APPENDIX C:

VASCULAR PLANTS: ANNOTATED SPECIES LIST

In the following annotated species list, taxonomic nomenclature fol­
lows P.A. Munz's *A Southern California Flora* (1974), except where super­
seded by more recent publications, or where we have accepted Dr. Robert
F. Thorne's advice (pers. comm. 1978) and returned to an earlier name. In
these cases, each taxon is listed by the revised name with the name as
listed by Munz following in brackets.

The symbols that accompany some listed taxa are defined as follows:

- **naturalized exotic**
- *observed but not collected during GMRS field work*
- **neither collected nor observed during GMRS field work**

Relative abundance notations are ranked as follows:

- **rare** — sighted between two and five times; seemingly restricted to
  particular localities.
- **infrequent** — somewhat more widespread or locally common than rare,
  but generally scarce.
- **frequent** — often fairly widespread within a particular habitat, but
  of scattered distribution.
- **common** — widespread and conspicuous within a particular habitat or
  many habitats; regularly encountered.
- **abundant** — exceptionally plentiful or dense; very widespread or
  conspicuous.

Given elevational ranges are approximate, and incorporate our obser­
vations with the specimen data of other collectors.

Where locality names follow abundance and range descriptions (e.g.,
"Common on bajadas; Cove Spring, Cottonwood Basin"), they represent either
specimen collection sites or characteristic localities where future re­
searchers can expect to relocate the taxa.

In the cases where range and abundance are unknown or poorly known,
only the sites of specimen collections and observations are listed.

Flowering period notations have been taken from Munz (1974), and modified according to our knowledge of specific flowering periods in the Granite Mountains.

Most annotations end with a single-letter symbol denoting habit as follows:

A — annual
B — biennial
P — herbaceous perennial
S — shrub
T — tree
V — perennial vine

Common names have been taken from Munz (1962, 1974), from Jaeger (1969), and from known common usage.
VASCULAR PLANTS OF THE GRANITE MOUNTAINS

SUBDIVISION PTEROPSIDA
CLASS FILICAE
ORDER FILICALES

PTERIDACEAE

*Adiantum capillus-veneris* L. **Venus-Hair Fern*
Collected at Cove Spring in 1926 and 1930 by M.E. Jones, this species has not been sighted there since. These are the only records of this species in the eastern Mojave Desert.

*Cheilanthes covillei* Maxon. **Lip Fern*
Frequent in shady rock crevices; Cove and Snake Springs areas, Bull and Cottonwood Canyons.

*Cheilanthes viscosa* Davenp. *
Frequent in shady rock crevices; Cove, Snake, and Coyote Springs areas, and Cottonwood Canyon.

*Cheilanthes wootoni* Maxon. **Granite Pass area at about 4000'.

*Notholaena californica* D.C. Eat.
Found once at base of mountains between Granite Cove and Cove Spring. A Colorado Desert and cismontane species, this is the only record from the eastern Mojave Desert.

*Notholaena parryi* D.C. Eat. **Parry Cloak Fern*
Frequent in shady rock crevices; Bull, Willow Spring, and Budweiser Canyons, and Cove Spring area.

*Pellaea mucronata* (D.C. Eat.) D.C. Eat. **Bird's Foot Fern*
var. mucronata.
Frequent in dry rocky places; between Cove Spring and Granite Cove, Willow Spring Basin, Bull Canyon.

*Pityrogramma triangularis* (Kaulf.) Maxon var. maxoni Weath.
GOLDENBACK FERN
Frequent in moist shady places; Cove and Snake Springs areas, Willow Spring and upper Bull Canyons.

CLASS CONIFERAES
ORDER CONIFERALES

CUPRESSACEAE

*Juniperus californica* Carr. **California Juniper*
Granite Pass, Cove Spring areas. Vasek (1977) reports this as the north-eastern distributional limit of this species. S-T

*Juniperus osteosperma* (Torr.) Little. **Utah Juniper*
Common on slopes between 4000' and 6780'. T
**PINACEAE**

*Pinus monophylla* Torr. & Frem.
Common on slopes between 4000' and 6780'. Occasional trees exhibit a partial two-needle condition. T

**CLASS Gnetae**

**ORDER Ephedrales**

**EPHEDRACEAE**

*Ephedra aspera* Engelm. ex Wats.  
MORMON-TEA  
Frequent on bajadas and rocky slopes at south side of range at about 4000'; Budweiser Canyon, Willow Spring Basin. S

*Ephedra californica* Wats.  
On bajadas, slopes and washes from Budweiser Spring to Granite Pass and north bajada at about 4000'. S

*Ephedra nevadensis* Wats.  
On bajadas and dry slopes; Cove and Snake Springs areas. S

*Ephedra viridis* Cov.  
Common on slopes and bajadas above 4000'; Pinyon-Juniper Woodland. S

**CLASS ANGIOSPERMAE**

**SUBCLASS Dicotyledones**

**Aizoaceae**

*Mollugo cerviana* (L.) Ser. + **  
INDIAN-CHICKWEED  
Budweiser Canyon, Wash and Spring areas; east of Willow Spring Basin on sand at 3800'. Sept.-March. A

