

HOGAN

A Floristic Inventory of the Doudy Draw  
OSMP Study 3611

Study



Hogan, Tim

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Doudy Draw/Eldorado Mountain Property,  
City of Boulder Open Space  
Boulder, Colorado

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**A Floristic Inventory  
of the  
Doudy Draw/Eldorado Mountain Property,  
City of Boulder Open Space  
Boulder, Colorado**

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1 November, 1994

This report is a supplement to the "Natural Heritage Inventory of the Rare Plants and Significant Natural Communities of the Doudy Draw and Eldorado Mountain Area, Colorado" completed in 1993 and submitted by the Colorado Natural Heritage Program. Fifteen days were spent in the field and the methodology followed during the 1994 season was equivalent to that described in the earlier report. A complete species list is herein submitted along with a qualitative assessment of the vegetation. [For a detailed discussion of the climate, soils, and vegetation of the study site see Hogan (1993): A floristic survey of the Boulder Mountain Park. *Natural History Inventory of Colorado, No. 13*].

Four hundred and seventy eight species of vascular plants in 324 genera and 97 families are documented for the Doudy Draw and Eldorado Mountain Area. Ninety species, nearly 19% of the flora, are non-native. The largest families are Asteraceae (81 spp.), Poaceae (59 spp.), Fabaceae (26 spp.), Rosaceae (20 spp.), and Brassicaceae (19 spp.). This represents an additional fifty species from the 1993 report. None of the species added during the 1994 field season were species of special concern. The 478 species of vascular plants documented is evidence of the high species richness found along grassland-forest ecotones in western North America.

The study area, approximately 2000 acres in size, is situated along the interface of the plains and the mountains. A rich diversity of vegetation (see map) provides the site with much of its value as a natural area. Grasslands are dominant in lower Doudy Draw and on the mesas to the east (Fig. 1). The western end of the area is dominated by forests of ponderosa pine (*Pinus ponderosa*) on the mesa tops (Fig. 2) and Douglas fir (*Pseudotsuga menziesii*) on the upper slopes of Eldorado Mountain (Fig. 3). Much of the study area is characterized by a blending of these vegetation types (Fig. 4), a blending that results in a mosaic of savanna woodlands, mixed forests, and diverse shrublands (Fig. 5).

Another aspect of the Doudy Draw/Eldorado Mountain property that contributes to its value as a natural area is its position in the landscape. Situated as it is in a constellation of open space lands - City of Boulder Open Space, Boulder County Open Space, Jefferson

County Open Space, Boulder Mountain Parks, and Golden Gate Canyon State Parks - the study site is an important link in the chain of connectivity that holds together a relatively intact foothills ecosystem.

While recognizing its high species richness, diverse vegetation, and important place in the landscape, it is also important to note that the ecological integrity of the Doudy Draw/Eldorado Mountain property has been compromised. The presence of an active railroad, the Denver Water Board diversion canal with its attendant roadway, and a long history of grazing and mining, have all undermined native communities and natural processes. One example of the latter has been the suppression of fire, resulting in crowded forests that pose a significant wildfire threat. The deterioration of natural communities is evident in the lower sections of Doudy Draw where fields of adventive weeds and a monoculture of smooth brome (*Bromus inermis*) dominates (Fig. 6).

In 1994 a special effort was made to inventory areas not thoroughly covered the previous year. These areas included Rattlesnake Gulch, Eldorado Mountain, and the moist meadows northeast of the Mouse Ears.

Rattlesnake Gulch (T1S R71W SEC 36 NW1/4) is a small, north-facing drainage in the western side of the study area. With an intermittent stream and a steep relief, the gulch does not provide enough moisture or soil development to support a rich flora. The drainage is marked by deciduous trees and shrubs (*Populus angustifolia*, *P. deltoides*, *P. tremuloides*, *Acer glabrum*, *Betula fontinalis*, *Negundo aceroides*), but does not display an assemblage of species such as *Aralia nudicaulis*, *Corylus cornuta*, and *Sanicula marilandica* in sufficient abundance to characterize it as a high quality foothills riparian vegetation. Rattlesnake Gulch has been impacted by the railroad above it, and it is difficult to say how much of the talus in the area is natural and how much is debris from the construction and maintenance of the tracks.

The portion of Eldorado Mountain located in the study area is characterized by dense Douglas Fir (*Pseudotsuga menziesii*) forests with an understory of *Ribes cereum*, *Mahonia repens*, and *Jamesia americana*. The mountain is steep and dry with extensive exposure of

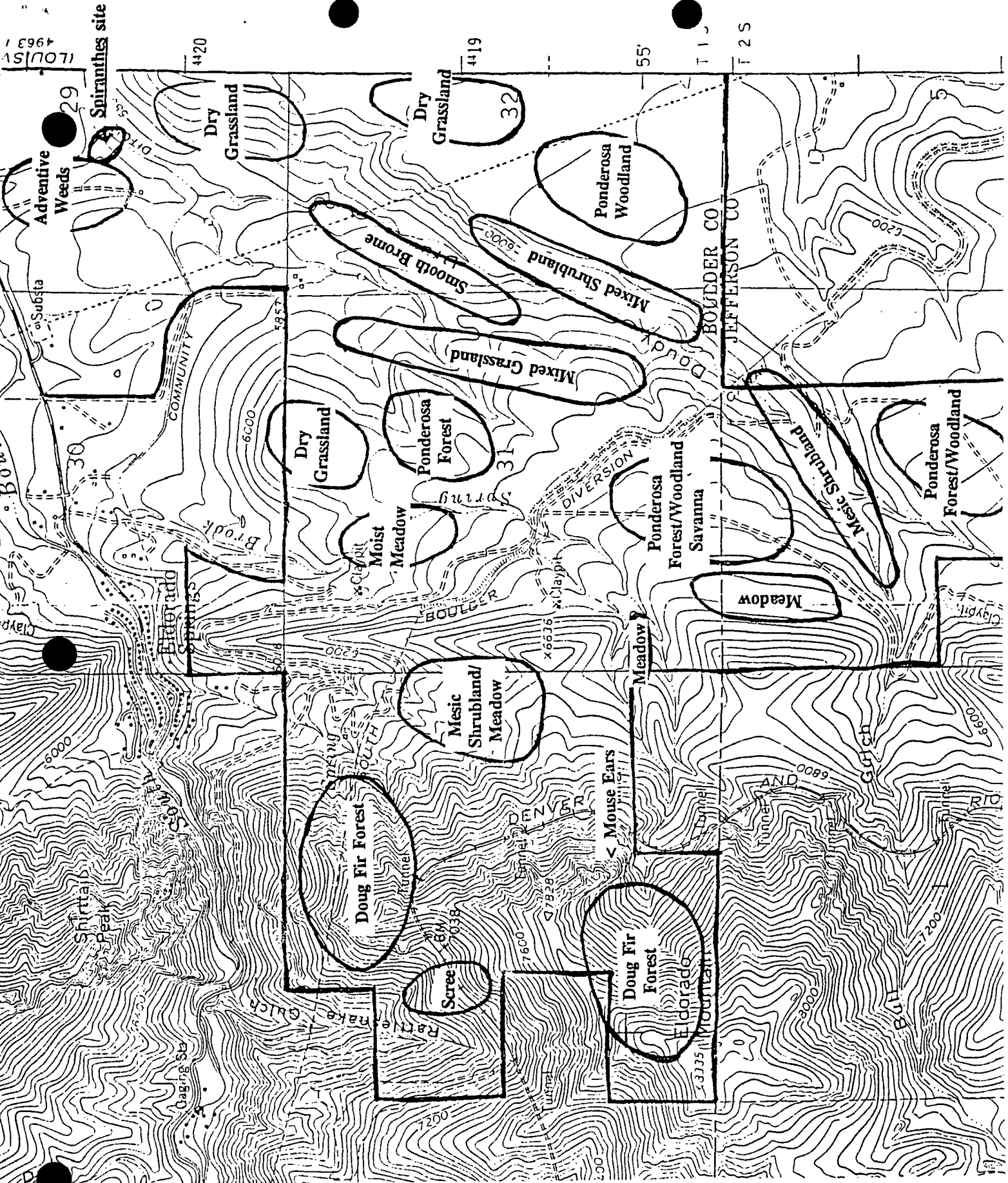
the Fountain sandstone. Beetle kill is evident on the northeast slopes. Some species (eg. *Ligularia pudica*, *Orthilia secunda*, *Pyrola chlorantha*) were only found at higher sites on the mountain, but species richness of vascular plants is relatively poor. Casual observations of the lichen cover indicate an uncommon richness in this area.

