampla*]. Streamsides at lower elevations. Western N.A. (interior).
- Rudbeckia hirta** L. var. **pulcherrima** A couple collections from dry ponderosa pine forests in Custer Co., 9,000'. North America.
- Rydbergia brandegei** (T. C. Porter) Rydberg [*Hymenoxys b.*; *Tetraneuris b.*]. Common in dry, alpine tundra. Southern Rockies.
- Rydbergia grandiflora** (Torrey & Gray) Greene [*Hymenoxys g.*; *Tetraneuris g.*]. Uncommon on tundra; a more northern species than *R. brandegei*. Western N.A. (Rocky Mountains).
- Saussurea weberi** Hultén Two specimens (Hogan 4963, 5048) from east side of Marble Mt. at 12,600', Custer Co. Previously unknown from the Sangres, these collections extend the range of this sensitive alpine species (G2/G3S2) from the Mosquito Range 80 miles north, and is the southernmost record in North America. Other calcareous sites in the Sangre alpine (eg. Bushnell Lakes area) should be surveyed for this taxon. Western N.A. (Rocky Mountains).
- Senecio atratus** Greene Talus and other disturbed sites, subalpine and alpine; common. Southern Rockies.
- Senecio crassulus** A. Gray Subalpine forests and meadows; apparently infrequent in study area. Western N.A.
- Senecio eremophilus** Richardson var. **kingii** Disturbed sites in forested zone, montane and subalpine. Southern Rockies.
- Senecio fremontii** Torrey & Gray ssp. **blitoides** Talus and screes, alpine and upper subalpine; not uncommon. Southern Rockies.
- Senecio integerrimus** Nuttall var. **exaltatus** Meadows and forests in the montane; only a few collections from area. Western N.A.
- Senecio serra** Hook. var. **admirabilis** Two collections (Elliot 4552, 4593) from Rainbow Trail north of Hayden Creek. Southern Rockies.
- Senecio spartioides** Torrey & Gray [*S. spartioides* var. *multicapitus*] Infrequent at lower elevations of study area, late season. Western N.A.
- Senecio triangularis** Hooker Common along subalpine streamsides. Western N.A.
- Senecio wootonii** Greene Collections from forested zone on east side of range. Southwestern N.A.
- Seriphidium vaseyanum** (Rydberg) Weber MOUNTAIN SAGEBRUSH. [*Artemisia tridentata* var. *vaseyanum*]. Collections from margins of study area. Western N.A.
- Solidago missouriensis** Nuttall Scattered at lower elevations. North America.
- Solidago multiradiata** Aiton Open sites from lower elevations to alpine. Western N.A. (oroboreal).
- Solidago nana** Nuttall A species of lower elevations in the study area. Western N.A. (Rocky Mountains).

**GREAT PLAINS.**

- Solidago velutina** DC. Uncommon at lower elevations. Western N.A.  
**Stephanomeria pauciflora** (Torrey) A. Nelson One specimen (Hogan 3607), sandy soils in piñon/juniper at 8,400' south of Crestone, Southwestern N.A.  
**Symphyotrichum foliaceum** (DC.) Nesom [*Aster foliacues*]. Montane and subalpine forests. Western N.A.  
**Symphyotrichum laeve** (L.) A. Löve & D. Löve [*Aster laevis*]. A montane species, one specimen (Elliot 4531) from Rainbow Trail; Fremont Co., North America.  
**Symphyotrichum spathulatum** (Lindley) Nesom [*Aster spathulatus*]. One specimen (Hartman 63936) from oak woodlands on west side of range. Western N.A.  
**Taraxacum ceratophorum** (Ledebour) DC. [*T. ovimum*]. Not uncommon on the high mountains. Western N.A. (oroboreal).  
**Taraxacum officinale** G. H. Weber ex Wiggers COMMON DANDELION [includes *T. erythrospermum*]. Scattered from lower elevations to treeline. Cosmopolitan.  
**Taraxacum scopulorum** (A. Gray) Rydberg [*T. lyratum* of lit.]. Infrequent on the high peaks. Western N.A. (oroboreal).  
**Tetradymia canescens** DC. Piñon/juniper and oak woodlands. Western N.A.  
**Tetraneurus acaulis** (Pursh) Greene var *acaulis* [*Hymenoxys acaulis*]. Common in dry habitats at lower elevations. (This circumscription includes collections of vars. *acaulis* and *arizonica*). Western N.A. (Rocky Mountains).  
**Tetraneurus acaulis** (Pursh) Greene var *caespitosa* [*Tetraneurus brevifolia*]. Common on dry sites in tundra and upper subalpine. Western N.A. (Rocky Mountains).  
**Thelesperma filifolium** (Hooker) Gray Occasionally collected in piñon/juniper and oak woodlands. Great Plains.  
**Tonestus pygmaeus** (Torrey & Gray) A. Nelson Common on rocky, alpine tundra. Southern Rockies.  
**Townsendia excapa** (Richardson) T. C. Porter Historical collections from Great Sand Dunes area. Western N.A. (interior).  
**Tragopogon dubius** Scopoli Common weed of lower elevations. Non-native.  
**Tragopogon pratensis** L. Occasional weed of more mesic sites than *T. dubius*. Non-native.  
**Ximenesia encelioides** Cavanilles [*Verbesina e.*]. Ruderal weed at lower elevations. Cosmopolitan.

**BERBERIDACEAE Barberry Family**

- Mahonia repens** (Lindley) Don OREGON GRAPE. [*Berberis r.*]. Not uncommon understory plant of middle elevation forests. Western N.A.

**BETULACEAE Birch Family**

- Alnus incana** (L.) Moench ssp *tenuifolia* ALDER. Along streambanks at middle elevations. Western N.A.  
**Betula occidentalis** Hooker RIVER BIRCH. [*B. fontinalis*]. Scattered along streams at middle elevations. Western N.A.

**BORAGINACEAE Borage Family  
(see also Hydrophyllaceae)**

- Cryptantha crassisepala** (Torrey & Gray) Greene A couple specimens from margins of study area in piñon/juniper zone on west side of range. Southwestern N.A.  
**Cryptantha feudleri** (A. Gray) Greene Scattered in drier sites at lower elevations on west side of range. Western N.A.  
**Cryptantha thrysiflora** (Greene) Payson Drier sites below 9,000'; scattered. Great Plains.  
**Cynoglossum officinale** L. HOUND'S TONGUE. A few specimens from margins of study area. Non-native.

**Eritrichum aretioides** (Chamisso) De Candolle ALPINE FORGET-ME-NOT [*Eritrichum nanum* var. *elongatum*]. Common cushion plant of dry tundra. Western N.A.

**Hackelia besseyi** (Rydb.) J. L. Gentry Several specimens reported from subalpine forests. Southwestern N.A.

**Hackelia floribunda** (Lehmann) I. M. Johnston Specimens from montane zone. Western N.A.

**Lappula occidentalis** (S. Watson) Greene var. *occidentalis* [*L. redowskii*]. Commonly collected at lower elevations of study area; dry, disturbed sites. Cosmopolitan (native).

**Lithospermum incisum** Lehmann Piñon/juniper and oak woodlands; early season; not uncommon. North America.

**Lithospermum multiflorum** Torrey ex Gray Higher elevation and perhaps more abundant than *L. incisum*. Southwestern N.A.

**Mertensia alpina** (Torrey) G. Don Two specimens, one (Elliot 9625; annotated by Hartman) from 13,600' on California Peak, and the other (Yeatts 2159) from the summit of Mt. Lindsey at 14,000'. Perhaps a broader circumscription than Weber & Wittmann describe. Western N.A. (Rocky Mountains).

**Mertensia ciliata** (James ex Torrey) G. Don Common species of subalpine streams and wetlands. Western N.A.

**Mertensia lanceolata** (Pursh) De Candolle Widespread and common. [A form w/ ovate leaves described by Rydberg in 1901 from Spanish Pks. as *M. ovata*, is not uncommon at higher elevations in the Sangres]. Western N.A. (interior).

**Mertensia oblongifolia** (Nuttall) G. Don A few specimens from the alpine at RM. Western N.A.

[*Mertensia ovata* Rydberg A form with ovate leaves described by Rydberg in 1901 from Spanish Pks. is not uncommon at higher elevations in the Sangres. Filed with *M. lanceolata* at COLO, this may as easily be placed with *M. oblongifolia* or *M. viridis*, three spp. that are very similar and intergrade throughout their range.]

**Mertensia viridis** (A. Nelson) A. Nelson [*M. lanceolata* var. *viridis*] Not uncommon on the high peaks. Western N.A.

**Oreocarya pustulosa** Rydberg [*Cryptantha cinerea* var. *pustulosa*]. Common in sandy soils of piñon/juniper zone between Crestone and Great Sand Dunes. Southwestern N.A.

#### BRASSICACEAE/CRUCIFERAE Mustard Family

**Alyssum alyssoides** (L.) L. Roadsides and trailheads at lower elevations. Non-native.

**Alyssum parviflorum** Fischer ex M. Bieberstein var. *micranthum* One specimen (Elliot 3490) from a stand of spruce and bristlecone at 9,000' in Huerfano County. Non-native.

**Arabis hirsuta** (L.) Scopoli Scattered in mid-elevation forests. North America.

**Berteroa incana** (L.) DC. One specimen (Elliot 5001) from margin of study area in mixed conifer (9,000') in Custer County. Non-native.

[*Boechera* This genus is currently being revised by Windham and Al-Shehbaz. Names and synonymy provided will hopefully be a guide through the shifting nomenclature.]

**Boechera drummondii** (A. Gray) Löve & Löve [*Arabis d.*; *B. stricta* (Graham) Al-Shehbaz]. Common throughout forests of the Sangres. North America (oroboreal).

**Boechera fendleri** (S. Watson) W. A. Weber var. *spatifolia* [*Arabis f.*; *B. spatifolia* Windham & Al-Shehbaz]. Common throughout forests of study area; perhaps more common below 9,500'. Southern Rockies.

**Boechera lignifera** (A. Nelson) W. A. Weber [*Arabis l.*]. A few collections from the piñon/juniper zone near Crestone. Western N.A. (interior).

**Boechera pendulina** (Greene) W. A. Weber One specimen (Elliot 7909) in oak/sage at 8700', Saguache Co. Recently segregated from *B. demissa* with which it has been included. Western N.A.

**Boechera pinetorum** (Tidestrom) Windham & Al-Shehbaz [*Arabis p.*; *A. (Boechera) divaricarpa* var. *pinetorum*]. Known from a few specimens from margins of the study area. Western N.A.

**Camellina microcarpa** DC. Only a couple specimens of this cosmopolitan weed from the study area. Non-native.

**Capsella bursa-pastoris** (L.) Medicus SHEPHERD'S PURSE. Scattered collections from roads and trailheads. Non-native.

**Cardamine cordifolia** A. Gray Common along forest streams. Western N.A.

**Descurainia californica** (A. Gray) O. E. Schulz Uncommon in forests and woodlands at lower elevations. Western N.A.

**Descurainia incana** (Bernh. ex Fisch. & C. A. Mey.) Dorn [*D. richardsonii*]. Scattered from piñon/juniper to mixed conifer forests. Western N.A. (oroboreal).

**Descurainia incisa** (Engelmann ex A. Gray) Britton Scattered across similar habitats as *D. incana*; not always distinguishable from each other. Western N.A.

**Descurainia pinnata** (Walter) Britton A few collections from lower elevations. North America.

**Descurainia ramosissima** Rollins A couple specimens from piñon/juniper zone on west side. Southern Rockies (Colorado).