**Amaranthaceae**

*Amaranthus fimbriatus* (Torr.) Benth. **  
In low spots on eastern and southern bajadas at about 4000'; Cottonwood Spring and Wash, Budweiser and Willow Spring areas. Aug.-Nov. A

**Anacardiaceae**

*Rhus trilobata* Nutt. ex T. & G. var. *anisophylla* (Greene) Jeps.  
SQUAW BUSH  
Common along wash margins and in canyons between 4000' and 5000'. March-April. S

**Apiaceae**

*Cymopterus panamintensis* Coult. & Rose ** var. *acutifolius* (Coul. & Rose) Munz.  
Budweiser Wash and Canyon. March-April. P

*Lomatium parryi* (Wats.) Macbr.  
WILD-PARSLEY  
Frequent in shady places from 4000' to 6000'. May-June. P

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APOCYNACEAE

Amsonia brevifolia Gray
var. brevifolia.
Infrequent in sandy washes near mouth of Bull Canyon at about 2700'. March-May. P
var. tomentosa (Torr. & Frem.) Jeps. [A. tomentosa Torr. & Frem.]
Infrequent in sandy washes near mouth of Bull Canyon at about 2700'. Found with var. brevifolia. March-May. P

ASCLEPIADACEAE

Asclepias erosa Torr.
DESERT MILKWEED
Infrequent in sandy washes below 4000'. May-July. P

Sarcostemma cynanchoides Dcne.
ssp. hartwegii (Vail) R. Holm.
Found in one location in Willow Spring Canyon at about 4500'. This is a new species record for the eastern Mojave Desert, at an unusually high elevation. April-July. V

Sarcostemma hirtellum (Gray) R. Holm.
CLIMBING MILKWEED
Locally abundant in Bull Canyon Wash at 2800'. March-May. V

ASTERACEAE

Acamptopappus sphaerocephalus (Harv. & Gray) Gray.
GOLDENHEAD
Frequent on bajadas below 4000'; Cove Spring, Willow Spring Basin, Budweiser Wash. May-June. S

Ageratina herbacea (Gray) King & Robbins.

Ambrosia dumosa (Gray) Payne.
BURRO-BUSH
Abundant on bajadas and in washes below 4000'. April-June. S

Ambrosia eriocentra (Gray) Payne.
WOOLY-FRUITED BURBUSH
Infrequent in sandy washes below 4200'. April-June. S

Amphipappus fremontii T. & G.
ssp. spinosus (A. Nels.) Keck.
EYTELIA
Frequent on rocky slopes of north and west sides of range from 2400' to 4000'. April-May. S

Anisocoma acaulis T. & G.
SCALE BUD
Common on sandy bajadas below 4300'; Willow Spring Basin, Cottonwood Spring. April-May. A

Artemisia dracunculus L.
Infrequent on sandy wash bottoms between 4000' and 5000'. Aug.-Oct. P

Artemisia ludoviciana Nutt.
PINYON WORMWOOD
Common on dry slopes and in washes about 4000'. July-Sept. P

Artemisia tridentata Nutt.
ssp. tridentata.
GREAT BASIN SAGEBRUSH
Atrichoseris platyphylla Gray. * TOBACCO-WEE'D
Rare on rocky fans bordering Bull Canyon Wash at 2700'. March-May. A

Baccharis brachyphylla Gray. **
Amid boulders in Willow Spring Canyon at 4000'. Aug.-Nov. S

Baccharis glutinosa Pers. MULE FAT
In sandy soil of wash in Willow Spring Basin, and at Dripping Spring Pond. These are the only records of this species in the eastern Mojave Desert. Blooms most of the year. S

Baccharis sergiloides Gray. SQUAW WATERWEED
Abundant in washes and canyon-bottoms below 5500'. July-Sept. S

Baileya pleniradiata Harv. & Gray. DESERT-MARIGOLD
Infrequent in sandy areas above 3500'; more common below. One specimen was collected at 6500' just east of Granite Peak, an unusually high location. March-June. A

Bebbia juncea (Benth) Greene. CHUCKWALLA'S DELIGHT
Infrequent in washes below 4000'; locally abundant along Bull Canyon Wash. April-June. S

Brickellia arguta Rob. BRICKELBUSH
Infrequent on rocky slopes, mostly below 4500'. April-May. S


Brickellia desertorum Cov. Rocky slopes and walls of Budweiser and Willow Spring Canyons. These are the only records of this species in the eastern Mojave Desert. Aug.-Nov. P-S

Brickellia incana Gray. Common in washes on north bajada at about 2500'; less frequent elsewhere, as at Willow Spring Basin at 3800' and Cottonwood Wash. May-Oct. P

Brickellia oblongifolia Nutt. var. linifolia (D.C. Eat.) Rob.
Frequent on dry slopes between 4200' and 6000' in Pinyon-Juniper Woodland. May-June. S