The parcel of the study area northeast of the Mouse Ears and south of Eldorado Springs (T1S R71W SEC36 NE1/4) is a diverse site with high species richness. In its lower reaches the site is moist and displays a well developed foothills riparian vegetation with cottonwood (*Populus* spp.), box elder (*Negundo aceroides*), and herbaceous species such as *Agrimonia striata*, *Ligusticum porteri*, *Sanicula marilandica*, and *Smilax lasioneuron*. Above 6200' the site opens into a meadow area that appears to be an incipient shrubland with *Padus virginiana*, *Symphoricarpos occidentale* and a lush assemblage of forbs. Native grasses such as big bluestem (*Andropogon gerardii*) and Indian Grass (*Sorghastrum avenaceum*) while present, were not abundant. Parts of the meadow are being invaded by ponderosa pine (*Pinus ponderosa*). It is not clear to me where this area, a mesic strike valley between the Dakota and Fountain formations, should be placed in a classic successional model. I did not observe evidence of fire or cutting (ie. stumps), nor, as noted above, did I observe tallgrass indicator species in sufficient abundance to classify the meadow as a mesic grassland. The site with its foothills riparian habitat and open meadow area, struck this botanist as particularly rich in birds, butterflies, dragonflies, and other insects.

After two field seasons in the Eldorado Mountain/Doudy Draw area, I am left with the impression of a functional ecosystem with an assortment of habitats that support a diverse assemblage of plants and animals. The vegetation, especially at the lower elevations, has been compromised by non-native species, but the soil is intact and many of these areas might be restored with careful management. Restoration tools that should be investigated include controlled burns, removal of cattle (while allowing for the careful use of grazing as a management tool), and IPM weed control. In addition, recreational impacts should be monitored, and where a deleterious effect can be demonstrated, the impacts from hikers, climbers, bikes, dogs, and horses should be controlled.

An acquisition that should be pursued in future Open Space purchases is the property

in the extreme SE1/4 of SEC 36 (T1S R71W) and the area immediately south, extending to, and including lower Bull Gulch. These meadows and drainages serve as important habitat for both montane and prairie species, and their inclusion into Open Space would serve to further protect those species that live along the grassland-forest ecotone.



Vegetation of Study Area



Fig. 1. Mesa-Top Grassland. T1S R70W SEC32



Fig. 2. Ponderosa Woodland. T1S R70W SEC31 SW1/4



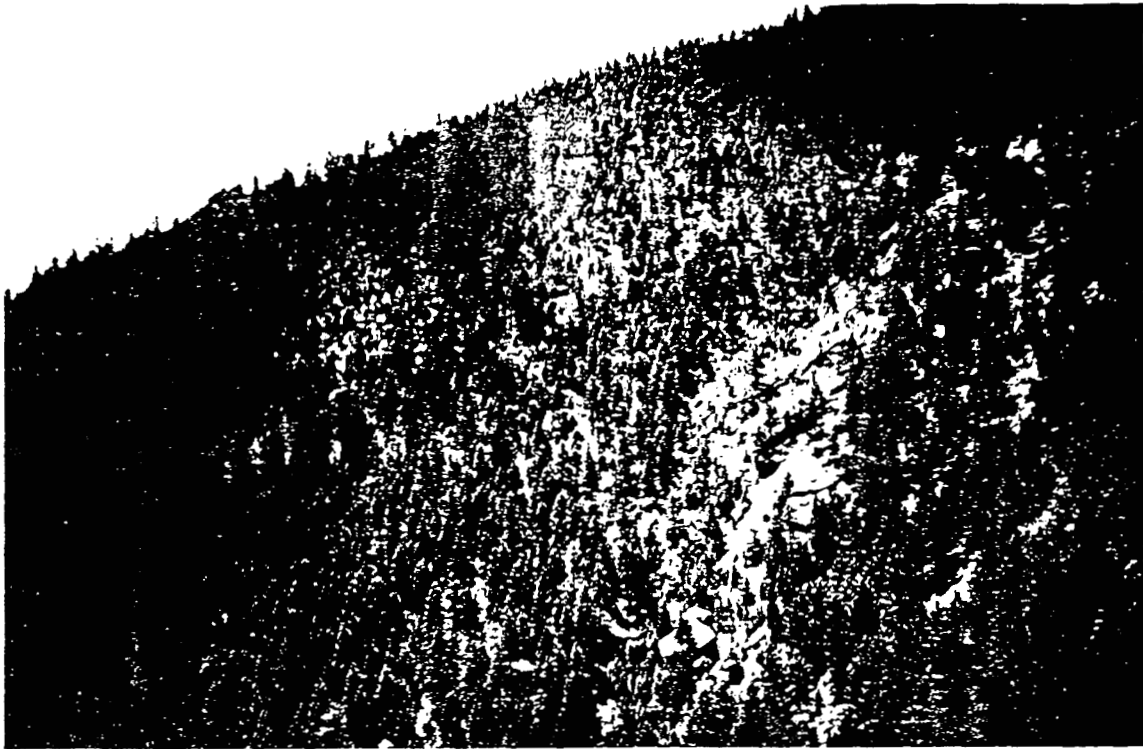


Fig. 3. Douglas Fir Forest. NE Slopes of Eldorado Mt.  
Note the extensive beetle kill.



Fig. 4. Vegetation Mosaic. T2S R70W SEC6 NW1/4  
Shrublands, Meadows, Woodlands, & Forests



Fig. 5. Mixed Shrubland. T1S R70W SEC31 SE1/4  
*Crataegus* in valley bottom; *Rhus* and *Physocarpus* on slopes.

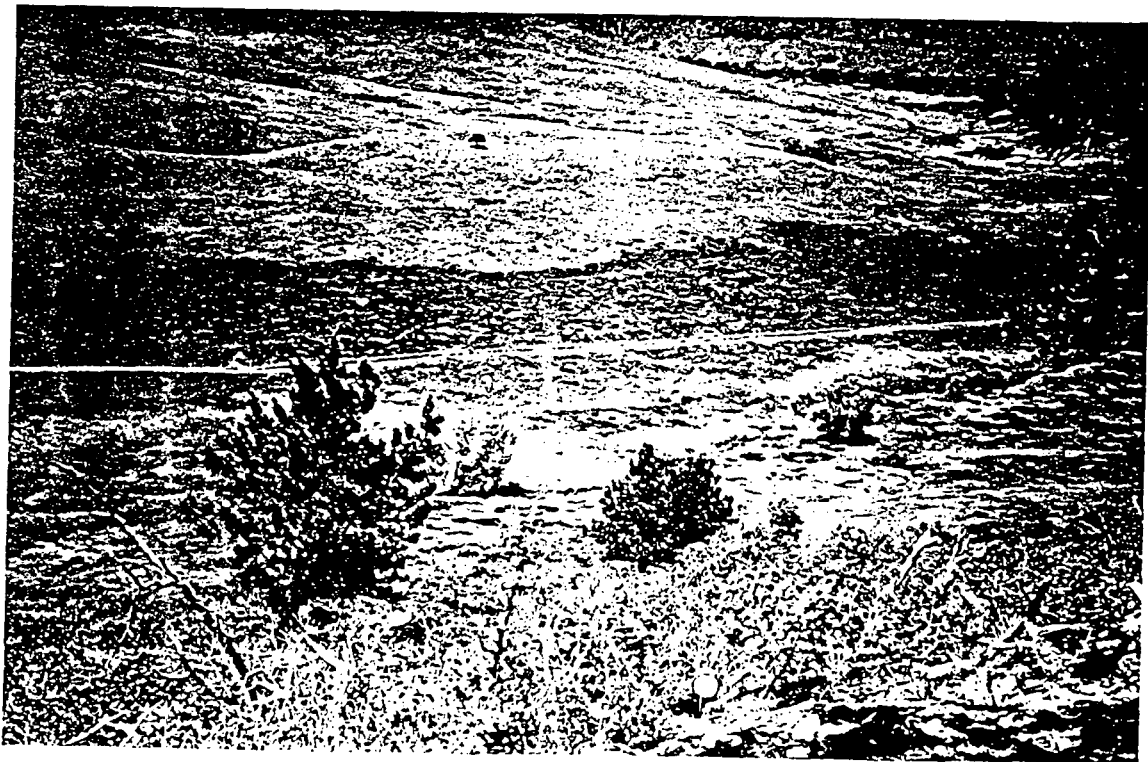


Fig. 6. Smooth Brome (*Bromus inermis*) incursion. T1S R70W SEC32 NW1/4  
Darker green area bisected by trail.

## Doudy Draw Species List

Nomenclature follows Weber (Weber and Wittmann, 1992). If other names are considered to be more familiar, these are provided. Those species marked with an asterisk (\*) were not observed by Hogan or Lederer, but are reported to be in the Herbarium of City Open Space. Most species were observed in the 1993 field season, those species marked with a plus sign (+) were observed in 1994. In addition to the local manuals (Weber, 1976, 1990), other works used in compiling this list include the *Flora of the Great Plains* (Great Plains Flora Association, 1986), *Intermountain Flora* (Cronquist et al., 1977), *Manual of the Plants of Colorado* (Harrington, 1954), and *Vascular Plants of Wyoming* (Dorn, 1988).