**Descurainia sophia** (L.) Webb ex Prantl A few specimens from lower elevations. Non-native.

**Draba aurea** Vahl ex Hornemann As Weber & Wittmann (2001) say, "widespread and abundant throughout the mountains." Western N.A. (oroboreal).

**Draba breweri** Watson var. *cana* [*D. lanceolata*]. One specimen at GRSA (Dixon sn) reported from ridge between Little Medano and Medano canyons (specimen not examined). Western N.A. (oroboreal).

**Draba crassifolia** Graham Not uncommon in the alpine. Western N.A. (oroboreal).

**Draba fladnizensis** Wulf var. *pattersonii* Rocks and moist ledges in the high mountains. Southern Rockies.

**Draba grayana** (Rydberg) C. L. Hitchcock Specimens from the highest peaks (5 records of this G2/S2 species from the Sangres). Southern Rockies (Colorado).

**Draba porsildii** G. A. Mulligan var. *porsildii* Two specimens (Elliot 10956, 11059) from the high mountains; a species more common in the arctic and disjunct here. Western N.A. (Rocky Mts.).

**Draba smithii** Gilg ex O. E. Schulz A southern Colorado endemic (G2S2), flowering most commonly in the aspen zone in the early season (14 herbarium records from Sangres). Southern Rockies (Colorado).

**Draba streptobrachia** Price Three records (Hogan 3432, 3446c, 4903), all from South Zapata Lk., "mesic alpine meadow, 12000 ft.". Southern Rockies (Colorado).

**Draba streptocarpa** A. Gray Infrequent in the upper subalpine and alpine. Southern Rockies.

**Erysimum asperum** (Nuttall) DC. Collections from the vicinity of GRSA. North America.

**Erysimum capitatum** (Douglas) Greene WALLFLOWER [Includes: vars. *argillorum*, *capitatum*, *nivale*]. Widespread and common across the Sangres. This taxon is likely to be more narrowly circumscribed in upcoming FNA treatments. North America.

**Halimolobos virgata** (Nuttall) O. E. Schulz One specimen (Hartman 63892) from oak woodlands at ca. 9,000'; North Rock Creek; Saguache Co. Western N.A.

**Lepidium alyssoides** Gray var. *alyssoides* [*L. montanum*]. Scattered at lower elevations in the study area. Southwestern N.A.

**Lepidium densiflorum** Schrader Margins of study area, associated with disturbed sites; a native species with 'weedy' habits. North America.

**Lepidium ramosissimum** A. Nelson A few collections from disturbed sites at lower elevations. Western N.A. (oroboreal).

**Noccaea montana** (L.) F. K. Meyer [*Thlaspi m.*] A widespread species, most commonly collected at higher elevations in the Sangres. Western N.A.

**Physaria floribunda** Rydberg var. *floribunda* Uncommon in the Sangres with collections from piñon/oak savanna, aspen zone, and alpine. Southern Rockies.

**Physaria montana** (Gray) Greene [*Lesquerella m.*] Fairly common in montane forests and woodlands. Great Plains (western).

**Rorippa** spp. Several species of *Rorippa* have been reported from the Sangres, each from a single specimen. A taxon in need of further work in the area.

**Sisymbrium altissimum** L. Ruderal mustard known from a few collections at lower elevations in the study area. Non-native.

**Thelypodium integrifolium** (Nuttall) Endlicher ex Walpers var. *gracilipes* One specimen (Elliot 4706) from Zapata Falls area. Southern Rockies.

**Thlaspi arvense** L. Alien mustard from lower elevations, scattered. Non-native.

#### CACTACEAE Cactus Family

**Echinocereus triglochidiatus** Engelmann [*E. coccineus*] Specimens from lower elevations on west side of wilderness. Southwestern N.A.

**Opuntia polyacantha** Haworth The only prickly-pear reported from the study area; lower elevations. Western N.A.

**Pediocactus simpsonii** (Engelmann) Britton & Rose Specimens from the piñon/juniper zone. Western N.A.

## CALOCHORTACEAE Mariposa Family

**Calochortus gunnisonii** Watson MARIPOSA LILY. Scattered throughout the forested zones, from 9,000 to 11,000'. Western N.A. (interior).

## CAMPANULACEAE Bellflower Family

**Campanula parryi** Gray Scattered along riparian areas in montane. Western N.A. (Rocky Mountains).

**Campanula rotundifolia** L. Very common throughout wilderness. North America.

**Campanula uniflora** L. A diminutive harebell of the tundra; not uncommon. Circumboreal.

## CANNABACEAE Hops Family

**Humulus lupulus** L. A couple specimens from lower margins of study area. North America.

## CAPPARACEAE Caper Family

**Cleome serrulata** Pursh A common plant of the San Luis Valley, appearing along the margins of the study area on the west side. North America.

## CAPRIFOLIACEAE Honeysuckle Family

**Linnaea borealis** L. TWINFLOWER. Signature species of moist spruce forests; scattered in study area. Placed in Linnaeaceae in recent treatments. Circumboreal.

**Lonicera involucrata** (Richardson) Banks ex Sprengel [*Distegia i.j.*] Scattered in mixed forests, montane and subalpine, often in mesic sites. Western N.A. (oroboreal).

**Sambucus racemosa** L. var. **microbotrys** [*S. microbotrys*]. Common understory shrub from lower elevation to treeline. Placed in Adoxaceae in recent treatments. Western N.A.

**Symphoricarpos rotundifolius** Gray [Including *S. oreophilus*]. Common in montane forests. Southwestern N.A.  
**Valerian** spp. [see Valerianaceae].

## CARYOPHYLLACEAE Pink Family (Including Alsinaceae)

**Arenaria lanuginosa** (Michx.) Rohrb. var. **saxosa** [*Spergulastrum lanuginosum* ssp *saxosum*]. Montane and subalpine forests; most collections from vicinity of Music Pass. Southwestern N.A.

**Cerastium arvense** L. ssp. **strictum** [*C. strictum*]. Common throughout study area. North America.

**Cerastium beeringianum** Chamisso & Schlechtendal ssp **earlei** On the highest peaks. Western N.A.

**Eremogone fendleri** (Gray) Ikonnikov [*Arenaria f.*]. Very common throughout the wilderness. Southwestern N.A.  
**Minuartia obtusiloba** (Rydberg) House [*Arenaria o.*; *Lidia o.*]. A common species of dry alpine tundra. Western N.A.

**Minuartia rubella** (Wahlenberg) Hiern [*Tryphane r.*]. Unstable sites in the alpine. Circumboreal.

**Minuartia stricta** (Swartz) Hiern [*Alsinanthe s.*]. One specimen (Elliot 11048a) "ca 0.5 mi W of Iron Nipple"; alpine, 12000'. Circumboreal.

**Paronychia pulvinata** Gray Dry fellfields on high peaks; seldom collected. Southern Rockies.

**Silene acaulis** L. ssp. **subcaulescens** MOSS CAMPION Common cushion plant of tundra. Circumboreal.

**Silene drummondii** Hook. var. **striata** [*Gastrolychnis d.*]. Scattered on drier sites throughout area. Western N.A.  
**Silene hitchquierei** Bocquillon [*Gastrolychnis apetala* ssp. *uralensis*]. One specimen (Elliot 5562) from east slope of Humboldt Peak. Circumboreal.

**Silene scouleri** Hook. ssp. **halii** A couple specimens from forested zone on east side of study area. Western N.A.  
**Silene vulgaris** (Moench) Garcke One specimen from Fremont County (Hartman 63746) in oak woodland. Non-native.

**Stellaria irrigua** Bunge A few collections from above 13,000'. Southern Rockies (Siberia)

**Stellaria longifolia** Mühlenberg A few records from lower elevations. North America.

**Stellaria longipes** Goldie Common chickweed from montane to alpine. Western N.A. (oroboreal).

**Stellaria umbellata** Turczaninov Widely scattered from montane into alpine; not uncommon. Western N.A.

### **CELASTRACEAE Stafftree Family**

**Paxistima myrsinites** (Pursh) Rafinesque MOUNTAINLOVER A couple collections from mixed conifer forests from ca. 9,000'. Western N.A.

### **CHENOPodiACEAE Goosefoot Family**

**Atriplex canescens** (Pursh) Nuttall var. **canescens** FOUR-WING SALTBUsh. A few records from piñon/juniper zone on west side of study area. Western N.A.

**Chenopodium atrovirens** Rydberg A few records from subalpine zone. Western N.A.

**Chenopodium capitatum** (L.) Ambrosi var. **parvicapitatum** Two collections (Elliot 9709, 9766) from Willow Creek drainage on west side of study area; Saguache Co., Western N.A.

**Chenopodium foliosum** (Moench) Ascherson Disturbed areas in the montane zone. Non-native.

**Chenopodium fremontii** S. Watson Scattered in mixed conifer forests. Western N.A.

**Chenopodium leptophyllum** (Moquin) Nuttall ex Watson Records from vicinity of Great Sand Dunes. Western N.A.

**Chenopodium pratericola** Rydberg Scattered across elevation gradient. North America.

**Krascheninnikovia lanata** (Pursh) Meeuse & Smit [*Ceratoides l.*; *Eurotia l.*]. A few records from lower elevations. Western N.A.

**Monolepis nuttalliana** (Schultes) Greene Scattered in moist sites at lower elevations. Western N.A.

### **CONVALLARIACEAE Mayflower family**

**Maianthemum amplexicaule** (Nuttall) W. A. Weber [*M. racemosa* ssp. *a.*; *Smilacina a.*]. Common throughout the montane and lower subalpine forests zone. Western N.A.

**Maianthemum stellatum** (L.) Link [*Smilacina s.*]. Common in the montane zone. North America.

### **CONVULVULACEAE Morning-glory Family**

**Convolvulus arvensis** L. A couple records from margin of study area on east side. Non-native.

### **CORNACEAE Dogwood Family**

**Cornus sericea** L. var. **sericea** [*C. stolonifera*; *Swida s.*]. Common along montane streambanks. North America.

### **CRASSULACEAE Stonecrop Family**

**Amerosedum lanceolatum** (Torrey) Löve & Löve [*Sedum l.*]. Common throughout the mountains. Western N.A.

**Clementsia rhodantha** (A. Gray) Rose [*Rhodiola r.*; *Sedum r.*] Scattered in wet sites in the subalpine and lower alpine. Western N.A. (Rocky Mountains).

**Rhodiola integrifolia** Rafinesque [*Sedum i.*; *Tolmachevia i.*]. Not uncommon in moist sites in the subalpine and alpine. Western N.A.

### **CYPERACEAE Sedge Family**

**Carex albonigra** Mackenzie BLACK AND WHITE SEDGE. Not uncommon in the tundra. Western N.A.

**Carex aquatilis** Wahlenberg WATER SEDGE. Common in subalpine wet sites. Circumboreal.

**Carex arapahoensis** Clokey ARAPAHO SEDGE. A few records from dry tundra in vicinity of Great Sand Dunes. Southern Rockies.

**Carex aurea** Nuttall GOLDEN SEDGE. One specimen reported from "below San Isabel Lake" in GRSA herbarium. North America.