Calycoseris parryi Gray. * TACK-STEM
Infrequent on dry slopes and flats below 5000'. March-May. A

Chaenactis carphoclinia Gray. PEBBLE PINCUSHION
Locally abundant on rocky slopes bordering Bull Canyon Wash, and on bajada south of Budweiser Canyon. March-April. A

Chaenactis fremontii Gray. FREMONT PINCUSHION
Infrequent on north and west bajadas, more common in Cottonwood Basin. March-May. A

Chaenactis macrantha D.C. Eat. MOJAVE PINCUSHION
Found in one location on rocky ridge at 3900' on west end of range. April-May. A

Chaenactis stevioides H. & A. * West bajada, and ¾ mile north of Cove Spring at 4100'. March-May. A


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Chrysothamnus paniculatus (Gray) Hall.  
Frequent in sandy washes and among rocks of south canyons and bajadas.  
June-Dec.  S

Chrysothamnus teretifolius (Dur. & Hilg.) Hall.  
Infrequent on open slopes above 4500'; Cottonwood Canyon.  Sept.-Nov.  S

Cirsium neomexicanum Gray.  
Frequent throughout the range.  May-June.  B

Dyssodia cooperi Gray.  
Infrequent in washes and on sandy bajadas below 4000'; Budweiser and Willow Spring Washes, mouth of Cottonwood Basin.  May-June.  P

Dyssodia porophylloides Gray.  
Rare on rocky slopes; Budweiser Canyon at 3800', and west end of range at about 3600'.  April-June.  P

Encelia farinosa Gray ex Torr.  
Locally common on dry rocky slopes from Willow Spring area around west end of mountains to Playground Wash.  E. farinosa often forms nearly pure stands on low slopes at the north-west end of the range.  March-May.  S

Encelia frutescens Gray.  **  
North bajada.  Feb.-May.  S

Encelia virginensis A. Nels.  
ssp. actoni (Elmer) Keck.  
Common on rocky slopes below 4000'; occasional on eastern bajada at 4100'.  April-June.  S

Erigeron divergens T. & G.  
Found in one location near Dripping Spring Pond at 4100'.  March-Nov.  A-B

Erigeron pumilus Nutt.  
ssp. concinnoides Cronq.  
Infrequent on rocky slopes of Bull Canyon at about 5300'.  Pinyon-Juniper Woodland.  May-June.  P

Erigeron breweri Gray.  
var. porphyreticus (Jones) Cronq.  
Found in one location on dry slope at head of Cottonwood Basin at 5000'.  May-June.  P

Eriophyllum pringlei Gray.  
Common on bajadas and in sandy areas below 5500'.  April-June.  A

Eriophyllum wallacei Gray.  
Common on bajadas and in sandy areas below 5500'. occasionally to Granite Peak.  March-May.  A

Filago californica Nutt.  
Infrequent; at mouth of Willow Spring Canyon at 4000', at base of mountains close to Cove Spring and at Coyote Springs at 3200'.  March-May.  A

Geraea canescens T. & G.  
Rare, found at Budweiser Spring corral at 3900' and in wash of northwest bajada.  Feb.-May, Oct.-Nov.  A

Glyptopleura marginata D.C. Eat.  
Found once on open ridge at west end of range at 3900'.  April-June.  A
Gnaphalium palustre Nutt. **
One plant found in Bull Canyon at 4200'. May-Oct. A

Gutierrezia microcephala (D.C.) Gray. MATCHWEED
Common on bajadas and in washes; Budweiser Canyon, Cottonwood Basin, Snake and Cove Spring areas below 4300', rarely to Granite Peak. July-Oct. S

Gutierrezia sarothrae (Pursh) Britt. & Rusby.
On bajadas and among rocks; Cove Spring area, Cottonwood Basin. June-Oct. S

Haplopappus cooperi (Gray) Hall. GOLDENBUSH
Common on bajadas below 4500'. April-June. S

Haplopappus cuneatus Gray
var. spathulatus (Gray) Blake.
Common in granitic rock-crevices. Sept.-Nov. S

Haplopappus laricifolius Gray.
In frequent in canyons and among rocks, generally below 4500'; Cove Spring area. Sept.-Oct. S

Haplopappus linearifolius D.C. LINEAR-LEAVED GOLDENBUSH
ssp. interior Hall.
Common throughout most of the range above 3900'. March-May. S

Hymenoclea salsola T. & G. CHEESE-BUSH
var. salsola.
Common on bajadas and in washes below 4200'. April-May. S

Layia glandulosa (Hook.) H. & A. WHITE TIDY-TIPS
ssp. glandulosa.
Common in sandy areas above 4000'. March-May. A

Machaeranthera tortifolia (Gray) Conq. & Keck. DESERT-ASTER
Frequent on bajadas and rocky slopes below 4100'; Cove and Budweiser Spring areas, and slopes above northwest bajada. March-May, Oct. P

Malacothrix coulteri Gray. ** SNAKES'-HEAD
In sand and gravel on lower bajada in Creosote Scrub. March-May. A