### FERNS and FERN ALLIES

#### ASPIDIACEAE SHIELD FERN FAMILY

*Dryopteris filix-mas* (L.) Schott MALE FERN.

#### ASPLENIACEAE SPLEENWORT FAMILY

*Asplenium septentrionale* (L.) Hoffman GRASS FERN.

#### ATHYRIACEAE LADY FERN FAMILY

*Cystopteris fragilis* (L.) Bernhardt BRITTLE FERN.

#### CRYPTOGRAMMACEAE ROCK BRAKE FAMILY

*Cryptogramma acrostichoides* R. Brown AMERICAN ROCK BRAKE. [*C. crispa* (L.) R.Br. ssp. *acrostichoides* (R.Br.) Hultén]

#### EQUISETACEAE HORSETAIL FAMILY

*Equisetum arvense* L. FIELD HORSETAIL.

*Hippochaete laevigata* (A. Braun) Farwell SMOOTH SCOURING-RUSH. [*Equisetum laevigatum* A. Braun]

#### HYPOLEPIDACEAE BRACKEN FAMILY

*Pteridium aquilinum* (L.) Kuhn ssp. *lanuginosum* (Bongard) Hultén BRACKEN FERN.

#### POLYPODIACEAE

*Polypodium amorphum* Suksdorf POLYPODY. [*P. hesperium* Maxon] +

#### SELAGINELLACEAE LITTLE CLUB-MOSS FAMILY

*Selaginella densa* Rydberg

#### SINOPTERIDACEAE LIPFERN FAMILY

*Cheilanthes fendleri* Hooker FENDLER'S LIP FERN.

WOODSIACEAE WOODSIA FAMILY

*Woodsia scopulina* Eaton ROCKY MOUNTAIN WOODSIA.

GYMNOSPERMS

CUPRESSACEAE CYPRESS FAMILY

*Juniperus communis* L. ssp. *alpina* (Smith) Celakowski COMMON JUNIPER.

*Sabina scopulorum* (Sargent) Rydberg ROCKY MOUNTAIN JUNIPER. [*Juniperus scopulorum* Sarg.]

PINACEAE PINE FAMILY

*Pinus contorta* Douglas ex Louden var. *latifolia* LODGEPOLE PINE. +

*Pinus flexilis* James LIMBER PINE.

*Pinus ponderosa* Douglas ssp. *scopulorum* (Watson) Weber PONDEROSA PINE.

*Pseudotsuga menziesii* (Mirbel) Franco DOUGLAS FIR.

ANGIOSPERMS

ACERACEAE MAPLE FAMILY

*Acer glabrum* Torrey MOUNTAIN MAPLE.

*Negundo aceroides* (L.) Moench BOX ELDER. [*Acer negundo* L.]

AGAVACEAE AGAVE FAMILY

*Yucca glauca* Nuttall SPANISH BAYONET.

ALISMATACEAE WATER-PLANTAIN FAMILY

*Alisma triviale* Pursh WATER PLANTAIN. [*A. plantago-aquatica* L. ssp. *brevipes* (Greene) Samuelsson]

*Sagittaria cuneata* Sheldon ARROWHEAD. +

ALLIACEAE ONION FAMILY

(LILLIACEAE)

*Allium cernuum* Roth NODDING ONION.

*Allium geyeri* Watson WILD ONION.

*Allium textile* Nelson & Macbride WILD ONION.

ALSINACEAE CHICKWEED FAMILY

(CARYOPHYLLACEAE)

*Cerastium fontanum* Baumgartner [*C. vulgatum* L.] Adventive.

*Cerastium strictum* L. *emend* Haenke MOUSE-EARS. [*C. arvense* of Colorado literature]

*Eremogone fendleri* (Gray) Ikonnikov SANDWORT. [*Arenaria fendleri* Gray]

*Paronychia jamesii* Torrey & Gray JAMES' NAILWORT.  
*Pseudostellaria jamesiana* (Torrey) Weber & Hartman TUBER STARWORT. [*Stellaria jamesiana* Torrey]

#### ANACARDIACEAE SUMAC FAMILY

*Rhus aromatica* Aiton ssp. *trilobata* (Nuttall ex Torrey & Gray) Weber SKUNKBRUSH. [*R. trilobata* Nutt.]  
*Rhus glabra* L. SMOOTH SUMAC.  
*Toxicodendron rydbergii* (Small ex Rydberg) Greene POISON IVY.

#### APIACEAE/UMBELLIFERAE PARSLEY FAMILY

*Aletes acaulis* (Torrey) Coulter & Rose MOUNTAIN CARAWAY.  
*Berula erecta* (Hudson) Coville WATER PARSNIP. Adventive.  
*Carum carvi* L. CARAWAY. Adventive. \*  
*Conium maculatum* L. POISON HEMLOCK.  
*Harbouria trachypleura* (Gray) Coulter & Rose WHISKBROOM PARSLEY.  
*Heracleum sphondylium* L. ssp. *montanum* (Schleicher ex Gaudin) Briquet in Schinz & Thellung COW PARSNIP.  
*Ligusticum porteri* Coulter & Rose PORTER'S LOVAGE, OSHA.  
*Lomatium orientale* Coulter & Rose SALT & PEPPER.  
*Musineon divaricatum* (Pursh) Nuttall ex Torrey & Gray  
*Osmorhiza depauperata* Philippi SWEET CICELY. [*O. obtusa* (Coulter & Rose) Fernald]  
*Osmorhiza longistylis* (Torrey) de Candolle  
*Sanicula marilandica* L. BLACK SNAKEROOT.

#### APOCYNACEAE DOGBANE FAMILY

*Apocynum androsaemifolium* L. SPREADING DOGBANE.

#### ARALIACEAE GINSENG FAMILY

*Aralia nudicaulis* L. WILD SARSAPARILLA.

#### ASCLEPIADACEAE MILKWEED FAMILY

*Asclepias pumila* (Gray) Vail DWARF MILKWEED.  
*Asclepias speciosa* Torrey SHOWY MILKWEED.  
*Asclepias stenophylla* Gray NARROW LEAVED MILKWEED.  
*Asclepias viridiflora* Rafinesque GREEN MILKWEED.

#### ASPARAGACEAE ASPARAGUS FAMILY

*Asparagus officinale* L. ASPARAGUS. Adventive. \*

#### ASTERACEAE/COMPOSITEAE SUNFLOWER FAMILY

*Achillea lanulosa* Nuttall YARROW.  
*Acosta diffusa* (Lamarck) Sojak KNAPWEED, CORNFLOWER. [*Centaurea diffusa* Lam.] Adventive.  
*Agoseris aurantiaca* (Hooker) Greene ORANGE FALSE DANDELION.  
*Agoseris glauca* (Pursh) Rafinesque PALE FALSE DANDELION.