**Carex bella** L.H. Bailey SHOWY SEDGE. Common in moist sites in the subalpine. Western N.A.

- Carex canescens** L. One specimen reported from "below San Isabel Lake" in GRSA herbarium and another (Hogan 5081) from mesic site in upper Sand Creek drainage. Cosmopolitan.
- Carex chalciolepis** T. Holm [*C. heteroneura* var. *chalciolepis*]. Common in alpine and subalpine. Western N.A. (Rocky Mountains).
- Carex disperma** Dewey Seldom collected, moist sites below treeline. Circumboreal.
- Carex douglasii** Boott Two specimen (Hall 987 at RM; Hogan 4829 at COLO) from northern end of study area in oak zone. Western N.A.
- Carex ebenea** Rydberg EBONY SEDGE. Common in subalpine and lower alpine. Southern Rockies.
- Carex egglestonii** Mackenzie One specimen from Bushnell Lake (Elliot 4689); Fremont Co.. Western N.A. (Rocky Mountains - COLO, NV, UT, WY).
- Carex elynoides** Holm Common in dry sites, subalpine and alpine. Western N.A. (Rocky Mountains).
- Carex geophila** Mackenzie Scattered understory sedge of dry, montane forests. Southwestern N.A.
- Carex geyeri** F. Boott ELK SEDGE. Apparently not common (under-collected?) in area; a forest understory sedge. Western N.A.
- Carex hassei** L.H. Bailey One specimen (Hogan 5030), moist site in lower Cotton Creek drainage at 8600'; Saguache Co. Western N.A.
- Carex haydeniana** Olney A few collections from subalpine meadows and dry tundra. Western N.A.
- Carex heteroneura** W. Boott Collections from the higher mountains at RM herbarium. Neither FNA nor Weber & Wittmann (2001) recognize this taxon in Colorado; other names that may apply include *C. atrata*, *C. epapillosa*, *C. heteroneura* var. *brevisquama*. Western N.A.
- Carex inops** L. H. Bailey ssp. *heliophila* SUN SEDGE. [*C. pensylvanica* ssp. *heliophila*]. Early season sedge of lower elevations. North America (interior).
- Carex interior** Bailey A couple records from lower elevations. North America.
- Carex lanuginosa** Michaux [*C. lasiocarpa* ssp. *americana* and *C. pellita* are applied to this taxon in FNA] Specimens from margins of study area. North America.
- Carex microptera** Mackenzie Not uncommon in moist to dry sites in the montane and subalpine. Western N.A.
- Carex nebrascensis** Dewey A few collections from wet sites at lower elevations in study area. Western N.A.
- Carex nelsonii** Mackenzie One specimen at COLO from Hermit Lake area (Gillett 12155); wet tundra. Western N.A. (Rocky Mountains).
- Carex nigricans** C. A. Meyer A few collections from wet sites near 12,000' in study area. Western N.A..
- Carex norvegica** Retzius ssp *stevensis* [*C. stevensii*]. Moist sites in subalpine forests. Western N.A. (Rocky Mountains).
- Carex nova** L. H. Bailey Common in wet sites, subalpine and alpine. Western N.A. (Rocky Mountains).
- Carex obtusata** Liljeblad One specimen from dry alpine ridge N of California Peak (Hogan 3482); Alamosa Co. North America (oroboreal).
- Carex occidentalis** L. H. Bailey WESTERN SEDGE. Common in drier sites in montane and subalpine. Western N.A.
- Carex pachystachya** Chamisso ex Steudel A couple collections from subalpine forests. Western N.A.
- [*C. pensylvanica* ssp. *heliophila*] See *C. inops* ssp. *pensylvanica*.
- Carex perglabosa** Mackenzie One specimen (Hogan 5002) from barren site near summit of Rito Alto Pk at 13,750'; Custer/Saguache Co. Southern Rockies (Colorado and the La Sal Mts. Of Utah).
- Carex phaeocephala** Piper A couple collections from the alpine. Western N.A.
- Carex pityophila** Mackenzie One collection from "meadows and forests" at 9,500' (Hartman 64910). [*C. pityophila*, *C. geophila*, and *C. rossii*, can be problematic to differentiate.] Southern Rockies.
- Carex praegracilis** Boott Not uncommon in montane forests. North America.
- Carex pyrenaica** Wahlenberg [*C. crandallii*; *C. micropoda*]. One specimen from alpine E of Blanca Peak. (Elliot 11094); Costilla Co. Western N.A.
- Carex rossii** Boott One record at GRSA herbarium (Decker & Doyle) from Medano Lk. Trail. Western N.A.
- Carex rupestris** Allioni ssp *drummondiana* (Dewey) Holub Two specimens (Hogan 3467; 4927) from dry alpine sites N of California Peak and N of Music Pass. Western N.A. (Rocky Mts.)
- Carex saxatilis** L. ssp *laxa* (Trautvetter) Kalela One specimen (Hogan 5082) from subalpine wetland in upper Sand Creek at 11,250'; Saguache Co. Circumboreal.
- Carex scopulorum** Holm MOUNTAIN SEDGE. Common in wet sites in the subalpine and alpine. Western N.A.
- Carex siccata** Dewey [*C. foenea* of lit.]. Common in drier sites from montane to subalpine. North America (oroboreal).
- Carex utriculata** F. Boott Not uncommon in wetlands at lower elevations. North America.

*Carex vallicola* Dewey Two specimens from lower elevations on E side of wilderness. Western N.A.  
*Carex vernacula* L. H. Bailey Two specimens (Yeatts 3612; Hogan 4995) from moist subalpine sites at N end of study area; Saguache Co., Western N.A.  
*Eriophorum angustifolium* Honckeney COTTONGRASS. [*E. polystachion*]. Uncommon, subalpine sedge of meadows and pond margins. Circumboreal.  
*Kobresia myosuroides* (Villars) Fiori & Paoli Common on dry tundra. Circumboreal.

#### CYPRIPEDIACEAE Lady's Slipper Family

*Cypripedium calceolus* L. ssp *parviflorum* [*C. parviflorum* var. *pubescens*]. Not known from the study area, but one specimen (Baltzell 178) at COLO from "7 miles west of Westcliffe". The Brush Creek Fen in the same vicinity is a Colorado State Natural Area that harbors a healthy population. A sensitive species in Colorado (G4S2). North America.

#### ELAEAGNACEAE Oleaster Family

*Shepherdia canadensis* (L.) Nuttall A not uncommon shrub of dry forests below 10,000' in the wilderness. North America (oroboreal).

#### ERICACEAE Heath Family (Including Monotropaceae, Pyrolaceae)

*Arctostaphylos uva-ursi* (L.) Sprengel KINNIKINNIK; BEARBERRY. Scattered in drier forests below 10,000' in study area. Circumboreal.  
*Chimaphila umbellata* (L.) W. Barton ssp *occidentalis* Uncommon in montane mixed forests; only known from east side of wilderness. Western N.A. (circumboreal).  
*Moneses uniflora* (L.) Gray Not uncommon in moist *Picea* forests in the subalpine. Circumboreal.  
*Orthilia secunda* (L.) House [*Pyrola*; *Ramischia*]. Not uncommon in mixed forests in the montane and subalpine. Circumboreal.  
*Pterospora andromedea* Nuttall PINEDROPS. Scattered in dry montane coniferous forests. North America.  
*Pyrola chlorantha* Swartz Not uncommon in mixed forests in the montane and subalpine. Circumboreal.  
*Pyrola minor* L. Moist sites in subalpine forests; uncommon. Circumboreal.  
*Pyrola picta* Smith Several collections from dry montane forests on east side of study area (Fremont Co.). Western N.A.  
*Pyrola rotundifolia* L. ssp *asarifolia* [*P. asarifolia*]. Moist sites in the montane and lower subalpine; not common. North America (oroboreal).  
*Vaccinium myrtillus* L. ssp *oreophilum* BLUEBERRY. The common *Vaccinium* of the study area. Western N.A.  
*Vaccinium scoparium* Leiberg ex Coville Collections from higher elevations than *V. myrtillus*; not common. Western N.A.

#### EUPHORBIACEAE Spurge Family

*Chamaesyce serpyllifolia* (Persoon) Small A couple collections from montane zone. North America.  
*Euphorbia brachycera* Engelmann [*Tithymalus b.*]. Common native spurge in the piñon/juniper zone. Western N.A. (interior).  
*Euphorbia esula* L. var. *uralensis* [*Tithymalus u.*]. A noxious weed collected (Elliot 9269) along Rainbow Trail, N. of Alvarado Campground. A couple reports from Sand Dunes. Non-native.

#### FABACEAE Pea Family

*Astragalus agrestis* Douglas ex G. Don Fairly common at lower elevations in study area. Circumboreal.  
*Astragalus alpinus* L. Broadly distributed from montane to lower alpine, but more common at higher elevations. Circumboreal.  
*Astragalus ceramicus* Sheldon var. *fillifolius* A few records from sandy sites at Great Sand Dunes and near Crestone. Great Plains.

**Astragalus crassicarpus** Nutt. var. *paysonii* A few specimens from woodlands and sage shrublands below 9,000'. Great Plains.

**Astragalus drummondii** Douglas ex Hooker Common dryland species of lower elevations. Western N.A.

**Astragalus flexuosus** (Hooker) Douglas ex G. Don var. **flexuosus** Woodlands and shrublands below 9,000'; not uncommon. Western N.A. (interior).

**Astragalus gracilis** Nuttall One specimen (Hall 1137) from Horn Creek Trailhead, ponderosa forest at 9,000'; Custer Co. (May be difficult to distinguish from *A. flexuosus*.) Great Plains.

**Astragalus hallii** Gray Dry forests; uncommon. Southern Rockies.

**Astragalus laxmannii** Jacquin var. *robustior* [*A. adsurgens* var. *robustior*]. Not uncommon throughout montane zone. Circumboreal.

**Astragalus miser** Douglas var. *oblongifolius* Mountain meadows and forest openings. Western N.A. (interior).

**Astragalus parryi** Gray Mixed forests and woodlands, montane. Southern Rockies.

**Astragalus scopulorum** Porter Not uncommon from lower woodlands up into mixed forests. Southwestern N.A.

**Astragalus shortianus** Nuttall Records (Hall 318 & 324) from one site at margin of study area; aspen and white fir at ca. 9,500', end of County Rd. 585; Huerfano Co. Southern Rockies.

**Astragalus tenellus** Pursh A few scattered records from forested sites. Western N.A.

**Glycyrrhiza lepidota** Pursh Two records from vicinity of Hayden Creek Campground; Fremont Co. Western N.A.

**Hedysarum occidentale** Greene One specimen (Hogan 5036) from upper Cotton Creek Trail in aspen stand at 10,400'; Saguache Co. Western N.A. (Rocky Mts.).

**Lupinus argenteus** Pursh Common lupine of the Sangres, from lower montane through subalpine. Western N.A.

**Lupinus caudatus** Kellogg [*L. argenteus* var. *heteranthus*]. One specimen (Hogan 3641) from sage flats at 10,000'; Saguache Co. Western N.A.

**Lupinus kingii** S. Watson Scattered collections from sandy soils of piñon/juniper zone between Crestone and Great Sand Dunes. Southwestern N.A.

**Lupinus parviflorus** Nuttall [*L. argenteus* var. *parviflorus*] A couple collections from montane zone, Saguache Co. Western N.A. (interior).

**Lupinus pusillus** Pursh Not uncommon from sandy soils of piñon/juniper zone, San Luis Valley. Western N.A.

**Medicago lupulina** L. Scattered at lower elevation trailheads and roadsides. Non-native.

**Melilotus officinalis** (L.) Pallas Scattered at lower elevation trailheads and roadsides. Non-native.

**Oxytropis borealis** DC. var. *viscida* [*O. viscida*] One specimen (Elliot 4204), east face of Eagle Peak, alpine slopes and timberline; Custer Co. Western N.A. (oroboreal).

**Oxytropis lambertii** Pursh PURPLE LOCOWEED. Common at lower elevations of study area. Great Plains.

**Oxytropis monticola** A. Gray [*O. campestris* of Colo. lit.]. One specimen (Hogan 3507), alpine ridge N of California Pk., 12,000'; Alamosa Co. Western N.A. (northern).