Malacothrix glabrata Gray. DESERT-DANDELION
Locally abundant on bajada at mouth of Willow Spring Basin at about 3600'; infrequent elsewhere below 4100'. March-May. A

Microseris linearifolia (D.C.) Sch.-Bip. SILVER PUFFS
Infrequent on sandy soil above 4000'; Willow Spring and Cottonwood Basins. April-June. A

Monoptilon bellidiforme T. & G. ex Gray.
Frequent in washes at south end of range below 4000'; Willow Spring Basin and Sheep Corral. March-June. A

Monoptilon belliioides (Gray) Hall. MOJAVE DESERT-STAR
Frequent in washes and on open slopes at north end of range; Bull Canyon Wash at 2500', Coyote Springs area at 3800'. March-May. A

Nicolletia occidentalis Gray. HOLE-IN-THE-SAND PLANT
Locally common in Willow Spring Wash at 3700'. April-May. P
Palafoxia arida  B.L. Turner  SPANISH-NEEDLES
var. arida. [P. linearis (Cav.) Lag. var. linearis]
Rare in Budweiser Canyon at 4100', more frequent at lower elevations on
north bajada. March-May. A

Pectis papposa  Harv. & Gray ex Gray. **  CHINCH WEED
Budweiser Canyon and Wash, Willow Spring Basin, south bajada. After summer
rains. A

Perityle emoryi  Torr. in Emory.  ROCK-DAISY
Common in crevices on dry rocky slopes between 2500' and 4500'. March-May. A

Pleurocoronis pluriseta  (Gray) King & Robinson.  ARROW LEAF
Frequent on rocky slopes below 4000' at the south, west and north sides of
the range. April-May. S

Porophyllum gracile  Benth.  ODORA
Rare on rocky slopes and in washes; Budweiser Canyon, Willow Spring Basin at
3500', and Silver Peak Road at 5300'. Oct.-June. P

Prenanthera exigua  (Gray) Rydb. [Lygodesmia exigua Gray]
Found in one location on rocky slope near west end of range at 3900'. March-
May. A

Psilostrophe cooperi  (Gray) Greene. **  PAPERFLOWER
In rocky crevices along base of mountains below 4500'. April-June, Oct.-Dec. P

Rafinesquia californica  Nutt. **  CALIFORNIA-CHICORY
Willow Spring Canyon at 4200'. April-May. A

Rafinesquia neomexicana  Gray.  DESERT-CHICORY
Locally common near northwest end of range, often scandent in creosote
bushes; infrequent on bajadas elsewhere; Willow Spring Basin and Cove Spring
area. March-May. A

Senecio douglasii  D.C. SANDY WASH GROUNDSEL
var. monoensis  (Greene) Jeps.
Frequent in sandy washes below 4000'; rare on rocky slopes to 5100'. April-
Sept. P-S

Senecio multilobatus  T. & G. ex Gray.  RAGWORT
Rare on steep rocky slopes in Pinyon-Juniper Woodland above 5700'; Cotton-
wood Canyon. April-June. P

Solidago confinis  Gray.  GOLDENROD
Infrequent in moist soil at Snake Spring oasis, in upper Bull Canyon, and
along wash in Cottonwood Basin at 4500'. June-Oct. P

Sonchus asper  (L.) Hill. + *  SOW-THISTLE
Frequent in moist or disturbed areas; Dripping Spring Pond, Budweiser and
Bull Canyons. April-May. A

Stephanomeria exigua  Nutt. WIRE-LETTUCE
var. pentachaeta  (D.C. Eat.) Hall.
Infrequent on east bajada from 3000' to 4000'. May-Sept. A

Stephanomeria parryi  Gray.  DESERT-STRAW
Locally common in Cove Spring area and Cottonwood Basin. May-June. P

Stephanomeria pauciflora  (Torr.) Nutt.
Stylocline micropoides Gray. DESERT NEST-STRAW
Rare in rock crevices on ridge west of Bull Canyon at 2800'. March-May. A

Syntrichopappus fremontii Gray. **
Snake Spring area, Coyote Springs, and at saddle between Cove Spring and Cottonwood Basin at 5200'. April-June. A

Tetradymia argyraea Munz & Roos. STRIPED HORSEBUSH
Frequent in Pinyon-Juniper Woodland from 4700' to Granite Peak. Aug.-Sept. S

Tetradymia stenolepis Greene.* MOJAVE HORSEBUSH
Common on eastern and southern bajadas to 4100'; rare on rocky slopes below 4500'. June-Aug. S

Trichoptilium incisum (Gray) Gray. YELLOW HEAD
Infrequent on bajadas near west end of range at 2300', and near Bull Canyon to 2700'. March-May, Oct.-Nov. A

Trixis californica Kell. Frequent on rocky slopes at west end of range from 2500' to 4000'. This is a new species record for the eastern Mojave Desert. March-May. S