*Ambrosia psilostachya* De Candolle var. *coronopifolia* (Torrey & Gray) Farwell WESTERN RAGWEED. [*A. coronopifolia* T. & G.]  
*Ambrosia trifida* L. GIANT RAGWEED. Adventive.  
*Anaphalis margaritacea* (L.) Bentham & Hooker PEARLY EVERLASTING. +  
*Antennaria howellii* Greene ssp. *neodioica* (Greene) Bayer NORTHERN PUSSYTOES. [*A. neglecta* of Colorado literature; *A. obovata* Nelson] +  
*Antennaria parvifolia* Nuttall MOUNTAIN PUSSYTOES.  
*Antennaria pulcherrima* (Hooker) Greene ssp. *anaphaloides* (Rydberg) Weber PUSSYTOES. [*A. anaphaloides* Rydb.]  
*Antennaria rosea* Greene PINK PUSSYTOES.  
*Arctium minus* (Hill) Bernhadi BURDOCK. Adventive.  
*Arnica cordifolia* Hooker HEARTLEAF ARNICA.  
*Arnica fulgens* Pursh ORANGE ARNICA.  
*Artemisia frigida* Willdenow SILVER SAGE.  
*Artemisia ludoviciana* Nuttall PRAIRIE SAGE.  
*Aster laevis* L. var. *geyeri* Gray SMOOTH ASTER.  
*Aster lanceolatus* Willdenow ssp. *hesperius* (Gray) Semple & Chmielewski [*A. hesperius* Gray]  
*Aster porteri* Gray PORTER'S ASTER.  
*Bidens frondosa* L. BEGGARS TICK.  
*Brickellia eupatoroides* (L.) Shinnars BRICKELLIA. [*Kuhnia eupatoroides* L.]  
*Brickellia grandiflora* (Hooker) Nuttall BRICKELLIA. +  
*Carduus nutans* L. ssp. *macrolepis* (Peterman) Kazmi MUSK THISTLE. Adventive.  
*Chlorocrepis albiflora* (Hooker) Weber WHITE HAWKWEED. [*Hieracium albiflora* Hook.]  
*Chrysothamnus nauseosus* (Pallas ex Pursh) Britton ssp. *nauseosus* RABBITBRUSH.  
*Cichorium intybus* L. CHICORY. Adventive.  
*Cirsium arvense* (L.) Scopoli CANADA THISTLE. Adventive.  
*Cirsium ochrocentrum* Gray  
*Cirsium vulgare* (Savi) Tenore BULL THISTLE. [*C. lanceolatum* (L.) Scopoli] Adventive.  
*Dyssodia papposa* (Ventenat) Hitchcock FETID MARIGOLD.  
*Erigeron colo-mexicanus* Nelson FLEABANE.  
*Erigeron compositus* Pursh CUTLEAF FLEABANE. +  
*Erigeron divergens* Torrey & Gray SPREADING FLEABANE.  
*Erigeron flagellaris* Gray WHIPLASH FLEABANE.  
*Erigeron speciosus* (Lindley) De Candolle SHOWY FLEABANE.  
*Erigeron vetensis* Rydberg LA VETA DAISY.  
*Gaillardia aristata* Pursh BLANKET FLOWER.  
*Grindelia squarrosa* (Pursh) Dunal GUMWEED.  
*Grindelia subalpina* Greene MOUNTAIN GUMWEED.  
*Gutierrezia sarothrae* (Pursh) Britton & Rusby SNAKEWEED.  
*Helianthus annuus* L. COMMON SUNFLOWER.  
*Helianthus pumilus* Nuttall SUNFLOWER.  
*Helianthus rigidus* (Cassini) Desfontaines ssp. *subrhomboideus* (Rydberg) Heiser  
*Heliomeris multiflora* Nuttall [*Gymnolomia multiflora* (Nutt.) Bentham & Hooker; *Viguiera multiflora* (Nutt.) Blake]  
*Heterotheca fulcrata* (Greene) Shinnars GOLDEN ASTER. [*Chrysopsis fulcrata* Greene]  
*Heterotheca villosa* (Pursh) Shinnars var. *villosa* GOLDEN ASTER. [*Chrysopsis villosa* (Pursh) Nuttall ex De Candolle]  
*Lactuca canadensis* L. CANADIAN WILD LETTUCE.  
*Lactuca serriola* L. PRICKLY LETTUCE. Adventive.  
*Liatris punctata* Hooker BLAZING STAR.  
*Ligularia pudica* (Greene) Weber [*Senecio pudicus* Greene] +

*Machaeranthera pattersonii* (Gray) Greene TANSY ASTER. [*Aster pattersonii* Gray] +  
*Nothocalais cuspidata* (Pursh) Greene FALSE DANDELION. [*Microseris cuspidata* (Pursh) Schultz-Bipontinus]  
*Oligoneuron rigidum* (L.) Small STIFF GOLDENROD. [*Solidago rigida* L.]  
*Oligosporus dracuncululus* (L.) Poljakov WILD TARRAGON. [*Artemisia dracunculoides* Pursh]  
*Oligosporus pacificus* (Nuttall) Poljakov WESTERN SAGEWORT. [*O. campestris* (L.) ssp. *pacificus* (Nutt.) Weber; *Artemisia campestris* L.; *A. pacifica* Nutt.]  
*Oreochrysum parryi* (Gray) Rydberg PARRY GOLDENROD. [*Haplopappus parryi* Gray]  
*Packera fendleri* (Gray) Weber & Löve FENDLER'S SENECIO. [*Senecio fendleri* Gray]  
*Packera plattensis* (Nuttall) Weber & Löve [*Senecio plattensis* Nutt.]  
*Pericome caudata* Gray var. *caudata*  
*Podospermum laciniatum* (L.) De Candolle FALSE SALSIFY. [*Scorzonera laciniata* L.] Adventive.  
*Psilochenia occidentalis* (Nuttall) Nuttall WESTERN HAWKSBEARD. [*Crepis occidentalis* Nutt.]  
*Ratibida columnifera* (Nuttall) Wootton & Standley PRAIRIE CONEFLOWER.  
*Rudbeckia ampla* Nelson TALL CONEFLOWER. [*R. laciniata* L. var. *ampla* (Nelson) Cronquist]  
*Senecio eremophilus* Richardson ssp. *kingii* (Rydb.) Douglas & Ruyle-Douglas WESTERN GOLDEN WEED. +  
*Senecio integerrimus* Nuttall SPRING SENECIO.  
*Senecio rapifolius* Nuttall TURNIP-LEAVED SENECIO. +  
*Senecio spartioides* Torrey & Gray BROOM SENECIO.  
*Solidago missouriensis* Nuttall SMOOTH GOLDENROD.  
*Solidago mollis* Bartling SOFT GOLDENROD. +  
*Solidago nana* Nuttall LOW GOLDENROD.  
*Solidago nemoralis* Aiton WOODLAND GOLDENROD.  
*Solidago serotinoidea* Löve & Löve LATE GOLDENROD. [*S. gigantea* Aiton] +  
*Sonchus asper* (L.) Hill SPINY SOW-THISTLE. Adventive. +  
*Taraxacum officinale* G.H. Weber COMMON DANDELION. Adventive.  
*Thelesperma megapotamicum* (Sprengel) Kuntze +  
*Townsendia grandiflora* Nuttall SHOWY EASTER DAISY.  
*Townsendia hookeri* Beaman  
*Tragopogon dubius* Scopoli ssp. *major* (Jacquin) Vollmann SALSIFY. Adventive.  
*Tragopogon porrifolius* L. Adventive.  
*Virgulus falcatus* (Lindley) Reveal & Keener [*Aster falcatus* Lindley]  
*Xanthium strumarium* L. COCKLEBUR. Adventive.

#### BALSAMINACEAE JEWEL-WEED FAMILY

*Impatiens capensis* Meerburgh JEWEL-WEED. +

#### BERBERIDACEAE BARBERRY FAMILY

*Mahonia repens* (Lindley) Don OREGON GRAPE.

#### BETULACEAE BIRCH FAMILY

*Alnus incana* (L.) Moench ssp. *tenuifolia* (Nuttall) Breitung ALDER. [*A. tenuifolia* Nutt.]  
*Betula fontinalis* Sargent RIVER BIRCH. [*B. occidentalis* Hooker]  
*Corylus cornuta* Marshall HAZLENUT.

## BORAGINACEAE BORAGE FAMILY

- Asperugo procumbens* L. MADWORT. Adventive.  
*Cynoglossum officinale* L. HOUND'S TONGUE. Adventive.  
*Hackelia floribunda* (Lehmann) Johnston STICKSEED.  
*Lappula redowskii* (Hornemann) Greene BEGGARS TICK.  
*Lithospermum incisum* Lehmann NARROW-LEAVED PUCCOON.  
*Lithospermum multiflorum* Torrey ex Gray MANY-FLOWERED PUCCOON.  
*Mertensia ciliata* (James ex Torrey) Don BLUEBELLS.  
*Mertensia lanceolata* (Pursh) De Candolle var. *lanceolata* BLUEBELLS.  
*Myosotis scorpioides* L. FORGET-ME-NOT. Adventive.  
*Onosmodium molle* Michaux ssp. *occidentale* (Mackenzie) Cochrane FALSE GROMWELL.  
*Oreocarya virgata* (Porter) Greene MINER'S CANDLE. [*Cryptantha virgata* (Porter) Payson]

## BRASSICACEAE/CRUCIFERAE MUSTARD FAMILY

- Alyssum alyssoides* L. ALYSSUM. Adventive.  
*Alyssum parviflorum* Bieberstein ALYSSUM. [*A. minus* (L.) Rothmaler] Adventive.  
*Arabis hirsuta* (L.) Scopoli HAIRY ROCK CRESS.  
*Barbarea orthoceras* Ledebour WINTERCRESS. Adventive.  
*Boechera fendleri* (Watson) Weber FENDLER'S ROCK CRESS. [*Arabis fendleri* Watson]  
*Camelina microcarpa* Andrzejowski FALSE FLAX. Adventive.  
*Capsella bursa-pastoris* (L.) Medicus SHEPHERDS PURSE. Adventive.  
*Cardaria chalapensis* (L.) Handel-Mazzetti WHITETOP. Adventive. +  
*Chorispora tenella* (Pallas) DeCandolle PURPLE MUSTARD. Adventive.  
*Descurainia incana* (Bernardhi ex Fischer & Meyer) Dorn WESTERN TANSY MUSTARD. [*D. richardsonii* (Sweet) Schultz]  
*Erysimum capitatum* (Douglas) Greene WESTERN WALLFLOWER.  
*Lepidium virginicum* L. PEPPERGRASS. Adventive.  
*Lesquerella montana* (Gray) Watson MOUNTAIN BLADDER-POD.  
*Neolepia campestre* (L.) Weber FIELD CRESS. [*Lepidium campestre* (L.) R. Brown] Adventive.  
*Noccaea montana* (L.) Meyer WILD CANDYTUFT. [*Thlaspi montanum* L.]  
*Physaria vitulifera* Rydberg DOUBLE BLADDER-POD. +  
*Sisymbrium altissimum* L. JIM HILL MUSTARD. Adventive.  
*Thlaspi arvense* L. PENNY CRESS. Adventive.  
*Turritis glabra* L. TOWER MUSTARD. [*Arabis glabra* (L.) Bernhardt] Adventive.