**Oxytropis parryi** A. Gray One specimen (Hogan 3466), dry alpine ridge N of California Pk., 12,000'; Alamosa Co. Western N.A.

**Oxytropis podocarpa** A. Gray Two specimens (Hogan 4961, 5045) from east side of Marble Mt. at 12,600'; Custer Co. Western N.A. (Rocky Mts./oroboreal).

**Oxytropis sericea** Nuttall WHITE LOCOWEED. Common in the montane zone of study area. Western N.A. (interior).

**Oxytropis splendens** Douglas ex Hooker One specimen (Hogan 3471), dry alpine ridge N of California Pk., 12,000'; Alamosa Co. Western N.A. (Rocky Mts./oroboreal).

**Psoralidium lanceolatum** (Pursh) Rydberg Collections from sandy soils of piñon/juniper zone between Crestone and Great Sand Dunes. Western N.A.

**Thermopsis montana** Nuttall var. *divaricarpa* [*T. divaricarpa*]. Common golden banner of lower elevations. Western N.A. (Rocky Mts.)

**Thermopsis montana** Nutt. var. *montana* More common in the montane zone. Western N.A.

**Thermopsis rhombifolia** (Nuttall ex Pursh) A few collections from piñon/juniper zone, Saguache Co. Great Plains.

**Trifolium attenuatum** Greene Not uncommon in upper subalpine and alpine. Southern Rockies.

**Trifolium dasycarpum** Torrey & Gray More common than *T. attenuatum* at higher elevations. Western N.A. (Rocky Mts.).

**Trifolium hybridum** L. A couple collections from moist sites at lower elevations. Non-native.

**Trifolium nanum** Torrey Dwarf clover of the high peaks; not uncommon. Western N.A. (Rocky Mts.).

**Trifolium parryi** A. Gray Moist alpine and upper subalpine. Western N.A. (Rocky Mts.).

**Trifolium pratense** L. RED CLOVER. Common along roads and trails. Non-native.

**Trifolium repens** L. WHITE DUTCH CLOVER. Common along roads and trails. Non-native.  
**Vicia americana** Muhlenberg ex Willdenow Scattered collections along lower margins of study area. North America.

#### FAGACEAE Oak Family

**Quercus gambelii** Nuttall SCRUB OAK. Signature species of lower elevation woodlands. Southwestern N.A.

#### FUMARIACEAE Fumitory Family

**Corydalis aurea** Willdenow Scattered in mixed forests in the montane. North America.  
**Corydalis curvisiliqua** Engelmann subsp. *occidentalis* [*C. aurea* var. *occidentalis*]. Less common and at lower elevations than *C. aurea*. North America (interior).

#### GENTIANACEAE Gentian Family

**Chondrophylla prostrata** (Haenke ex Jacquin) J.P. Anderson SIBERIAN GENTIAN. [*Gentiana p.*]. Moist tundra on the high peaks; seldom collected. Circumboreal.  
**Frasera speciosa** Douglas ex Grisebach GREEN GENTIAN. Meadows and openings from montane to lower alpine; common. Western N.A.  
**Gentianella acuta** (Michaux) Hiiutonen LITTLE GENTIAN [*Gentianella amarella* var. *acuta*]. Not uncommon in moist sites; subalpine to lower alpine. Circumboreal.  
**Gentianodes algida** (Pallas) Löve & Löve ARCTIC GENTIAN. [*Gentiana a.*]. Alpine; a late season harbinger of autumn. Western N.A. (Rocky Mts/Asia).  
**Gentianopsis barbellata** (Engelmann) Iltis FRINGED GENTIAN. [*Gentiana b.*] Subalpine and lower alpine; uncommon. Southern Rockies.  
**Pneumonanthe affinis** (Grisebach) Greene BOTTLE GENTIAN. [*Gentiana a.*]. One report from Buck Creek at Great Sand Dunes. Western N.A.  
**Pneumonanthe parryi** (Engelmann) Greene BOTTLE GENTIAN. [*Gentiana p.*; *G. calycosa* of lit.]. Subalpine and lower alpine; scattered. Southern Rockies.  
**Swertia perennis** L. STAR GENTIAN. Wet sites in the subalpine and lower alpine; common. Circumboreal.

#### GERANIACEAE Geranium Family

**Erodium cicutarium** (L.) L'Hér. ex Aiton Lower elevation margins of study area. Non-native.  
**Geranium atropurpureum** A. Heller var. *cowenii* [*G. caespitosum* ssp. *atropurpureum*]. One specimen (Hall 1228), "end of Music Pass road, ponderosa and aspen"; Custer Co. Southern Rockies.  
**Geranium caespitosum** James ex Torrey Drier sites in the montane; common. Southwestern N.A.  
**Geranium richardsonii** Fischer & Trautvetter Moist sites at higher elevations than *G. caespitosum*; common. Western N.A.  
**Geranium viscosissimum** Fischer & Meyer One specimen (Elliot 8189), near Hayden Creek Campground, 8,100'; Fremont Co. Western N.A.

#### GROSSULARIACEAE Currant/Gooseberry Family

**Ribes aureum** Pursh GOLDEN CURRANT. A few records from lower margins of study area. North America.  
**Ribes cereum** Douglas WAX CURRANT. Common from piñon/juniper woodland through montane. Western N.A.  
**Ribes coloradense** Coville [*R. laxiflorum*]. A few specimens from moist subalpine sites on west side of range. Southern Rockies.  
**Ribes inerme** Rydberg Moist sites, montane; scattered. Western N.A.  
**Ribes leptanthum** Gray Dry sites at lower elevations; not uncommon. Southwestern N.A.  
**Ribes montigenum** McClatchie Subalpine forests and lower alpine; common. Western N.A.  
**Ribes wolfii** Rothrock One specimen (Hartman 66181) reported from Methodist Mt. at 11,000' "along road," Chaffee Co. Western N.A.

#### HELLEBORACEAE (See Ranunculaceae)

#### HYDRANGEACEAE Hydrangea Family

*Jamesia americana* Torrey & Gray WAXFLOWER Common on drier sites in montane forested zone.  
Southwestern N.A.

#### HYDROPHYLACEAE Waterleaf Family

*Hydrophyllum fendleri* (Gray) A. Heller Not uncommon in middle elevation forests. Western N.A.  
*Phacelia alba* Rydberg A few specimens from lower elevations in Saguache Co., Southern Rockies.  
*Phacelia denticulata* Osterhout Two specimens at RM herbarium from lower elevation of study area. Southern Rockies.  
*Phacelia hastata* Douglas ex Lehmann One specimen (Hogan 4758) from treeline at Venable Lakes, 11,500'; Custer Co. Western N.A.  
*Phacelia heterophylla* Pursh Scattered in subalpine forests. Western N.A.  
*Phacelia sericea* (Graham ex Hook.) Gray Common in rocky sites in the subalpine and alpine. Western N.A.

#### HYPOXIDACEAE Yellow Stargrass Family

*Hypoxis hirsuta* (L.) Coville Not known from the study area, but one specimen (Rocchio 04FJR01) at COLO from the Brush Creek Fen, a Colorado State Natural Area, proximate to the area; Custer Co. A rare species in Colorado (GSS1). Eastern N.A.

#### IRIDACEAE Iris Family

*Iris missouriensis* Nuttall Common in wet meadows in San Luis and Wet Mt. valleys in early summer; one specimen (Hogan 3576) from Lily Lake Trail at 10,750' in wilderness. Western N.A.

#### JUNCACEAE Rush Family

*Juncus arcticus* Willdenow [*J. ater*; *J. balticus*] Moist areas at lower elevations, scattered. North America (cosmopolitan).  
*Juncus bufonius* L. One report from Sand Creek trail "near stock pond" at 8,100'. Cosmopolitan.  
*Juncus castaneus* J. E. Smith One specimen (Weber 15206) "in mossy runoff of spring in subalpine forest," Hermit Lake Trail, 11,500', Custer Co. Circumboreal.  
*Juncus drummondii* E. Meyer Not uncommon upper subalpine and alpine. Western N.A.  
*Juncus longistylis* Torrey Reports from vicinity of Great Sand Dunes at lower elevations. Western N.A. (oroboreal).  
*Juncus mertensianus* Bongard Common rush of wet sites in the subalpine. Western N.A.  
*Juncus parryi* Engelmann A couple collections from the alpine. Western N.A.  
*Juncus saximontanus* Nelson [*J. ensifolius* var. *montanus*] One record (Elliot 4579) from mixed conifer along the Rainbow Trail; Fremont Co.; probably not so uncommon. Western N.A.  
*Luzula comosa* Meyer A couple collections from the montane. Western N.A.  
*Luzula parviflora* (Ehrhart) Desvaux Common woodrush of subalpine. Circumboreal.  
*Luzula spicata* (L.) De Candolle Common in upper subalpine and alpine. Circumboreal.

#### JUNCAGINACEAE Arrowgrass Family

*Triglochin maritima* L. One specimen (Hogan 5083) from upper Sand Creek, 11,250'; Saguache Co. Cosmopolitan.

## LAMIACEAE Mint Family

- Dracocephalum parviflorum** Nuttall Scattered in montane zone. North America.  
**Mentha arvensis** L. Several specimens from Great Sand Dunes area. Cosmopolitan.  
**Monarda fistulosa** L. var. **menthofolia** Two specimens (Elliot 4072, 4530) from mixed conifer forest below 9,000' on east side of range. Western N.A.  
**Monarda pectinata** Nuttall Not uncommon in the piñon/juniper zone. Southwestern N.A.  
**Prunella vulgaris** L. One specimen (Yeatts 2171) reported from Lily Lake Trail as "abundant on trail, but only place seen;" Huerfano Co. Scattered reports from margins of study area. Cosmopolitan.  
**Scutellaria brittonii** Porter SKULLCAP Several specimens from lower elevation at northeast end of study area in mixed forests; an early season plant, perhaps overlooked by collectors. Southern Rockies.  
**Scutellaria galericulata** L. One report from Medano Creek at Great Sand Dunes. Cosmopolitan.  
**Stachys palustris** L. ssp **pilosa** [*S. pilosa*] A few records from wet sites at lower margins of study area. North America.

## LILIACEAE Lily Family

(see also Agavaceae, Alliaceae, Convallariaceae, Calochortaceae, Melanthiaceae, Uvulariaceae)

- Lilium philadelphicum** L. WOOD LILY. An historical record (Baltzell 182) from "7 miles west of Westcliffe" in a "low area" at 8,300'. To be looked for in aspen stands on east side of range; a species vulnerable to indiscriminate collecting. One record (Hogan 5037) from moist seep in Cotton Creek at 10,000'; Saguache Co. – an unexpected occurrence. North America.  
**Lloydia serotina** (L.) Reichenbach ALPINE LILY A not uncommon species of the alpine tundra. Circumboreal.

## LINACEAE Flax Family

- Linum lewisii** Pursh [*Adenolimum l.*]. Scattered early season collections at lower elevations. Western N.A.

## LOASACEAE Loasa Family

- Menzelia albicaulis** (Dougl. ex Hook.) Douglas [*Acrolasia a.*]. One report from South Arrastre Canyon in Great Sand Dunes; Alamosa Co. Western N.A.  
**Menzelia multiflora** (Nuttall) Gray [*Nuttallia m.*]. Sandy sites on west side of range in piñon/juniper zone. Southwestern N.A.  
**Menzelia speciosa** Osterhout [*Nuttallia o.*]. One specimen (Elliot 4733) from vicinity of Zapata Falls in piñon/juniper zone; Alamosa Co. Southern Rockies.