Viguiera deltoidea Gray var. parishii (Greene) Vasey & Rose. GOLDENEYE
Common on rocky slopes below 5000'; infrequent on bajadas. April-June, Sept.-Oct. S

BERBERIDACEAE

Berberis haematocarpa Woot.** BARBERRY
Summit of east fork of Willow Spring Canyon at 5000'. May-June. S

BIGNONIACEAE

Chilopsis linearis (Cav.) Sweet. DESSERT-WILLOW
Locally common in wide sandy washes. June-July. T

BORAGINACEAE

Amsinckia tessellata Gray. FIDDLENECK
Abundant on bajadas and in washes below 5000', often under Larrea. March-June. A

Cryptantha angustifolia (Torr.) Greene. Common in sandy and gravelly places below 4300'. March-May. A

Cryptantha barbigera (Gray) Greene. Common throughout much of the range from lower bajadas to above 6500'. March-May. A

Cryptantha circumscissa (H. & A.) Jtn. Common at lower elevations throughout the range. April-May. A

Cryptantha decipiens (Jones) Heller. ** Southeast of Willow Spring Basin at 3500', and upper Bull Canyon at 4200'. March-May. A

Cryptantha dumetorum (Greene ex Gray) Greene. ** Mouth of Willow Spring Canyon at 4000'. April-May. A

Cryptantha gracilis Osterh. Frequent on rocky slopes and in Pinyon-Juniper Woodland above 4000'. April-June. A

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Cr~ptantha maritima (Greene) Greene. **
Budweiser Canyon at 3900', and rocky slopes of Bull Canyon Wash at 2500'.
March-May. A

Cryptantha micrantha (Torr.) Jtn. **
Mouth of Willow Spring Canyon at 4000', Budweiser Canyon. March-June. A

Cryptantha nevadensis Nels. & Kenn. **
var. nevadensis.
Bull Canyon Wash at 2500', and southwest of Granite Pass at 2700'. March-
May. A

Cryptantha pterocarya (Torr.) Greene.
Common in sandy and gravelly areas above 4000'. March-June. A

Cryptantha racemosa (Wats.) Greene. **
South of Willow Spring Canyon at 3800', sandy bottom of Budweiser Wash at 3900', and rocky slopes of Bull Canyon at 3500'. March-May. P

Cryptantha utahensis (Gray) Greene.
Cottonwood Basin at 5000', Bull Canyon at 4400', and Coyote Springs at 3200'.
March-May. A

Pectocarya heterocarpa Jtn.
Common on bajadas and dry slopes below 4500'. March-April. A

Pectocarya platycarpa (M. & J.) M. & J.
In sandy and gravelly areas; Coyote Springs, Willow Spring Wash, Bull Can-
yon, Cove Spring Area. March-April. A

Pectocarya recurvata Jtn.
Cottonwood Basin at 3900', and Coyote Springs at 3200'. March-April. A

Pectocarya setosa Gray.
Common on bajadas, infrequent on slopes above. April-May. A

Plagiobothrys arizonicus (Gray) Greene ex Gray.           ARIZONA POPCORN FLOWER
Frequent on bajadas and slopes between 3200' and 5000'. March-May. A

BRASSICACEAE

Arabis glaucovalvula Jones.   ROCK CRESS
Rare on bajadas and rocky slopes to 5000'. March-May. P

Arabis perennans Wats.
Frequent above 4000' in Pinyon-Juniper Woodland. April-June. P

Arabis pulchra Jones
var. gracilis Jones.
Common on rocky slopes above 4000'; Pinyon-Juniper Woodland. April-June. P

Brassica geniculata (Desf.) J. Ball. +
MUSTARD
Infrequent in disturbed areas on east bajada; Cove Spring Pond, Cottonwood
Basin road at 4200'. May-Oct. B-P

Caulanthus cooperi (Wats.) Pays. **
Frequent on eastern bajada, and in washes above 4000', often scandent in
shrubs. March-April. A

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Caulanthus lasiophyllum (H. & A.) Pays. CALIFORNIA MUSTARD
Common among shrubs on bajadas below 5000', infrequent in washes as in Bull Canyon Wash at 2500', and Coyote Springs at 3200'. March-April. A

Descurainia pinnata (Walt.) Britton YELLOW TANSY MUSTARD
sspp. glabra (Woot. & Standl.) Detl., menziesii (D.C.) Detl., and halictorum (Ckll.) Detl. Abundant on eastern bajada, especially in sandy washes; frequent elsewhere throughout the range, often beneath the canopy of shrubs. March-June. A

Descurainia sophia (L.) Webb. Found once on Snake Spring bajada at 4000'. May-Aug. A

Dithyrea californica Harv. * SPECTACLE-POD
Common in sandy washes and on bajadas below 4000'. March-May. A

Draba cuneifolia Nutt. ex T.& G. var. integrifolia Wats. Rare in shade of rocks on slopes at west side of range between 2500' and 3500'. Feb.-April. A

Lepidium fremontii Wats. DESERT-ALYSSUM
Common on south bajada from Granite Cove to Budweiser Canyon. Also in moist sand around Upper Dad Spring in Willow Spring Canyon at 5000'. March-May. P