## CACTACEAE CACTUS FAMILY

- Coryphantha missouriensis* (Sweet) Britton & Rose NIPPLE CACTUS. [*Mammillaria missouriensis* Sweet]  
*Echinocereus viridiflorus* Engelm. GREEN FLOWERED HEDGEHOG CACTUS.  
*Opuntia fragilis* (Nuttall) Haworth BRITTLE CACTUS.  
*Opuntia macrorhiza* Engelm. PRICKLY PEAR CACTUS. [*O. compressa* (Salisbury) Macbride]  
*Pediocactus simpsonii* (Engelmann) Britton & Rose MOUNTAIN BALL CACTUS.

## CALOCHORTACEAE MARIPOSA FAMILY (LILIACEAE)

- Calochortus gunnisonii* Watson MARIPOSA LILY.



CAMPANULACEAE BELL FLOWER FAMILY

*Campanula rotundifolia* L. HAREBELL.

CANNABACEAE HOPS FAMILY

*Humulus lupulus* L. ssp. *americanus* (Nuttall) Löve & Löve WILD HOPS. [*H. americanus* Nutt.]

CAPPARACEAE CAPER FAMILY

*Polanisia dodecandra* (L.) de Candolle CLAMMY WEED. [*P. trachysperma* T. & G] +

CAPRIFOLIACEAE HONEYSUCKLE FAMILY

*Symphoricarpos albus* (L.) Blake WHITE SNOWBERRY.

*Symphoricarpos occidentalis* Hooker WESTERN SNOWBERRY.

*Viburnum lentago* L. NANNYBERRY. Adventive.

CARYOPHYLLACEAE PINK FAMILY

(see also ALSINACEAE)

*Silene antirrhina* L. SLEEPY CATCHFLY. Adventive. +

*Gastrolychnis drummondii* (Hooker) Löve & Löve CAMPION. [*Lychnis drummondii* (Hook.) Watson]

*Saponaria officinalis* L. SOAPWORD. Adventive. +

CHENOPODIACEAE GOOSEFOOT FAMILY

*Bassia sieversiana* (Pallas) Weber BURNING BUSH. [*Kochia iranica* of the Colorado literature]  
Adventive.

*Chenopodium fremontii* Watson

*Chenopodium leptophyllum* (Nuttall ex Moquin) Watson

COMMELINACEAE SPIDERWORT FAMILY

*Tradescantia occidentalis* (Britton) Smyth var. *scopulorum* (Rose) Anderson & Woodson SPIDERWORT.

CONVALLARIACEAE MAYFLOWER FAMILY

(LILIACEAE)

*Maianthemum amplexicaule* (Nuttall) Weber FALSE SOLOMON'S SEAL. [*Smilacina racemosa* of the Colorado literature]

*Maianthemum stellatum* (L.) Link FALSE SOLOMON'S SEAL. [*Smilacina stellata* (L.) Desfontaines]

CONVOLVULACEAE MORNINGGLORY FAMILY

*Convolvulus arvensis* L. BINDWEED. Adventive.

COPTACEAE MEADOW RUE FAMILY

(RANUNCULACEAE)

*Thalictrum fendleri* Engelmann ex Gray MEADOW RUE.

CORNACEAE DOGWOOD FAMILY

*Swida sericea* (L.) Holub RED OSIER DOGWOOD. [*Cornus stolonifera* Michaux]

CRASSULACEAE STONECROP FAMILY

*Amerosedum lanceolatum* (Torrey) Löve & Löve STONECROP. [*Sedum lanceolatum* Torrey]

CYPERACEAE SEDGE FAMILY

*Carex brevior* (Dewey) Mackenzie

*Carex foenea* Willdenow [*C. siccata* Dewey] +

*Carex lanuginosa* Michaux

*Carex microptera* Mackenzie [*C. festiva* Dewey]

*Carex nebrascensis* Dewey

*Carex occidentalis* Bailey

*Carex pennsylvanica* Lamarck ssp. *heliophila* (Mackenzie) Weber [*C. heliophila* Mackenzie]

*Carex praegracilis* Boott

*Carex rossii* Boott +

*Carex scoparia* Schkuhr ex Willdenow

*Carex stenophylla* Wahlenberg ssp. *eleocharis* (Bailey) Hultén [*C. eleocharis* Bailey]

*Carex stipata* Mühlenberg ex Willdenow

*Carex vulpinoidea* Michaux

*Eleocharis palustris* (L.) Roemer & Schultes SPIKE RUSH. [*E. macrostachya* Britton]

*Schoenoplectus lacustris* (L.) Palla ssp. *acutus* (Mühlenberg) Löve & Löve [*Scirpus acutus* Mühl. ex Bigelow] +

*Schoenoplectus pungens* (Vahl) Palla TULE. [*Scirpus americanus* of Colorado literature] +

*Scirpus microcarpus* Presl BULRUSH. [*S. rubrotinctus* Fernald]

*Scirpus pallidus* (Britton) Fernald BULRUSH.

ELAEAGNACEAE OLEASTER FAMILY

*Elaeagnus angustifolia* L. RUSSIAN OLIVE. Adventive.

ERICACEAE HEATH FAMILY

(see also MONOTROPACEAE, PYROLACEAE)

*Arctostaphylos uva-ursi* (L.) Sprengel ssp. *adenotricha* (Fernald & Macbride) Calder & Taylor KINNIKINNIK, BEARBERRY.

EUPHORBIACEAE SPURGE FAMILY

*Agaloma marginata* (Pursh) Löve & Löve SNOW-ON-THE-MOUNTAIN. [*Euphorbia marginata* Pursh]

*Chamaesyce serpyllifolia* (Persoon) Small [*Euphorbia serpyllifolia* Pers.] Adventive. +

*Poinsettia dentata* (Michaux) Klotsch & Garcke [*Euphorbia dentata* Michx.] \*

*Tithymalus brachyceras* (Engelmann) Small ROCKY MT. SPURGE. [*T. montanus* (Engelm.) Sm.; *Euphorbia robusta* of Colorado literature]

*Tithymalus uralensis* (Fischer ex Link) Prokhanov LEAFY SPURGE. [*Euphorbia uralensis* Fischer ex Link] Adventive. +

*Tragia ramosa* (Müller-Argoviensis) Torrey STINGING SPURGE.

## FABACEAE/LEGUMINOSAE PEA FAMILY

- Amorpha fruticosa* L. LEAD PLANT.  
*Amorpha nana* Nuttall DWARF AMORPHA.  
*Astragalus adsurgens* Pallas var. *robustior* Hooker [*A. striatus* Nuttall ex Torrey & Gray]  
*Astragalus agrestis* Douglas ex Don [*A. dasyglottis* of Colorado literature]  
*Astragalus crassicarpus* Nuttall GROUND PLUM.  
*Astragalus drummondii* Douglas ex Hooker DRUMMOND'S MILK VETCH.  
*Astragalus flexuosus* (Hooker) Don WIRY MILK VETCH.  
*Astragalus shortianus* Nuttall in Torrey & Gray  
*Astragalus tenellus* Pursh LOOSE FLOWERED MILK VETCH.  
*Dalea candida* Willdenow var. *oligophylla* (Torrey) Shinnery WHITE PRAIRIE CLOVER.  
*Dalea purpurea* Ventenat PURPLE PRAIRIE CLOVER.  
*Glycyrrhiza lepidota* Pursh WILD LICORICE.  
*Lathyrus leucanthus* Rydberg WHITE FLOWERED PEAVINE.  
*Lotus tenuis* Waldstein & Kitaibel BIRDSFOOT TREFOIL. Adventive.  
*Lupinus argenteus* Pursh COMMON LUPINE.  
*Medicago lupulina* L. BLACK MEDIC. Adventive.  
*Medicago sativa* L. ALFALFA. Adventive.  
*Melilotus albus* Medicus WHITE SWEET CLOVER. Adventive.  
*Melilotus officinalis* (L.) Pallas YELLOW SWEET CLOVER. Adventive.  
*Oxytropis lamberti* Pursh COLORADO LOCO.  
*Psoralidium tenuiflora* (Pursh) Rydberg [*Psoralea tenuiflora* Pursh]  
*Thermopsis divaricarpa* Nelson GOLDEN BANNER.  
*Trifolium fragiferum* L. STRAWBERRY CLOVER. Adventive.  
*Trifolium pratense* L. RED CLOVER. Adventive.  
*Trifolium repens* L. WHITE DUTCH CLOVER. Adventive.  
*Vicia americana* Mühlenberg AMERICAN VETCH.