## MALVACEAE Mallow Family

- Iliamna rivularis** (Douglas) Greene One specimen (Elliot 9080) from north face of Methodist Mt., 9,300'; Chaffee Co. Western N.A.  
**Sidalcea candida** Gray Moist sites in the montane zone; scattered. Western N.A. (Rocky Mountains).  
**Sidalcea neomexicana** Gray A couple records from moist sites below 9,000' on west side of range. Western N.A.  
**Sphaeralcea coccinea** (Nuttall) Rydberg COPPER MALLOW. Not uncommon in piñon/juniper zone. Western N.A.

## MELANTHIACEAE False Hellebore Family

- Anticlea elegans** (Pursh) Rydberg [*Zigadenus e.*]. Moist sites in the subalpine and lower alpine; common. Western N.A. (oroboreal).  
**Veratrum tenuipetalum** Heller CORN HUSK LILY. [*V. californicum*]. Moist sites in the subalpine and lower alpine; scattered. Southern Rockies.

## NYCTAGINACEAE Four-O'Clock Family

- Abronia fragrans** Nuttall ex Hooker One specimen (Hogan 4625) from sandy site in piñon/juniper; Huerfano Co. Great Plains.
- Mirabilis linearis** (Pursh) Heimerl [*Oxybaphus l.*] Not uncommon at lower elevations in piñon/juniper and oak woodlands. North America (central).
- Mirabilis multiflora** (Torrey) A. Gray A few collections from piñon/juniper zone in vicinity of Great Sand Dunes and Zapata Falls. Southwestern N.A.
- Mirabilis oxybaphoides** (Gray) Gray A few collections from SW end of study area in piñon/juniper; Alamosa Co. Southwestern N.A.
- Tripterocalyx micranthus** (Torrey) Hooker Sandy sites in piñon/juniper zone between Crestone and Great Sand Dunes. Western N.A.

## ONAGRACEAE Evening-Primrose Family

- Chamerion angustifolium** (L.) Holub var. *canescens* FIREWEED. [*C. danielsii*; *Epilobium a.*] Mixed forests in the upper montane and subalpine; not uncommon. Circumboreal.
- Circaea alpina** L. One specimen (Elliot 9337) from alpine "near Commanche Lk." at 12,000'; Custer Co. — an unusually high altitude for the species. Circumboreal.
- Epilobium anagallidifolium** Lamarck Two specimens, one (Hartman 63959) from Hayden Pass Creek, 9,250', and one (Hogan 4987) from moist alpine site in Río Alto drainage, 11,900'; Saguache Co. Circumboreal.
- Epilobium brachycarpum** C. Presl A few collections from montane zone. Western N.A. (oroboreal).
- Epilobium ciliatum** Rafinesque A few collections from the montane. North America.
- Epilobium clavatum** Trelease One specimen (Elliot 3690) "along the road to Hermit Lake", spruce/fir at 11,400'; Custer Co. Western N.A.
- Epilobium hornemannii** Reichenbach A few records from the subalpine. Circumboreal.
- Epilobium lactiflorum** Haussknecht One specimen (Hogan 5059) from seep in *Picea* forest near Music Pass, 10,700', Custer Co.; with another report from similar site in Great Sand Dunes Preserve, Saguache Co. Circumboreal.
- Epilobium saximontanum** Haussknecht Moist sites throughout the mountains; scattered. Western N.A.
- Gaura coccinea** Nuttall ex Pursh [*Oenothera suffrutescens*]. A species of dry sites at lower elevations; scattered. Western N.A.
- Gayophytum diffusum** Torrey & Gray Drier sites in the piñon/juniper and montane. Western N.A.
- Gayophytum ramosissimum** Torrey & Gray Drier sites in the piñon/juniper and montane. Western N.A.
- Oenothera albicaulis** Pursh Not uncommon in sandy soils of the piñon/juniper between Crestone and Great Sand Dunes. Great Plains.
- Oenothera caespitosa** Nuttall ssp *macroglossa* Not uncommon in the piñon/juniper and montane. Southern Rockies.
- Oenothera coronopifolia** Torrey & Gray Common in the piñon/juniper and montane. Western N.A. (interior).
- Oenothera elata** H.B.K. ssp *hirsutissima* [*O. hookeri*]. Scattered records from moist sites in the montane. Western N.A.
- Oenothera pallida** Lindley ssp *runcinata* Sandy soils of the piñon/juniper between Crestone and Great Sand Dunes. Southwestern N.A.

## ORCHIDACEAE Orchid Family

- Calypso bulbosa** (L.) Oakes An early season orchid of shaded forest sites, probably more common than few collections indicate. Circumboreal.
- Coeloglossum viride** (L.) Hartman Two specimen (Elliot 5038a; Hogan 5024) from mesic forests in the lower subalpine; Custer Co. Circumboreal.
- Corallorrhiza maculata** Rafinesque Drier montane forest understory; common. North America.
- Corallorrhiza striata** Lindley Understory of Douglas fir/aspen; uncommon (overlooked?). Western N.A. (oroboreal).
- Corallorrhiza trifida** (L.) Chatelain Montane sites; uncommon (overlooked?). Circumboreal.
- Corallorrhiza wisteriana** Conrad Dry montane forests; most commonly collected on east side of range. North America (eastern).

**Goodyera oblongifolia** Rafinesque Not uncommon in montane and lower subalpine forest understory on east side of Sangres. Western N.A. (oroboreal).

**Listera cordata** (L.) R. Brown Moist, subalpine *Picea* forests; scattered. Circumboreal.

**Platanthera aquilonis** Sheviak [*Habenaria hyperborea*; *Limnorchis h.*]. Bog orchid of moist sites in the montane; scattered. North America (oroboreal).

**Platanthera huronensis** (Nuttall) Lindley [*Habenaria hyperborea* var. *huronensis*; *Limnorchis hyperborea* var. *huronensis*]. One specimen (Hogan 3569) from Lily Lake area in "subalpine wetland" at 10,500'; Huerfano Co. North America (oroboreal).

**Platanthera obtusata** (Banks ex Pursh) Lindley [*Habenaria o.*; *Lysiella o.*]. One specimen (Hogan 3617) from Dorsey Creek in "moist *Picea* forest" at 10,500'; Saguache Co. Circumboreal.

**Platanthera purpurascens** (Rydberg) Sheviak & W.F. Jennings [*Habenaria saccata*; *Limnorchis stricta*; *P. stricta*]. Moist sites in montane and subalpine; scattered. Southern Rockies.

**Platanthera tescamnis** Sheviak & Jennings [*Limnorchis ensifolia*; *Platanthera sparsiflora* var. *laxiflora*]. One specimen (Rondeau 97-094) at COLO of this recently described species from vicinity of Valley View Hot Springs in "*Populus angustifolia/Quercus gambelii* riparian" habitat at 8,460'; Saguache Co. Western N.A. (interior).

**Spiranthes romanzoffiana** Chamisso One report from upper Sand Creek Lake at 11,750'; Saguache Co. North America (oroboreal).

#### OROBANCHACEAE Broom-Rape Family

**Aphyllon fasciculatum** (Nuttall) Torrey & Gray [*Orobanche f.*] Scattered collections from early season in dry forests. Western N.A.

**Aphyllon uniflorum** (L.) Torrey & Gray [*Orobanche u.*] One collection (Schooley sn at COLO) from "cascades below Horseshoe Lake", 12,300'; Custer Co. North America.

#### PARNASSIACEAE Grass-of-Parnassus Family

**Parnassia fimbriata** Konig Subalpine streams, seeps, and springs; scattered. Western N.A.

#### PLANTAGINACEAE Plantain Family

**Plantago major** L. A few collections from lower elevation trailheads and trailsides. Non-native.

#### POACEAE Grass Family

**Achnatherum hymenoides** (Roemer & Schultes) Barkworth INDIAN RICEGRASS. [*Oryzopsis h.*] Common below 9,000', particularly on the San Luis Valley side of the wilderness. Western N.A.

**Achnatherum lettermanii** (Vasey) Barkworth [*Stipa l.*] One specimen (Hartman 63923) from oak woodlands at 9,000' in Saguache Co. Western N.A.

**Achnatherum nelsonii** (Scribnier) Barkworth [*Stipa n.*] A few collections from montane sites at northern end of study area. Western N.A.

**Achnatherum robustum** (Vasey) Barkworth [*Stipa r.*] A couple collections from openings in aspen and limber pine forests; Saguache Co. Southwestern N.A.

**Achnatherum scribneri** (Vasey) Barkworth [*Stipa s.*] One report from Great Sand Dune area, 9,000'. Southwestern N.A.

**Agropyron cristatum** (L.) Gaertner CRESTED WHEATGRASS. [*A. desertorum*] Trailheads and roadsides at lower elevations; not abundant. Non-native.

**Agrostis exarata** Trinius A couple records from moist sites in the mountains, Saguache Co. Western N.A.

**Agrostis gigantea** Roth One record (Hogan 3789) along trail in Hot Springs Canyon, piñon/juniper/oak at 9,200'; Saguache Co. Non-native.

**Agrostis scabra** Willdenow Scattered across the forest zone. North America.

**Agrostis stolonifera** L. Lower elevations; a few records. Non-native.

**Anisantha tectorum** (L.) Nevski CHEATGRASS. [*Bromus t.*] Lower elevation trailheads and roads. Non-native.

**Aristida purpurea** Nuttall A few records from the margin of the study area at lower elevations. Western N.A.

**Blepharoneuron tricholepis** (Torrey) Nash One specimen (Hogan 3548) from east facing slopes at 11,750' (!) below Zapata Pass; Huerfano Co. Southwestern N.A.

**Bromopsis canadensis** (Michaux) Holub [*Bromus ciliatus*]. Common brome of subalpine forests. North America (oroboreal).

**Bromopsis inermis** (Leysser) Holub SMOOTH BROME. [*Bromus i.*] Scattered, often along roads and near trailheads. Non-native.

**Bromopsis lanatipes** (Shear) Holub [*Bromus l.*] Scattered at lower elevations. Southwestern N.A.

**Bromopsis porteri** (Coulter) Holub [*Bromus p.*] Uncommon (overlooked) in montane forests and openings. Western N.A. (interior).

**Bromopsis pubescens** (Mühlenberg ex Willdenow) Holub [*Bromus p.*] One specimen (Hartman 65636b) from Rainbow Trail at 9,000'; Fremont Co. Eastern N.A.

**Bromopsis pumpelliana** (Scribner) Holub [*Bromus inermis* ssp. *p.*] Scattered in the subalpine. Native counterpart to *B. inermis*. Western N.A. (oroboreal).

**Calamagrostis canadensis** (Michaux) P. Beauvois Moist sites from montane to upper subalpine; not uncommon. North America.

**Calamagrostis purpurascens** R. Brown in Richardson Dry sites in the subalpine and lower alpine; common. Western N.A. (oroboreal).

**Catabrosa aquatica** (L.) P. Beauvois A couple specimens at RM from wet sites southeast of Poncha Pass, Saguache Co. Circumboreal.

**Ceratochloa carinata** (Hooker & Arnott) Tutin [*Bromus c.*] One record reported from Medano Lake Trail at 11,200'. Non-native.

**Chondrosum gracile** H. B. & K. BLUE GRAMA. [*Bouteloua g.*] Common in woodlands below 9,000'; Western N.A.

**Cinna latifolia** (Treviranus) Grisebach in Ledebour One record reported from Medano Creek in spruce/fir at 9,500'. Circumboreal.

**Dactylis glomerata** L. ORCHARDGRASS. Specimens from roadsides and motorized trails; scattered. Non-native.

**Danthonia intermedia** Vasey OATGRASS. Upper subalpine and lower alpine, often in moist sites; not uncommon. Western N.A. (oroboreal).