Lepidium lasiocarpum Nutt. PEPPERGRASS Abundant throughout the range. Feb.-May. A

Stanleya pinnata (Pursh.) Britton PRINCE'S PLUME
ssp. pinnata. Locally common near Granite Pass at 4000'. May-June. P

Thysanocarpus curvipes Hook. LACE-POD
var. eradiatus Jeps. Common on bajadas and sandy slopes throughout the range. March-May. A

Thysanocarpus laciniatus Nutt. ex T. & G. Rare, Cottonwood Canyon at about 5500', Coyote Springs area at 3400'. April-May. A

Echinocactus polycephalus Engelm. & Bigel. * COTTONTOP CACTUS
Infrequent on rocky bajadas between 2300' and 3600'; lower Budweiser Wash, and Bull Canyon Wash area. March-May.

Echinocereus engelmannii (Parry) Lem HEDGEHOG CACTUS
var. chrysoceiicur (Engelm. ex Bigel.) Engelm. ex Rump. * Common on bajadas and slopes below 5500'. April-May.

Echinocereus triglochidiatus Engelm. MOJAVE MOUND CACTUS
var. mojavensis (Engelm. & Bigel.) L. Benson. * Common on slopes above 5000', infrequent below. April-June.

Ferocactus acanthodes (Lem.) Brit. & Rose. * BARREL CACTUS
Common on steep, dry, rocky slopes below 5000'. April-May.

Mammillaria tetrancistra Engelm. * NIPPLE CACTUS
Infrequent on bajadas and rocky slopes below 4000'; Sheep Corral, Willow Spring Basin. March.
Opuntia acanthocarpa Engelm. & Bigel.
var. coloradensis L. Benson. *
BUCKHORN CHOLLA
Common on south and east bajadas; frequent on slopes to 6000'. May-June.

Opuntia basilaris Engelm. & Bigel.
var. basilaris. *
BEAVERTAIL CACTUS
Frequent on bajadas and slopes below 5000'. April-June.

Opuntia chlorotica Engelm. & Bigel. *
PANCAKE-PEAR
Infrequent in rocky areas between 4000' and 5000'; Willow Spring Canyon, Bull Canyon, Cove Spring area. May-June.

Opuntia echinocarpa Engelm. & Bigel.
var. echinocarpa. *
SILVER CHOLLA
Infrequent on bajadas and moderate slopes below 6000'. April-May.

Opuntia erinacea Engelm. & Bigel.
var. erinacea. *
OLD MAN CACTUS
Frequent on slopes above 5500'. May-June.

Opuntia erinacea Engelm. & Bigel.
var. ursina (A. Weber) Parish. *
GRIZZLY BEAR CACTUS
Locally common above 6000'. May-June.

Opuntia phaeacantha Engelm. **
Observed in the Cove Spring area. May-June.

Opuntia ramosissima Engelm. *
PENCIL CHOLLA
Common on east bajada at about 4000'; infrequent elsewhere, mostly below 4000'. April-May.

CAMPANULACEAE

Nemacladus glanduliferus Jeps.
var. orientalis McVaugh.
Locally common in lower Bull Canyon at 2500'. March-May. A

Nemacladus rubescens Greene.
THREAD STEM
Locally common on bajada between Sheep Corral and Willow Spring Basin at about 3600'. April-May. A

Nemacladus sigmoideus Robbins.
Found once among rocks in Budweiser Canyon at 3900'. April-June. A

CAPPARACEAE

Isomeris arborea Nutt.
BLADDERPOD
Common in sandy washes below 4000'. Flowers most of the year. S

CARYOPHYLLACEAE

Achyonychia cooperi T. & G.
FROST-MAT
Locally common in washes and on bajadas below 4000'; mouth of Willow Spring Basin, and Bull Canyon Wash. March-May. A

Arenaria macradenia Wats.
var. parishiorum Rob.
DESSERT SANDWORT
Infrequent on dry rocky slopes above 3000'. April-June. P

Silene antirrhina L.
CATCHFLY
Frequent on slopes above 4200'; Pinyon-Juniper Woodland. April-June. A
Silene verecunda Wats.
ssp. andersonii (Clokey) Hitch. & Maguire.
Frequent in dry streambeds of Cottonwood Basin above 4500'. June-July. P

CHENOPODIACEAE

Atriplex polycarpa (Torr.) Wats.
Sandy soil in bottom of Sheep Corral. July-Oct. P

Ceratooides lanata (Pursh.) Howell.
[Eurotia lanata (Pursh.) Moq.]
Frequent on slopes below 5000'; summit of east fork of Willow Spring Basin, mouth of Bighorn Basin, and west end of range. April-June. S

Chenopodium fremontii Wats.
Infrequent in washes and sandy canyon bottoms. June-Oct. A