## FUMARIACEAE FUMITORY FAMILY

- Corydalis aurea* Willdenow ssp. *aurea* GOLDEN SMOKE.

## GENTIANACEAE GENTIAN FAMILY

- Frasera speciosa* Douglas ex Grisebach MONUMENT PLANT, GREEN GENTIAN.  
*Pneumonanthe affinis* (Grisebach) Greene BOTTLE GENTIAN. [*Gentiana affinis* Gris. in Hooker]

## GERANIACEAE GERANIUM FAMILY

- Erodium cicutarium* (L.) L'Heritier STORKSBILL. Adventive.  
*Geranium caespitosum* James COMMON GERANIUM.

## GROSSULARIACEAE CURRANT or GOOSEBERRY FAMILY

- Ribes aureum* Pursh GOLDEN CURRANT.  
*Ribes cereum* Douglas WAX CURRANT.  
*Ribes inerme* Rydberg COMMON GOOSEBERRY.

**HELLEBORACEAE HELLEBORE FAMILY**  
(**RANUNCULACEAE**)

*Delphinium carolinianum* Walter ssp. *virescens* (Nuttall) Johnston PLAINS LARKSPUR. [*D. virescens* Nutt.]

*Delphinium nuttallianum* Pritzel BLUE LARKSPUR. [*D. nelsonii* Greene]

**HYDRANGEACEAE HYDRANGEA FAMILY**

*Jamesia americana* Torrey & Gray WAXFLOWER.

**HYDROPHYLLACEAE WATERLEAF FAMILY**

*Hydrophyllum fendleri* (Gray) Heller WATERLEAF.

*Phacelia heterophylla* Pursh SCORPION WEED.

**HYPERICACEAE ST. JOHNSWORT FAMILY**

*Hypericum perforatum* L. KLAMATH WEED. Adventive.

**IRIDACEAE IRIS FAMILY**

*Iris missouriensis* Nuttall WILD IRIS.

*Sisyrinchium montanum* Greene BLUE-EYED-GRASS.

**JUNCACEAE RUSH FAMILY**

*Juncus arcticus* Willdenow ssp. *ater* (Rydb.) Hultén

*Juncus articulatus* L. Adventive.

*Juncus bufonius* L. TOAD RUSH.

*Juncus compressus* Jacquin Adventive.

*Juncus confusus* Coville

*Juncus dudleyi* Wiegand [*J. tenuis* Willdenow] \*

*Juncus interior* Wiegand +

*Juncus longistylis* Torrey

*Juncus saximontanus* Nelson

*Luzula parviflora* (Ehrhart) Desvaux WOOD RUSH.

**LAMIACEAE/LABIATAE MINT FAMILY**

*Lycopus americanus* Mühlenberg ex Barton WATER HOREHOUND.

*Mentha arvensis* L. FIELD MINT.

*Mentha spicata* L. SPEARMINT. Adventive. +

*Monarda fistulosa* L. var. *menthifolia* (Graham) Fernald PINK BERGAMOT.

*Nepeta cataria* L. CATNIP. Adventive.

*Prunella vulgaris* L. HEAL-ALL.

*Salvia reflexa* Homemann LANCE LEAVED SAGE. Adventive.

*Scutellaria brittonii* Porter BRITTON SKULLCAP.

*Teucrium canadense* L. var. *occidentalis* GERMANDER.

LEMNACEAE DUCKWEED FAMILY

*Lemna minor* L. DUCKWEED.

LILIACEAE LILY FAMILY

(see also ALLIACEAE, CONVALLARIACEAE, CALOCHORTACEAE,  
MELIANTHIACEAE, and UVULARIACEAE)

*Leucocrinum montanum* Nuttall ex Torrey & Gray SAND LILY.

LINACEAE FLAX FAMILY

*Adenolinum lewisii* (Pursh) Löve & Löve WILD FLAX. [*Linum lewisii* Pursh]

LOASACEAE LOASA FAMILY

*Acrolasia dispersa* (Watson) Davidson [*Mentzelia dispersa* Wats.] +  
*Nuttallia sinuata* (Rydberg) Daniels [*Mentzelia sinuata* (Rydb.) Hill] +  
*Nuttallia speciosa* (Osterhout) Greene [*Mentzelia speciosa* Osterhout] +

MALVACEAE MALLOW FAMILY

*Malva neglecta* Wallroth MALLOW. Adventive.  
*Sphaeralcea coccinea* (Pursh) Rydberg COPPER MALLOW.

MELANTHIACEAE FALSE HELLEBORE FAMILY  
(LILIACEAE)

*Toxicoscordion venenosum* (Watson) Rydberg DEATH CAMAS. [*Zigadenus gramineus* Rydb.; *Z. venenosus* Watson]

MONOTROPACEAE PINESAP FAMILY  
(ERICACEAE)

*Pterospora andromeda* Nuttall PINEDROPS. +

NYCTAGINACEAE FOUR O'CLOCK FAMILY

*Oxybaphus hirsutus* (Pursh) Sweet in De Candolle HAIRY UMBRELLAWORT. [*Mirabilis hirsuta* (Pursh)  
MacMillan]  
*Oxybaphus linearis* (Pursh) Robinson NARROW LEAVED UMBRELLAWORT. [*Mirabilis linearis* (Pursh)  
Heimerl]  
*Oxybaphus nyctagineus* (Michaux) Porter HEART-LEAVED UMBRELLAWORT. [*Mirabilis nyctaginea* (Mich.)  
MacMillan] +

ONAGRACEAE EVENING-PRIMROSE FAMILY

*Calylophus serrulatus* (Nuttall) Raven [*Oenothera serrulata* Nutt.]  
*Chamerion danielsii* Löve FIREWEED. [*C. angustifolium* and/or *Epilobium angustifolium* of Colorado literature]  
*Circaea alpina* L. ssp. *pacifica* (Ascherson & Magnus) Raven ENCHANTERS NIGHTSHADE.  
*Epilobium brachycarpum* Presl ANNUAL WILLOW HERB. [*E. paniculatum* Nuttall]  
*Epilobium ciliatum* Rafinesque ssp. *glandulosum* (Lehmann) Hoch & Raven NORTHERN WILLOW HERB. [E.

*adenocaulon* Haussknecht]  
*Gaura coccinea* Nuttall ex Pursh SCARLET GAURA.  
*Gaura parviflora* Douglas ex Lehmann  
*Oenothera caespitosa* Nuttall WHITE STEMLESS EVENING PRIMROSE. +  
*Oenothera villosa* Thunberg ssp. *strigosa* (Rydberg) Dietrich & Raven COMMON EVENING PRIMROSE. [*O. strigosa*  
(Rydberg) Mackenzie & Bush]

#### ORCHIDACEAE ORCHID FAMILY

*Corallorhiza maculata* Rafinesque SPOTTED CORAL ROOT.  
*Corallorhiza striata* Lindley STRIPED CORAL ROOT.  
*Corallorhiza wisteriana* Conrad SPRING CORAL ROOT.  
*Limnorchis hyperborea* (L.) Rydberg NORTHERN BOG ORCHID. [*Habenaria hyperborea* (L.) Brown] +  
*Spiranthes diluvialis* Sheviak UTE LADY TRESSES.

#### OROBANCHACEAE BROOMRAPE FAMILY

*Aphyllon fasciculatum* (Nuttall) Torrey & Gray BROOMRAPE. [*Orobanche fasciculata* Nutt.]  
*Aphyllon uniflorum* (L.) Torrey & Gray BROOMRAPE. [*Orobanche uniflora* L.]

#### OXALIDACEAE WOOD SORREL FAMILY

*Oxalis dillenii* Jacquin WOOD SORREL.

#### PAPAVERACEAE POPPY FAMILY

*Argemone polyanthemus* (Fedde) Ownbey PRICKLY POPPY. [*A. intermedia* Sweet]  
*Papaver orientale* L. ORIENTAL POPPY. Adventive.

#### PLANTAGINACEAE PLANTAIN FAMILY

*Plantago lanceolata* L. ENGLISH PLANTAIN. Adventive.  
*Plantago major* L. COMMON PLANTAIN. Adventive.  
*Plantago patagonica* Jacquin WOOLY PLANTAIN. Adventive. +

#### POACEAE/GRAMINEAE GRASS FAMILY

*Agropyron cristatum* (L.) Gaertner ssp. *desertorum* (Fischer) Löve & Löve CRESTED WHEAT GRASS. [*A. desertorum* (Fisch.) Schultes] Adventive.  
*Agrostis gigantea* Roth RED TOP. Adventive.  
*Agrostis scabra* Willdenow TICKLEGRASS. +  
*Andropogon gerardii* Vitman BIG BLUESTEM.  
*Anisantha tectorum* (L.) Nevski CHEAT GRASS. [*Bromus tectorum* L.] Adventive.  
*Aristida purpurea* Nuttall THREE AWN. [Including *A. fendleriana* Steudel, *A. harvardii* Vasey, *A. longiseta* Steudel, *A. wrightii* Nash]  
*Arrhenatherum elatius* (L.) Presl TALL OAT GRASS. Adventive.  
*Bouteloua curtipendula* (Michaux) Torrey SIDE-OATS GRAMA.  
*Bromopsis inermis* (Leysser) Holub SMOOTH BROME. [*Bromus inermis* Leysser] Adventive.  
*Bromopsis lanatipes* (Shear) Holub BROME. [*Bromus lanatipes* Shear; *B. anomalus* Ruprecht ex Fournier var *lanatipes*]  
*Bromus briziformis* Fischer & Meyer RATTLESNAKE GRASS. Adventive.