**Danthonia parryi** Scribner Dry openings in montane and subalpine; not uncommon. Western N.A.

**Deschampsia cespitosa** (L.) P. Beauvois Common in moist sites in upper subalpine and lower alpine. Circumboreal.

**Elymus elymoides** (Rafinesque) Swezey [including vars. *brevifolius* and *elymoides*] (*E. longifolius*). Common dryland grass, lower elevations of wilderness. Western N.A.

**Elymus glaucus** Buckley A couple specimens from aspen stands in montane zone. Western N.A. (oroboreal).

**Elymus lanceolatus** (Scribner & Smith) Gould Scattered collections from lower reaches of study area. Western N.A.

**Elymus repens** (L.) Gould (*Agropyron r.*; *Elytrigia r.*) Margins of study area at lower elevations. Non-native.

**Elymus scribnieri** (Vasey) Jones Common on dry tundra and upper subalpine. Western N.A.

**Elymus trachycaulus** (Link) Gould Subalpine forests and meadows; not uncommon. North America.

**Festuca arizonica** Vasey Not uncommon in montane forests. Southwestern N.A.

**Festuca brachyphylla** Schultes ssp *coloradensis* Common on dry tundra. Distinguished from *F. saximontana* largely by its shorter stature, and higher elevation habitat. Western N.A.

**Festuca idahoensis** Elmer A few specimens from forested zone; apparently not as common as *F. arizonica*. Western N.A.

**Festuca minutiflora** Rydberg Scattered on tundra of high peaks. Western N.A.

**Festuca rubra** L. One specimen (Hartman 66245) from near top of Methodist Mt. at north end of Sangres. North America.

**Festuca saximontana** Rydberg Subalpine and alpine; scattered. Distinguished from *F. brachyphylla* by its taller habit, and somewhat lower habitat. Western N.A. (oroboreal).

**Festuca thurberi** Vasey in Rothrock Common on open slopes in the subalpine and lower alpine. Southern Rockies.

**Glyceria striata** (Lamarck) A. S. Hitchcock var *stricta* A few specimens from moist area at lower elevations. North America.

**Helictotrichon mortonianum** (Scribner) Henrard One specimen (Elliot 4210) from east face of Eagle Peak, alpine slopes; Custer Co. Southern Rockies.

**Hesperostipa comata** (Trinius & Ruprecht) Barkworth [*Stipa c.*] Not uncommon in piñon/juniper and lower margins of study area. Western N.A.

**Hierochloë hirta** (Schrank) Borbas ssp *arctica* SWEETGRASS. [*Anthoxanthum h.j.*] Scattered collections from lower alpine. Western N.A. (oroboreal).

**Koeleria macrantha** (Ledebour) Schultes JUNEGRASS. Common montane species. North America.

**Muhlenbergia montana** (Nuttall) A. S. Hitchcock Not uncommon in dry forests and woodlands in the montane. Western N.A.

[*Muhlenbergia* spp. Several species of *Muhlenbergia* are cited from the Great Sand Dunes area including *M. andina*; *M. asperifolia*; *M. minutissima*; *M. pungens*; and *M. richardsonis*. These records are based on one or two records and have not been examined, but should be looked for in the area.]

**Nassella viridula** (Trinius) Barkworth [*Stipa v.*] A few records from the montane zone. Great Plains.

**Oryzopsis asperifolia** Michaux Scattered in montane forests. North America (oroboreal).

**Pascopyrum smithii** (Rydberg) Löve WESTERN WHEATGRASS. (*Elymus s.*) One specimen (Elliot 3101) from margin of study area at 8,800' in piñon/juniper, Saguache Co. North America.

**Phleum alpinum** L. ALPINE TIMOTHY. [*P. commutatum*] Common in moist sites, subalpine and lower alpine. Circumboreal.

**Phleum pratense** L. Moist sites in montane and lower subalpine; not uncommon. Non-native.

**Piptatherum micranthum** (Trinius & Ruprecht) Barkworth [*Oryzopsis m.*] Not uncommon in dry, montane forests. Western N.A.

**Poa abbreviata** R. Brown ssp. *pattersonii* Snowmelt sites in the alpine. Western N.A. (circumboreal)

**Poa alpina** L. Common in the subalpine and lower alpine. Circumboreal.

**Poa arctica** R. Brown ssp. *grayana* A few specimens from the high peaks. Western N.A. (Rocky Mountains).

**Poa cusickii** Vasey ssp *epilis* A couple collections from lower alpine. Western N.A.

**Poa fendleriana** (Steudel) Vasey Common and widespread from piñon/juniper to treeline. Western N.A.

**Poa glauca** M. Vahl ssp *rupicola* Dry sites in subalpine and alpine; common. Western N.A.

**Poa interior** Rydberg [*P. nemoralis* ssp *interior*] Dry sites in subalpine and alpine; scattered. Western N.A. (oroboreal).

**Poa leptocoma** Trinius One specimen (Hogan 4997) from a marshy subalpine sites near Rito Alto Lk.; Saguache Co. Western N.A.

**Poa lettermanii** Vasey One specimen (Hogan 3407) from dry alpine tundra at 12,000'; Alamosa Co. Western N.A.

**Poa palustris** L. Moist sites in the montane; uncommon (seldom collected?). Circumboreal.

**Poa pratensis** L. s.l. (Including *P. agassizensis*) Widespread and common at lower elevations. *P. agassizensis*, a taxon of drier sites, is said to be a native species by Weber & Wittmann; some of the records from the Sangres probably belong in this taxon. Non-native.

**Poa reflexa** Vasey & Scribner A few collections from the subalpine zone. Western N.A.

**Poa secunda** J. Presl [*P. juncifolia*] Scattered throughout the wilderness. Western N.A. (oroboreal).

**Poa tracyi** Vasey One specimen (Hogan 5058) from subalpine seep near Music Pass, 10,700'; Custer Co. Southern Rockies.

**Redfieldia flexuosa** (Thurber ex A. Gray) Vasey Several records from sandy sites at Great Sand Dunes and near Crestone. Great Plains.

**Sporobolus cryptandrus** (Torrey) A. Gray Common dropseed of piñon/juniper. North America.

**Thinopyrum intermedium** (Host) Barkworth & D.R. Dewey [*Elymus hispidus*] Scattered at lower elevations of study area near roads and trailheads. Non-native.

**Trisetum montanum** Vasey (Perhaps better placed in *T. canescens* Buckley or as a subspecies of *T. spicatum*) A few specimens from aspen and other moist sites in the montane. Southern Rockies.

**Trisetum spicatum** (L.) Richter (Including ssp. *alaskanum* and *cogdonii*) Common in drier sites in the subalpine and alpine. Circumboreal.

#### POLEMONIACEAE Phlox Family

**Aliciella pinnatifida** (Nuttall ex Gray) J. M. Porter [*Gilia p.*] Scattered throughout the mountains on gravels and sands. Western N.A. (interior).

**Collomia linearis** Nuttall Scattered sites in the montane and subalpine. North America.

**Giliastrum acerosum** (Gray) Rydberg [*G. rigidulum* ssp. *acerosum*] One specimen (Elliot 4694) "by radio tower on road to Zapata Falls" in piñon/juniper at 8,000'; Alamosa Co. Southwestern N.A.

- Ipomopsis aggregata** (Pursh) V. Grant ssp *collina* SCARLET GILIA. Common gilia of the montane. Southern Rockies (ssp.).
- Ipomopsis longiflora** (Torrey) V. Grant Sandy sites between Crestone and Great Sand Dunes. Great Plains.
- Leptosiphon nuttallii** (Gray) J. M. Porter & L. A. Johnson ssp. *nuttallii* [*Linanthastrum n.*] Not uncommon in subalpine along the Venable/Comanche loop, Custer Co., but not collected elsewhere. Western N.A.
- Linanthus pungens** (Torrey) J. M. Porter & L. A. Johnson [*Leptodactylon p.*] Not uncommon on dry sites in piñon/juniper and montane. Western N.A.
- Microsteris gracilis** (Douglas ex Hooker) Greene A couple specimens from montane; a diminutive species frequently overlooked. Western N.A.
- Phlox condensata** (Gray) E. Nelson Common on dry tundra in the alpine. Southwestern N.A.
- Phlox multiflora** Nelson A few collections from the Hermit Road, Custer Co. Western N.A.
- Phlox pulvinata** (Wherry) Cronquist [*P. sibirica* ssp. *p.*] A few collections from alpine near the Crestones. Western N.A.
- Polemonium brandegeei** (Gray) Greene Cliffs and boulders in the subalpine; collections from the southern end of wilderness; scattered. Western N.A. (Rocky Mountains).
- Polemonium confertum** Gray Collections from the alpine. This taxon is sometimes conflated with *P. viscosum*. Southern Rockies (Colorado).
- Polemonium foliosissimum** Gray Infrequent in mesic sites in the montane. Western N.A. (Rocky Mountains).
- Polemonium pulcherrimum** Hooker ssp *delicatum* Common understory species of the subalpine. Western N.A.
- Polemonium viscosum** Nuttall Common denizen of alpine tundra. Western N.A.

### POLYGONACEAE Knotweed Family

- Bistorta bistortoides** (Pursh) Small [*Polygonum b.*] Common in subalpine meadows and alpine. Western N.A.
- Bistorta vivipara** (L.) S. Gray [*Polygonum b.*] Moist alpine tundra; not uncommon. Western N.A. (oroboreal).
- Eriogonum cernuum** Nuttall Collections from lower elevation shrublands. Western N.A.
- Eriogonum effusum** Nuttall [*E. microthecum* Nutt. var. *effusum*] Records from Great Sand Dunes and oak woodlands in Saguache Co; uncommon (seldom collected?). Great Plains (northern).
- Eriogonum flavum** Nuttall ssp *chloranthum* [*E. arcuatum* var. *xanthum*; *E. flavum* var. *flavum*] Not uncommon on the alpine tundra. Southern Rockies (Colorado).
- Eriogonum jamesii** Bentham var. *jamesii* A species of lower elevations for which its common name, James's antelope sage, is a fitting appellation; not uncommon. Great Plains (southern).
- Eriogonum umbellatum** Torrey (incl. vars. *aureum* & *umbellatum*) Scattered in the piñon/juniper and montane. Western N.A. (interior).
- Oxyria digyna** (L.) Hill Cliffs and rocky crevices in the alpine; not uncommon. Circumboreal.
- Polygonum aviculare** L. [*P. arenastrum*] Scattered in the montane. Cosmopolitan.
- Polygonum douglasii** Greene A few collections from the *Picea* zone. Western N.A. (oroboreal).
- Polygonum sawatchense** Small Apparently more common and widespread than *P. douglasii* into which it is subsumed by some authors. Western N.A.
- Rumex acetosella** L. [*Acetosella vulgaris*] Moist sites along roads and trails; scattered. Cosmopolitan.
- [**Rumex spp.** Several species are cited in the spreadsheet based upon single specimens – a closer look is warranted.]
- Pterogonum alatum** (Torrey) Gross [*Eriogonum a.*] Open sites in the piñon/juniper and lower montane; not uncommon. Great Plains (southern).

### PORTULACACEAE Purslane Family

- Claytonia lanceolata** Pallas ex Pursh One report from "Mosca Pass Summit, aspen woodland, grassy understory", 9,750'; Alamosa Co. Western N.A.
- Claytonia megarhiza** (Gray) Parry ex Watson A signature species of the high mountains. Western N.A.
- Lewisia pygmaea** (Gray) B. L. Robinson [*Oreobroma p.*] A couple collections from open subalpine sites; a small plant often overlooked. Western N.A.