Grayia spinosa (Hook.) Moq.
Frequent on east bajadas below 4500'. April-June. S

CONVOLVULACEAE

Cuscuta californica H. & A. ? * DODDER
Frequent throughout the range and locally common in Cottonwood Basin and Bull Canyon. Often observed on Eriogonum fasciculatum. May-Aug. V

CRASSULACEAE

Dudleya arizonica Rose.
ARIZONA LIVE FOREVER
Locally common in rock crevices of Budweiser, Willow Spring, and Bull Canyons between 2800' and 4800'. May-June. P

Dudleya saxosa (Jones) Britt. & Rose
ssp. aloides (Rose) Moran.
Locally common on rocky slopes and bajadas of east portion of range. Generally between 4000' and 5500'. April-June. P

CUCURBITACEAE

Cucurbita palmata Wats. * COYOTE MELON
Frequent in sandy washes below 4000'. May-Sept. V

EUPHORBIACEAE

Euphorbia albomarginata T. & G.
RATTLESNAKE WEED
Common on the south and east bajadas below 4000', infrequent to 5300'. April-Nov. P

Euphorbia incisa Engelm.
SPURGE
Common on rocky slopes between 3000' and 5800'. March-April. P

Euphorbia micromera Boiss. *
South of Granites at 3200', Budweiser Canyon at 4000', Willow Spring Canyon at 4000', north bajada at 2600'. March-April, Sept.-Dec. A

Euphorbia serpillifolia Pers. **
Sandy bottom of Willow Spring Canyon at 4000'. Mostly Aug.-Oct. A

Euphorbia setiloba Engelm. **
South of Granites on road to Budweiser Spring, Budweiser Spring and Canyon, Willow Spring Canyon. Most months. A

296
Stillingia linearifolia Wats. TOOTH-LEAF
Rare, found in Budweiser Wash at 2500', and in Budweiser Canyon. March-May. P

FABACEAE

Acacia greggii Gray. CATCLAW, WAIT-A-MINUTE BUSH
Common in washes and canyons below 5500'. June. S

Astragalus acutirostris Wats. LOCOWEED
Frequent on bajadas at about 4000'. April-May. A

Astragalus didymocarpus H. & A. var. dispermus (Gray) Jeps. **
Near Cove Spring at 4100', east fork of Willow Spring Canyon, Cottonwood Spring. Feb.-May. A
var. didymocarpus
Silver Peak Road at 4500'. March-May. A

Astragalus layneae Greene. **
Willow Spring at 3500', lower Bull Canyon at 2500', Budweiser Spring in sandy soil, and on alluvial fan at Coyote Spring in coarse gravelly soil. March-May. P

Astragalus lentiginosus Dougl. **
var. fremontii (Gray) Wats.
On sand in Bull Canyon at 3800'. April-July. P

Astragalus mohavensis Wats. MOJAVE RATTLEWEED
var. mohavensis
Frequent on slopes and washes above 4000'; Snake Spring, Cottonwood Basin. April-May. A-P

Astragalus nutans Jones.
Common on dry slopes above 4000' to Granite Peak; Cottonwood Canyon, Silver Peak; Pinyon-Juniper Woodland. March-April. P

Astragalus nuttallianus DC. var. imperfectus (Ryd.) Barneby.
Common in sandy and stony places above 3200'. March-June. A

Astragalus purshii Doug.
var. tinctus Jones.
Locally common above 5000' in Pinyon-Juniper Woodland; Cottonwood Canyon, Silver Peak. March-May. P

Cassia armata Wats. DESERT SENNA
Locally common along wash margins in Willow Spring Basin and east of Cottonwood Basin at 3500', otherwise occasional on bajadas below 4000'. April-May. S

Dalea fremontii Torr. INDIGO BUSH
var. minutifolia (Parish) L. Benson.
Frequent on bajadas and moderate slopes below 4100'. April-May. S

Dalea mollissima (Ryd.) Munz.
Locally abundant on fans above Bull Canyon Wash, frequent on dry rocky flats and bajadas from about 2500' to 4000'; north and west bajadas, and west slopes of range. April-June. P

Dalea spinosa Gray. * SMOKE TREE
Infrequent in sandy washes below 3500'; Bull Canyon Wash, Budweiser Wash, lower Sheep Corral drainage. June-July. T

297
Lotus humistratus  Greene.
Frequent on bajadas below 4500'; Cottonwood Basin and Cove Spring area.
April-June. A

Lotus rigidus (Benth.) Greene.  ROCK-PEA
Common on dry rocky slopes and in washes below 5000'. March-May. P

Lotus tomentellus  Greene.
Frequent on bajadas and in sandy places below 4000'. March-May. A

Lupinus arizonicus (Wats.) Wats.  ARIZONA LUPINE
Rare in moist sandy places; Cottonwood Basin at 4500' and Coyote Springs
Wash. May-June. A

Lupinus concinnus  Agardh.
ssp. orcutti (Wats.) D. Dunn.
Common on bajadas below 4300', frequent on open granitic slopes. March-May. A