*Bromus japonicus* Thunberg JAPANESE BROME. Adventive.  
*Buchloë dactyloides* (Nuttall) Engelman BUFFALO GRASS.  
*Ceratochloa carinata* (Hooker & Arnott) Tutin RESCUE GRASS. [*Bromus carinatus* Hook. & Arnott]  
*Chondrosium gracile* Humboldt, Bonpland, & Kunth BLUE GRAMA. [*Bouteloua gracilis* (H.B. & K.) Lagasca ex Griffiths]  
*Chondrosium hirsutum* (Lagasca) Sweet HAIRY GRAMA. [*Bouteloua hirsuta* Lag.]  
*Critesion jubatum* (L.) Nevski FOXTAIL BARLEY. [*Hordeum jubatum* L.]  
*Cylindropyrum cylindricum* (Host) Löve GOAT GRASS. [*Aegilops cylindrica* Host] Adventive.  
*Dactylis glomerata* L. ORCHARD GRASS. Adventive.  
*Danthonia spicata* (L.) Beauvois POVERTY OAT GRASS.  
*Dichanthelium oligosanthes* (Schultes) Gould var. *scribnerianum* (Nash) Gould [*Panicum scribnerianum* Nash] +  
*Elymus canadensis* L. CANADA WILD RYE.  
*Elymus glaucus* Buckley BLUE WILD RYE.  
*Elymus lanceolatus* (Scribner & Smith) Gould [*Agropyron albicans* Scrib. & Sm.; *Elytrigia albicans* (Scrib. & Sm.) Weber] +  
*Elymus longifolius* (Smith) Gould SQUIRREL TAIL. [*Sitanion longifolium* Smith]  
*Elymus trachycaulus* (Link) Gould SLENDER WHEATGRASS. [*Agropyron trachycaulum* (Link) Malte]  
*Elytrigia repens* (L.) Nevski QUACK GRASS. [*Agropyron repens* (L.) Beauvois] Adventive.  
*Festuca pratensis* Hudson MEADOW FESCUE. [*F. elatior* L.] Adventive.  
*Festuca saximontana* Rydberg +  
*Glyceria elata* (Nash ex Rydberg) Hitchcock TALL MANNA GRASS.  
*Glyceria striata* (Lamarck) Hitchcock FOWL MANNA GRASS.  
*Koeleria macrantha* (Ledebour) Schultes JUNE GRASS. [*K. cristata* (L.) Persoon, *K. gracilis* Pers.]  
*Leucopoa kingii* (Watson) Weber SPIKE FESCUE. [*Hesperochloa kingii* (Watson) Rydberg]  
*Leymus ambiguus* (Vasey & Scribner) Dewey COLORADO WILD RYE. [*Elymus ambiguus* Vasey & Scribner]  
*Muhlenbergia asperifolia* (Nees & Meyen ex Trinius) Parodi ALKALI MUHLY.  
*Muhlenbergia montana* (Nuttall) Hitchcock MOUNTAIN MUHLY.  
*Muhlenbergia racemosa* (Michaux) Britton, Stearns, & Poggenberg MARSH MUHLY. +  
*Muhlenbergia wrightii* Vasey SPIKE MUHLY.  
*Oryzopsis asperifolia* Michaux ROUGH-LEAVED RICEGRASS. +  
*Oryzopsis micrantha* (Trinius & Ruprecht) Thurber LITTLESEED RICEGRASS.  
*Panicum virgatum* L. SWITCHGRASS.  
*Pascopyrum smithii* (Rydberg) Löve WESTERN WHEATGRASS. [*Agropyron smithii* Rydberg]  
*Phalaroides arundinacea* (L.) Rauschert REED CANARY GRASS. [*Phalaris arundinacea* L.] Adventive.  
*Phleum pratense* L. TIMOTHY. Adventive.  
*Poa agassizensis* Boivin & D. Löve BLUEGRASS.  
*Poa bulbosa* L. BULBOUS BLUEGRASS.  
*Poa compressa* L. CANADA BLUEGRASS. Adventive(?).  
*Poa fendleriana* (Steudel) Vasey MUTTONGRASS. +  
*Poa nemoralis* L. ssp. *interior* (Rydberg) Butters & Abbe [*P. interior* Rydb.]  
*Poa pratensis* L. KENTUCKY BLUEGRASS. Adventive.  
*Puccinellia airoides* Watson & Coulter ALKALI GRASS. [*P. nuttalliana* of literature]  
*Schizachyrium scoparium* (Michaux) Nash LITTLE BLUESTEM. [*Andropogon scoparius* Michaux]  
*Sorghastrum avenaceum* (Michaux) Nash INDIAN GRASS. [*S. nutans* (L.) Nash]  
*Sporobolus heterolepis* (Gray) Gray PRAIRIE DROPSEED.  
*Stipa comata* Trinius & Ruprecht NEEDLE-AND-THREAD.  
*Stipa nelsonii* Scribner NEEDLEGRASS. [*S. columbiana* Macoun]  
*Stipa viridula* Trinius GREEN NEEDLEGRASS.  
*Thinopyrum intermedium* (Host) Barkworth & Dewey WHEAT GRASS. [*Agropyron intermedium* (Host) Beauvois; *Elytrigia intermedia* (Host) Nevski] Adventive.

*Vulpia octoflora* (Walter) Rydberg SIX WEEKS FESCUE. [*Festuca octoflora* Walt.]

#### POLEMONIACEAE PHLOX FAMILY

*Collomia linearis* Nuttall NARROWLEAVED COLLOMIA.

*Ipomopsis aggregata* (Pursh) Grant ssp. *candida* (Rydberg) Grant & Grant GILIA. [*Gilia candida* Rydb.;

*I. candida* (Rydb.) Wherry]

*Ipomopsis spicata* (Nuttall) Grant SPIKE GILIA. [*Gilia spicata* Nutt.]

*Microsteris gracilis* (Douglas ex Hooker) Greene ssp. *humilis* (Greene) Grant [*M. humilis* (Doug. ex Hook.) Greene]

*Phlox multiflora* Nelson MANY-FLOWERED PHLOX.

#### POLYGONACEAE BUCKWHEAT FAMILY

*Acetosella vulgaris* (Koch) Fourreau SHEEP SORREL. [*Rumex acetosella* L.] Adventive.

*Eriogonum effusum* Nuttall

*Eriogonum jamesii* Bentham var. *flavescens* Watson +

*Eriogonum umbellatum* Torrey SULPHUR FLOWER.

*Polygonum arenastrum* Boreau DEVIL'S SHOESTRING. [*P. aviculare*, *P. rurivagum* of many authors] Adventive.

*Polygonum douglasii* Greene DOUGLAS KNOTWEED. [*P. montanum* (Small) Greene, *P. sawatchense* Small]

*Pterogonum alatum* (Torrey) Gross WINGED BUCKWHEAT. [*Eriogonum alatum* Torrey]

*Rumex crispus* L. CURLY DOCK. Adventive.

#### PORTULACAEAE PURSLANE FAMILY

*Claytonia rosea* Rydberg SPRING BEAUTY. [*C. lanceolata* Pursh]

#### PRIMULACEAE PRIMROSE FAMILY

*Androsace septentrionalis* L. ROCK PRIMROSE.

*Dodecatheon pulchellum* (Rafinesque) Merrill SHOOTING STAR.

*Lysimachia ciliata* L. FRINGED LOOSESTRIFE. [*Steironema ciliatum* (L.) Rafinesque] \*

#### PYROLACEAE WINTERGREEN FAMILY

*Chimaphila umbellata* (L.) Barton ssp. *occidentalis* (Rydberg) Hultén PIPSISSEWA.

*Orthilia secunda* (L.) House ONE-SIDED WINTERGREEN. [*Pyrola secunda* L.; *Ramischia secunda* (L.) Garcke] +

*Pyrola chlorantha* Swartz GREEN-FLOWERED PYROLA. [*P. virens* Schweigge] +

#### RANUNCULACEAE BUTTERCUP FAMILY

(see also COPTACEAE and HELLEBORACEAE)

*Anemone cylindrica* Gray THIMBLEWEED.