## PRIMULACEAE Primrose Family

**Androsace chamaejasme** Host ssp. **lehmanniana** Common cushion plant of the dry tundra. Western N.A. (Rocky Mountains and Arctic).

**Androsace septentrionalis** L. Very common throughout the mountains. Circumboreal.

**Dodecatheon pulchellum** (Rafinesque) Merrill SHOOTINGSTAR. [*Primula pauciflora* var. *pauciflora*]. Common along streams from montane to subalpine. Western N.A.

**Primula angustifolia** Torrey ALPINE PRIMROSE. Common species of the high mountains. Southern Rockies.

**Primula parryi** Gray PARRY'S PRIMROSE. Not uncommon along subalpine streamsides. Western N.A. (Rocky Mountains).

## PYROLACEAE (See Ericaceae)

## RANUNCULACEAE Buttercup Family (Including Helleboraceae)

**Aconitum columbianum** Nuttall ex Torrey & Gray MONKSHOOD. Wet sites in the subalpine; not uncommon. Western N.A.

**Actaea rubra** (Aiton) Willdenow Mixed forests, montane and subalpine; not uncommon. Western N.A. (oroboreal).

**Anemone canadensis** L. [*Anemonidium c.*]. One collection (Elliot 8699a) from riparian area near La Veta Pass at margin of study area. North America (eastern).

**Anemone multifida** Poiret Dry forested sites; not uncommon. North America (oroboreal).

**Anemone parviflora** Michaux One specimen (Hogan 4528), open site below Bushnell Lake, limestone, 11,000'; Fremont Co. Southern extent of its range in the Sangres. Western N.A. (oroboreal).

**Anemone patens** L. var. **multifida** PASQUE FLOWER. [*Pulsatilla ludoviciana*]. Early season flower of dry forests; uncommon (seldom collected?). Western N.A.

**Aquilegia coerulea** James ex Torrey COLORADO COLUMBINE. Open sites from montane to alpine; common. Western N.A. (Rocky Mountains).

**Aquilegia elegantula** Greene Moist subalpine forests; uncommon. Southern Rockies.

**Caltha leptosepala** DC. MARSH-MARIGOLD. [*Psychrophila l.*]. Wet meadows, subalpine and alpine; common. Western N.A.

**Clematis columbiana** (Nuttall) Torrey & Gray [*Atragane c.*]. Dry forests; flowers in early season, uncommon or rarely collected. Western N.A.

**Clematis hirsutissima** Pursh var. **scottii** LEATHERFLOWER. [*Coriflora scottii*]. Not uncommon in dry, mixed forests below 9,500'; early season. Western N.A. (interior).

**Clematis ligusticifolia** Nuttall Collections from margin of study area on west side. Western N.A.

**Delphinium alpestre** Rydberg [*D. ramosum* var. *alpestre*]. Scattered on the dry tundra. A species of special concern (G2S2). Southern Rockies.

**Delphinium barbeyi** (Huth) Huth Moist *Picea* forests; common. Southern Rockies.

**Delphinium ramosum** Rydberg Moist sites, montane and subalpine; scattered. Southern Rockies.

**Ranunculus abortivus** L. One specimen (Elliot 1475), from riparian area in piñon/juniper zone west of Valley View Hot Springs; Saguache Co. North America (eastern).

**Ranunculus cardiophyllus** Hooker One report from Medano Pass Road, Great Sand Dunes, 9,000'; Saguache Co. Western N.A. (Rocky Mountains).

**Ranunculus cymbalaria** Pursh [*Halerpestes c.*]. Seeps and riparian areas at lower elevations; scattered. Circumboreal.

**Ranunculus eschscholtzii** Schlechtendal One report from Medano Lake Trail, Great Sand Dunes, seeps at 11,500'; Saguache Co. Western N.A..

**Ranunculus inamoenus** Greene Common buttercup of moist areas in subalpine and lower alpine. Western N.A.

**Ranunculus macauleyi** Gray An endemic species of the high mountains; common in the Sangres. Southern Rockies.

**Ranunculus macounii** Britton Collections from montane streamsides; uncommon. North America (oroboreal).

**Ranunculus pedatifidus** Sm. var. **affinis** One collection (Elliot 3718) "from Horseshoe Lake up to Hermit Pass", 12,000'+; Custer Co. Circumboreal.

**Thalictrum alpinum** L. A diminutive plant of moist tundra; scattered (probably overlooked). Circumboreal.

**Thalictrum fendleri** Engelmann ex Gray Forests and meadows, montane through subalpine; common. Western N.A.

**Trollius albiflorus** (Gray) Rydberg GLOBEFLOWER. Moist sites, subalpine and alpine; scattered. At the southern extent of its range in the Sangres. Western N.A. (northern).

## RHAMNACEAE Buckthorn Family

**Ceanothus fendleri** Gray Low-lying shrub of piñon/juniper and montane; not uncommon. Southwestern N.A.

## ROSACEAE Rose Family

**Acomastylis rossii** (R. Brown) Greene ssp *turbinate* ALPINE AVENS [*Geum r.* var. *t.*]. Common species of rocky alpine tundra. Western N.A.

**Amelanchier alnifolia** Nuttall SERVICEBERRY Scattered in montane forests; scattered. Western N.A. (oroboreal).

**Cercocarpus montanus** Rafinesque MOUNTAIN-MAHOGANY Common shrub of piñon/juniper and montane woodlands. Western N.A.

**Dryas octopetala** L. ssp *hookeriana* A species of the high mountains; often associated with limestone in the Sangres. Western N.A. (circumboreal).

**Drymocallis fissa** (Nuttall) Rydberg [*Potentilla f.*] Not uncommon in dry montane forests. Western N.A. (Rocky Mountains).

**Fallugia paradoxa** (Don) Endlicher APACHE PLUME. Western margin of study area at lower elevations. Southwestern N.A.

**Fragaria vesca** L. Common in mesic forest understory, montane and subalpine. North America.

**Fragaria virginiana** P. Miller Common in dry forest understory, montane and subalpine. North America.

**Geum aleppicum** Jacquin Uncommon; a couple collections from low elevation riparian areas (Wild Cherry Creek), northern Saguache Co. North America.

**Geum macrophyllum** Willdenow Not uncommon along montane streamsides. Western N.A. (oroboreal).

**Holodiscus dumosus** (Nuttall ex Hooker) Heller [*H. discolor*]. Rocky sites in the montane; common. Southwestern N.A.

**Ivesia gordonii** (Hooker) Torrey & Gray One specimen (Hogan 3516), "alpine ridge N of California Pk. Gravelly site east of point 12,330'; Alamosa Co. Western N.A.

**Oreobatus deliciosus** (James ex Torrey) Rydberg BOULDER RASPBERRY [*Rubus d.*]. Piñon/juniper and montane zone; not uncommon. Southern Rockies.

**Padus virginiana** (L.) P. Miller ssp *melanocarpa* CHOKECHERRY [*Prunus v.*]. Shaded sites in montane forests; not uncommon. Western N.A.

**Pentaphylloides floribunda** (Pursh) Löve SHRUBBY CINQUEFOIL [*Dasiphora fruticosa*; *Potentilla f.*] Common in moist sites from montane to treeline. Circumboreal.

**Physocarpus monogynus** (Torrey) Coulter NINEBARK. Not uncommon in mixed montane forests. Western N.A. (Rocky Mountains).

**Potentilla anserina** L. [*Argentina a.*] A few collections from moist sites in shrublands at lower margins of study area. Circumboreal.

**Potentilla concinna** Richardson var. *concinna* Broadly distributed on dry sites in the mountains. Western N.A.

**Potentilla diversifolia** Lehmann Common, subalpine and alpine. Western N.A. (oroboreal).

**Potentilla gracilis** Douglas One specimen (Hogan 3582b), from steep in aspen forest, upper Huerfano, 10,200'; Huerfano Co. Western N.A. (oroboreal).

**Potentilla hippiana** Lehmann Not uncommon on dry sites, montane and subalpine. Western N.A. (oroboreal).

**Potentilla hookeriana** Lehmann A few collections (Elliot) from tundra of the high peaks (may be misidentifications of *P. uniflora*). Circumboreal.

**Potentilla ovina** Macoun One collection (Hogan 4937) from dry alpine tundra NW of Music Pass, 12,600'; Custer/Saguache Co. Western N.A. (Rocky Mountains).

**Potentilla pensylvanica** L. Scattered collections, mostly from lower elevations. North America.

**Potentilla pulcherrima** Lehmann [*P. gracilis* var. *pulcherrima*]. Common from dry sites in the montane and subalpine. Western N.A.

**Potentilla rubricaulis** Lehmann [*P. saximontana*] A species of the high peaks; scattered. North America (Rocky Mts./northern).

- Potentilla pulcherrima** Lehmann [*P. gracilis* var. *pulcherrima*]. Common from dry sites in the montane and subalpine. Western N.A.
- Potentilla rubricaulis** Lehmann [*P. saximontana*] A species of the high peaks; scattered. North America (Rocky Mts./northern).
- Potentilla subjugata** Rydberg Collections from treeline and lower alpine; scattered. Western N.A. (Rocky Mountains).
- Potentilla uniflora** Ledebour [*P. subgorodkovii*] One specimen (Hogan 3739), from fellfield at 13,200' on Mt. Owen; Saguache Co. Western N.A. (northern).
- Prunus americana** Marshall WILD PLUM. A couple collections from gulches at lower margins of study area, Fremont Co.. Eastern N.A.
- Rosa nutkana** C. Presl var. *hispida* Mixed forests, montane and subalpine. Western N.A.
- Rosa sayi** Schweinitz [*R. acicularis*] Mixed forests, montane. North America (northern).
- Rosa woodsii** Lindley The common wild rose from lower elevations to subalpine. Western N.A. (oroboreal).
- Rubus idaeus** L. (including ssp. *aculeatissimus* and *melanolasius*) RASPBERRY. The common raspberry of the mountains. Circumboreal.
- Sibbaldia procumbens** L. Moist tundra; not uncommon. Circumboreal.

#### RUBIACEAE Madder Family

- Galium boreale** L. ssp. *septentrionale* [*G. septentrionale*]. Common in montane mixed forests . Circumboreal.
- Galium triflorum** Michaux Scattered collections from mixed forests in the montane. Circumboreal.

#### SALICACEAE Willow Family

- Populus angustifolia** James NARROWLEAF COTTONWOOD. Along streams at lower elevations in the wilderness; signature species of these rich avian habitats. Western N.A.
- Populus tremuloides** Michaux ASPEN. Common, often dominant, in montane zone, particularly on the west side of range where lodgepole is largely absent. North America.
- Salix arctica** Pallas ssp *petraea* [*S. petrophila*]. A species of the tundra and upper subalpine. Western N.A.
- Salix bebbiana** Sargent Streamsides in the montane and lower subalpine; not uncommon. Circumboreal.
- Salix brachycarpa** Nuttall Common in subalpine willow thickets along streams; sometimes confused (lumped) w/ *S. glauca*, a species of higher elevation. Western N.A. (oroboreal).
- Salix drummondiana** Barratt Common streamside willow, montane and lower subalpine. Western N.A.
- Salix exigua** Nuttall Scattered records from lower elevation, often sandy, streamsides. Western N.A.
- Salix glauca** L. var. *villosa* Snow melt basins at and above timberline, often with *S. planifolia*. Western N.A.
- Salix lasiandra** Bentham A few records from lower elevation streamsides. Western N.A.
- Salix ligulifolia** (Ball) Ball ex Schneider [*S. eriocephala* var. *ligulifolia*]. A few records from montane streamsides at south end of study area. Western N.A.
- Salix monticola** Bebb A few collections from montane streamsides. Southern Rockies.
- Salix nivalis** Hooker [*S. reticulata* ssp. *nivalis*; *S. reticulata* ssp. *nana* ]. Not uncommon species of moist tundra; sometimes sympatric with *S. arctica*. Western N.A.
- Salix planifolia** Pursh Subalpine wetlands. Western N.A. (oroboreal).
- Salix scouleriana** Barratt ex Hooker A willow of upland sites, not uncommon in the Sangres. Western N.A.

#### SANTALACEAE Sandalwood Family

- Comandra umbellata** (L.) Nuttall ssp *pallida* Not uncommon in piñon/juniper and montane woodlands. Western N.A.

#### SARCOBATACEAE Greasewood Family

- Sarcobatus vermiculatus** (Hooker) Torrey GREASEWOOD. One specimen (Elliot 4743) from piñon/juniper/blue grama site "on road to Zapata Falls," Alamosa Co. Common in the San Luis Valley. Western N.A.

**Heuchera parvifolia** Nuttall ex Torrey & Gray Very common throughout the wilderness. Western N.A.

**Hirculus platysepalus** (Trautvetter) W. A. Weber ssp *crandallii* [*Saxifraga flagellaris* var. *crandallii*]. Scattered on the highest peaks. Western N.A. (Rocky Mountains).

**Hirculus serpyllifolius** (Pursh) W. A. Weber ssp *chrysanthus* [*Saxifraga serpyllifolia* var. *chrysanthus*; *S. chrysanthus*]. Scattered on highest peaks; perhaps less common and on moister sites than *H. platysepalus*. Western N.A. (Rocky Mountains).

**Lithophragma tenellum** Nuttall One specimen (Hartman 64889) from "top of Little Sheep Mt." at SE margin of study area, 9500'; Huerfano Co. Western N.A. [An early season taxon likely overlooked by collectors.]

**Micranthes odontoloma** (Piper) Heller [*Saxifraga o.*]. Common along subalpine streamsides. Western N.A.

**Micranthes oregana** (Howell) Small [*Saxifraga o.*]. One record (Elliot 11050) from alpine site at 12,000' near the Iron Nipple; Huerfano Co. Western N.A.

**Micranthes rhomboidea** (Greene) Small [*Saxifraga r.*]. Common alpine plant in the Sangres. Western N.A. (Rocky Mountains).

[*Mitella* spp. Notable for their absence.]

**Muscaria adscendens** (L.) Small [*Saxifraga a.*] One specimen (Lederer 97-155b) collected from Venable Falls, "moist rocks in moss near creek," at 10,800'; Custer Co. Western N.A. (northern).

**Muscaria delicatula** Small [*Saxifraga cespitosa* var. *delicatula*]. A species of rocky tundra on the highest peaks. Circumboreal.

**Saxifraga cernua** L. A few records from moist sites in the high mountains. Circumboreal.

**Saxifraga hyperborea** R. Brown ssp *debilis* [*S. debilis*]. Alpine and upper subalpine, in shade of rocks. Western N.A. (Rocky Mountains).

**Saxifraga rivularis** L. [*S. hyperborea*]. Moist sites in the subalpine and alpine. (Some records of *S. rivularis* from the Sangres may apply to *S. hyperborea* ssp. *debilis*.) Circumboreal.

[According to FNA (Vol. 8), "For Colorado. Weber appears to have applied the name *S. rivularis* to what we call *S. hyperborea*, and *S. hyperborea* ssp. *debilis* to what we call *S. debilis*"].

#### SCROPHULARIACEAE Figwort Family (Including Orobanchaceae, Phrymaceae, Plantaginaceae)

**Besseya alpina** (Gray) Rydberg [PTG] Common in the high mountains. Southern Rockies.

**Besseya plantaginea** (James) Rydberg [PTG] Scattered, usually on drier sites in the montane. Southern Rockies.

**Castilleja haydenii** (Gray) Cockerell [ORO] A striking paintbrush, not uncommon on dry tundra in the Sangres. Southern Rockies.

**Castilleja integra** Gray [ORO] Common paintbrush in open sites of piñon/juniper and lower montane. Southwestern N.A.

**Castilleja linariifolia** Bentham [ORO] Common in piñon/juniper and lower montane. Western N.A.

**Castilleja miniata** Douglas ex Hooker [ORO] Subalpine forests and openings; not uncommon. Western N.A. (oroboreal).

**Castilleja occidentalis** Torrey [ORO] Mesic sites in the subalpine and alpine; common. Western N.A. (Rocky Mountains).

**Castilleja rhexiifolia** Rydberg [ORO] Apparently uncommon in the Sangres; alpine. Western N.A. (Rocky Mountains).

**Castilleja sulphurea** Rydberg [ORO] Scattered in the subalpine. Western N.A. (Rocky Mountains).

**Chionophila jamesii** Bentham [PTG] Scattered on the high mountains. Southern Rockies.

**Collinsia parviflora** Douglas [PTG] Only a few collections from the study area; a diminutive species of montane forests, likely overlooked in the early season. Western N.A. (oroboreal).

**Mimulus guttatus** DC. [PHR] Moist sites in the montane and subalpine; common. Western N.A.

**Mimulus tilingii** Regel var. *tilingii* [PHR] A few collections from subalpine seeps. Western N.A. [Unverified reports of *Mimulus floribundus* and *M. glabratus* from Great Sand Dunes].

**Orthocarpus luteus** Nuttall [ORO] A few collections from low elevation woodlands. Western N.A.

[*Pedicularis bracteosa* ssp. *paysoniana* A Rocky Mountain species notable for its absence in the Sangres.]

**Pedicularis canadensis** L. ssp. *fluviatilis* [ORO] One specimen (Hogan 2780) from "North Colony Creek drainage, in *Pseudotsuga/Populus tremuloides* forest at 9,800 ft."; Custer Co. Southern Rockies (the subspecies of this Eastern N.A. taxon).

**Pedicularis crenulata** Bentham in De Candolle One specimen (Hogan 5029) from moist site along lower Cotton Creek Trail, 8600'; Saguache Co. Western N.A. (Rocky Mountains).

**Pedicularis groenlandica** Retzius [ORO] ELEPHANTELLA. Common in moist meadows in the subalpine. Western N.A. (oroboreal).

**Pedicularis parryi** Gray [ORO] Common on dry alpine and subalpine sites. Western N.A. (Rocky Mountains).

**Pedicularis procera** Gray [ORO] Common lousewort in understory of mixed forests in the montane and subalpine. Southern Rockies.

**Penstemon angustifolius** Nutt. ex Pursh var. **caudatus** [PTG] A few collections from sandy sites in the piñon/juniper zone. Great Plains.

**Penstemon auriberbis** Pennell [PTG] A couple collections from lower elevation margins of study area. Southern Rockies.

**Penstemon barbatus** (Cavanilles) Roth [PTG] Not uncommon in mixed forests from lower elevations through the montane. Southwestern N.A.

**Penstemon caespitosus** Nuttall ssp. **crandallii** [*P. crandallii*] Scattered in openings of mixed forests from lower elevations to upper montane. Southern Rockies.

**Penstemon degeneri** Crosswhite [PTG] A G2S2 species; three specimens (Hartman 63958, 63992 and Elliot 3702 at RM) of this narrow endemic from north end of the Sangres, near 9,000'; Chaffee and Fremont counties. Southern Rockies (Colorado). *[Carol English, a student of the group, is quite sure these are misidentifications of the more widely distributed *P. griffithii*.]*

**Penstemon griffithii** Nelson [PTG] A few collections from north end of Sangres; montane zone. Southwestern N.A.

**Penstemon hallii** Gray [PTG] Not uncommon species of dry tundra sites. Southern Rockies (Colorado).

**Penstemon harbourii** Gray [PTG] Two specimens (Elliot 3820 and Hogan 5006) from south side of Rito Alto Pk. on barren substrate; 13,000'; Saguache Co. Southern Rockies (Colorado).

**Penstemon secundiflorus** Bentham [PTG] Scattered collections from montane. Southern Rockies.

**Penstemon strictus** Bentham [PTG] Scattered collections from lower elevations to upper montane. Western N.A. (Rocky Mts.)

**Penstemon virens** Pennell ex Rydberg [PTG] An early season *Penstemon* from the montane zone; scattered collections. Southern Rockies.

**Penstemon virgatus** Gray ssp *asa-grayi* [PTG] Common in dry, montane sites. Southern Rockies.

**Penstemon whippleanus** Gray [PTG] Perhaps the most common *Penstemon* of the montane and subalpine mountains. Western N.A. (Rocky Mountains).

**Scrophularia lanceolata** Pursh [SCR] A few collections from margins of study area; moist sites at lower elevations. North America.

**Verbascum thapsus** L. [SCR] Scattered collections from lower elevations proximate to roads and trailheads. Non-native.

**Veronica americana** Schweinitz ex Bentham [PTG] Moist sites in the mountains; scattered. North America.

**Veronica catenata** Pennell [PTG] Moist sites in the lower mountains; a few collections. Cosmopolitan.

**Veronica nutans** Bongard [*V. wormskjoldii*] Common in moist subalpine meadows and lower alpine. Western N.A.

**Veronicastrum serpyllifolium** L. ssp. **humifusum** [*Veronica*] Muddy ground, montane and subalpine; a few collections. North America.

#### THALICTRACEAE (See Ranunculaceae)

#### URTICACEAE Nettle Family

**Urtica dioica** L. var. **occidentalis** [*U. gracilis*] Scattered in moist sites in the mountains. North America.

#### UVULARIACEAE Bellwort Family

**Prosartes trachycarpa** Watson [*Disporum t.*] Two specimens (Hogan 4876, 5100) from N-facing slopes in moist *Picea* forests, drainages of Stout and Garner creeks (Fremont & Saguache Co. respectively) ca. 9,000'. An early season species, likely overlooked. Western N.A.

**Streptopus amplexifolius** (L.) DC. [*S. fassettii*] Montane and subalpine forests by streams; not uncommon. Western N.A. (oroboreal).

## **VALERIANACEAE Valerian Family**

**Valeriana arizonica** Gray Uncommon *Valeriana* collected in drainages on west side of wilderness between Cotton Creek and South Zapata; shaded montane sites. Southwestern N.A.

**Valeriana capitata** Pallas ex Link ssp **acutiloba** [*V. acutiloba*]. Moist, open sites from montane to lower alpine; not uncommon. Western N.A.

**Valeriana edulis** Nuttall Montane to lower alpine; scattered. Western N.A. (and Great Lakes region).

**Valeriana occidentalis** A. Heller Moist sites, montane and subalpine; scattered. Western N.A.

## **VERBENACEAE Vervain Family**

**Verbena bracteata** Lagasca & Rodriguez Not uncommon in the piñon/juniper zone. Non-native.

## **VIOLACEAE Violet Family**

**Viola adunca** J. E. Smith Collections from the montane and subalpine; not uncommon. Western N.A. (oroboreal).

**Viola biflora** L. A few collections from moist sites in the lower alpine; disjunct from Canada and Alaska. Circumboreal.

**Viola canadensis** L. ssp. **scopulorum** [*V. scopulorum*] Common forest violet of the montane zone. Southern Rockies.

**Viola labradorica** Schrank [*V. adunca* ssp. *bellidifolia*] A few collections from the alpine. Western N.A. (Rocky Mountains).

**Viola nephrophylla** Greene [*V. sororia*] A few collections from moist, montane sites at north end of range. North America.

## **VISCACEAE Mistletoe Family**

**Arceuthobium vaginatum** (Willdenow) J. Presl var. **cryptopodium**