*Atragene occidentalis* Hornemann BLUE CLEMATIS. [*Clematis occidentalis* (Hornemann) DeCandolle, *C. columbiana* of Colorado literature]

*Batrachium circiniatum* (Sibthorp) Fries WATER CROWFOOT. [*Ranunculus circiniatus* Sib.]

*Clematis ligusticifolia* Nuttall VIRGIN'S BOWER.

*Coriflora hirsutissima* (Pursh) Weber SUGARBOWLS. [*Clematis hirsutissima* Pursh]

*Pulsatilla patens* (L.) Miller ssp. *multifida* (Pritzel) Zamels PASQUE FLOWER. [*P. ludoviciana* (Nuttall) Heller;



*Anemone patens* L.]  
*Ranunculus abortivus* L. ssp. *acrolasius* (Fernald) Kapoor SMALL FLOWERED CROWFOOT.  
*Ranunculus acriformis* Gray SHARP BUTTERCUP. +  
*Ranunculus macounii* Britton MACOUN'S BUTTERCUP.

#### RHAMNACEAE BUCKTHORN FAMILY

*Ceanothus fendleri* Gray BUCKBRUSH.  
*Ceanothus herbaceus* Rafinesque REDROOT. [*C. ovarius* Desfontaines]  
*Ceanothus velutinus* Douglas ex Hooker STICKY LAUREL.

#### ROSACEAE ROSE FAMILY

*Agrimonia striata* Michaux AGRIMONY.  
*Amelanchier alnifolia* Nuttall SERVICEBERRY.  
*Cerasus pennsylvanica* (L.) Loiseleur PIN CHERRY. [*Prunus pennsylvanica* L.]  
*Cercocarpus montanus* Rafinesque MOUNTAIN-MAHOGONY.  
*Crataegus erythropoda* Ashe HAWTHORN. +  
*Crataegus macracantha* Loddiges var. *occidentalis* (Britton) Eggleston HAWTHORN. [*C. succulenta* of Colorado literature]  
*Drymocallis fissa* (Nuttall) Rydberg [*Potentilla fissa* Nutt.]  
*Fragaria vesca* L. ssp. *bracteata* (Heller) Staudt STRAWBERRY. [*F. americana* (Porter) Britton]  
*Geum aleppicum* Jacquin ssp. *strictum* (Aiton) Clausen YELLOW AVENS. [*G. strictum* Aiton]  
*Holodiscus dumosus* (Hooker) Heller OCEANSPRAY.  
*Malus domestica* Borkhausen APPLE. [*M. pumila* Miller] Adventive.  
*Oreobatus deliciosus* (James) Rydberg BOULDER RASPBERRY. [*Rubus deliciosus* James]  
*Padus virginiana* (L.) Miller ssp. *melanocarpa* (Nelson) Weber CHOKECHERRY. [*Prunus virginiana* L.]  
*Physocarpus monogynus* (Torrey) Coulter NINEBARK.  
*Potentilla hippiana* Lehmann WOOLY CINQUEFOIL.  
*Potentilla pensylvanica* L. PRAIRIE CINQUEFOIL.  
*Potentilla recta* L. Adventive.  
*Prunus americana* Marshall WILD PLUM.  
*Rosa woodsii* Lindley WILD ROSE.  
*Rubus idaeus* L. ssp. *melanolasius* (Dieck) Focke WILD RASPBERRY.

#### RUBIACEAE MADDER FAMILY

*Galium aparine* L. CLEAVERS. Adventive.  
*Galium septentrionale* Roemer & Schultes NORTHERN BEDSTRAW. [*G. boreale* of Colorado literature]

#### SALICACEAE WILLOW FAMILY

*Populus acuminata* Rydberg  
*Populus alba* L. WHITE POPLAR. Adventive. +  
*Populus angustifolia* James NARROWLEAF COTTONWOOD.  
*Populus deltoides* Marshall ssp. *monilifera* (Aiton) Eckenwalder PLAINS COTTONWOOD. [*P. sargentii* Dode]  
*Populus tremuloides* Michaux ASPEN.  
*Salix amygdaloides* Andersson PEACH LEAVED WILLOW.  
*Salix bebbiana* Sargent BEAKED WILLOW. [*S. depressa* of Colorado literature]  
*Salix exigua* Nuttall SANDBAR WILLOW.  
*Salix fragilis* L. CRACK WILLOW. Adventive.

*Salix irrorata* Andersson BLUESTEM WILLOW.

*Salix scouleriana* Barratt +

#### SANTALACEAE SANDALWOOD FAMILY

*Comandra umbellata* (L.) Nuttall ssp. *pallida* (De Candolle) Piehl BASTARD TOADFLAX. [*C. pallida* DC]

#### SAXIFRAGACEAE SAXIFRAGE FAMILY

*Ciliaria austromontana* (Weigand) Weber SPOTTED SAXIFRAGE. [*Saxifraga bronchialis* L. ssp. *austromontana* (Weig.) Piper]

*Heuchera bracteata* (Torrey) Seringe BRACTED ALUM ROOT.

*Heuchera parvifolia* Nuttall ex Torrey & Gray COMMON ALUM ROOT.

*Micranthes rhomboidea* (Greene) Small SNOWBALL SAXIFRAGE. [*Saxifraga rhomboidea* Greene]

#### SCROPHULARIACEAE FIGWORT FAMILY

*Besseyia plantaginea* (Bentham) Rydberg FOOTHILLS BESSEYA. +

*Castilleja linariifolia* Bentham in De Candolle WYOMING PAINTBRUSH.

*Castilleja miniata* Douglas ex Hooker SCARLET PAINTBRUSH.

*Castilleja sessiliflora* Pursh PLAINS PAINTBRUSH.

*Collinsia parviflora* Douglas in Lindley BABY-BLUE-EYES.

*Digitalis purpurea* L. FOXGLOVE. Adventive.

*Linaria genistifolia* (L.) Miller ssp. *dalmatica* (L.) Maire BUTTER AND EGGS. [*L. dalmatica* (L.) Miller] Adventive.

*Mimulus glabratus* H.B.K. SMOOTH MONKEY FLOWER.

*Penstemon glaber* Pursh SMOOTH PENSTEMON. [*P. alpinus* Torrey]

*Penstemon gracilis* Nuttall SLENDER PENSTEMON.

*Penstemon secundiflorus* Bentham in De Candolle ONE-SIDED PENSTEMON.

*Penstemon virens* Pennell ex Rydberg LOW PENSTEMON.

*Penstemon virgatus* Gray ssp. *asa-grayi* Crosswhite

*Scrophularia lanceolata* Pursh FIGWORT.

*Verbascum thapsus* L. MULLEIN. Adventive.

*Veronica americana* Schweintz ex Bentham AMERICAN BROOKLIME.

*Veronica catenata* Pennell Adventive.

#### SMILACACEAE SMILAX FAMILY

*Smilax lasioneuron* Hooker CARRION FLOWER. [*S. herbacea* L. var. *lasioneuron* (Hook.) De Candolle]

#### SOLANACEAE NIGHTSHADE FAMILY

*Physalis virginiana* Miller GROUND CHERRY. [*P. lanceolata* Michaux] +

*Solanum rostratum* Dunal BUFFALO BUR. Adventive.

#### TYPHACEAE CATTAIL FAMILY

*Typha latifolia* L. BROAD LEAVED CATTAIL.

ULMACEAE ELM FAMILY

*Celtis reticulata* Torrey HACKBERRY. [*C. occidentalis* L.]

*Ulmus pumila* L. SIBERIAN ELM. Adventive.

URTICACEAE NETTLE FAMILY

*Parietaria pensylvanica* Mühlenberg ex Willdenow PELLITORY.

*Urtica gracilis* Aiton STINGING NETTLE. [*U. dioica* L. var. *gracilis* Aiton; *U. gracilentata* Greene]

VERBENACEAE VERVAIN FAMILY

*Phyla cuneifolia* (Torrey) Greene FOG FRUIT. \*

*Verbena bracteata* Lagasca & Rodriguez VERVAIN. Adventive.

VIOLACEAE VIOLET FAMILY

*Viola nuttallii* Pursh YELLOW VIOLET.

*Viola pedatifida* Don BIRDFOOT VIOLET.

*Viola rydbergii* Greene [*V. rugulosa* and *V. canadensis* of the Colorado literature]

*Viola scopulorum* (Gray) Greene [*V. canadensis* L. var. *scopulorum* Gray]

VISCACEAE DWARF MISTLETOE FAMILY

*Arceuthobium vaginatum* (Willdenow) Presl MISTLETOE.

VITACEAE GRAPE FAMILY

*Vitis riparia* Michaux WILD GRAPE. [*V. vulpina* of the Colorado literature]

ZYGOPHYLLACEAE CALTROP FAMILY

*Tribulus terrestris* L. PUNCTURE VINE. Adventive. \*

Floristic Summary

Families 97

Genera 324

Species 478

Adventives 90

Asteraceae 81 spp.

Poaceae 59

Fabaceae 26

Rosaceae 20

Brassicaceae 19