Lupinus sparsiflorus  Benth.
ssp. mohavensis  Dziek. & Dunn.
Locally common on the east bajadas below 4000'; infrequent elsewhere, as in
Budweiser Wash at 2500' and Bull Canyon Wash. March-May. A

Prosopis glandulosa  Torr.
var. torreyana (L. Benson) M.C. Jtn.
Locally common in Willow Spring Canyon at 3800', and near mouth of Bull and
Budweiser canyons. May-June. T

FAGACEAE

Quercus chrysolepis  Liebm.  CANYON OAK
Common in canyons, less so on rocky slopes above 4000' in Pinyon-Juniper
Woodland; locally abundant in upper Bull Canyon. T

GARRYACEAE

Garrya flavescens  Wats.
ssp. flavescens.
Locally abundant in upper Bull Canyon; infrequent elsewhere in rocky washes
above 4200; Pinyon-Juniper Woodland. Feb.-April. S

GENTIANACEAE

Centaurium exaltatum  (Griseb.) W. Wight.
Rare on moist sand near Cove Spring at 4100' and in Cottonwood Basin at
4500'. This is a new species record for the eastern Mojave Desert. May-Aug. A

GERANIACEAE

Erodium cicutarium  (L.) L'Her. +  FILAREE
Abundant on bajadas and flats throughout the range. March-May. A

HYDROPHYLLACEAE

Emmenanthe penduliflora  Benth.  WHISPERING-BELLS
Frequent in rocky places below 5000'; Cove and Coyote Springs, Willow
Spring and Bull Canyons. April-June. A
Eriodictyon angustifolium Nutt.  
YERBA SANTA  
Several clumps occur in upper Cottonwood Basin along the Silver Peak road between 4200' and 4800'. This is the southwestern distributional limit of this species in California. May-June. S

Eucrypta chrysanthemifolia (Benth.) Greene  
var. bipinnatifida (Torr.) Const.  
Common in shade of rocks and shrubs, mostly below 6000'. March-May. A

Eucrypta micrantha (Torr.) Heller.  
Common in shade of rocks and shrubs below 4500'. March-May. A

Nama demissum Gray  
var. demissum  
Common in broad sandy washes; infrequent on bajadas below 4500'. March-May. A

Nemophila menziesii H. & A. *  
ssp. integrifolia (Parish) Munz  
var. annulata Chandl.  
Common in shady places generally below 5700'; often beneath the canopy of shrubs. March-May. A

Phacelia affinis Gray.  
Found once on moist sand in Bull Canyon at 3900'. May-June. A

Phacelia campanularia Gray  
ssp. vasiiformis Gillett.  
Common in sandy washes and rocky places mostly below 4500', but ranging to Granite Peak. March-May. A

Phacelia crenulata Torr.  
var. ambigua (Jones) Macbr.  
Common in washes and on gravelly bajadas on the north side of the range below 2800'; also in Willow Spring Basin at 3500'. March-May. A

Phacelia cryptantha Greene.  
Frequent in canyons and on slopes above 4200' in Pinyon-Juniper Woodland; often in shade of trees and shrubs. April-May. A

Phacelia curvipes Torr. ex Wats.  
Rare in duff beneath Pinus monophylla above 5200'; Cottonwood Canyon and Granite Peak area. April-June. A

Phacelia distans Benth.  
WILD-HELIOTROPE  
Common on bajadas and slopes, generally in shade of trees and shrubs. March-June. A

Phacelia fremontii Torr.  
YELLOW THROATS  
Locally abundant on southeast bajadas between Sheep Corral and Granite Cove; infrequent throughout the range to Granite Peak. March-May. A

Phacelia lemmonii Gray.  
Locally common in moist sandy areas; Cottonwood Basin, Budweiser Canyon, Bull Canyon, Coyote Springs. April-June. A

Phacelia pachyphylla Gray. **  
Rocky slopes of Bull Canyon Wash at 2500'. April-May. A

Phacelia pedicellata Gray.  
Frequent on rocky slopes below 4200'; Cove, Budweiser and Willow Spring areas, and Bull Canyon Wash. March-May. A
Phacelia rotundifolia Torr. ex Wats.  
Rare in rock crevices of Budweiser Canyon at 4000', Bighorn Basin at 3600', and Bull Canyon at 3000'. April-May. A

Phacelia vallis-mortae J. Voss  
var. vallis-mortae.  
Infrequent beneath Pinus monophylla; Cottonwood Canyon, upper Bull Canyon, Silver Peak, and Coyote Springs. April-June. A

Pholistoma membranaceum (Benth.) Const.  
WHITE FIESTA-FLOWER  
Common in shade of rocks, shrubs, and trees below 5500'. March-May. A

KRAMERIACEAE

Krameria grayi Rose & Painter.  
WHITE RATANY  
Frequent on bajadas and rocky slopes below 4500'; Coyote Springs, Budweiser Wash, north and west bajadas. April-May. S

Krameria parvifolia Benth.  
RATANY  
var. imparata Macbr.  
Common on bajadas and rocky slopes below 4500'; March-May. S  
var. glandulosa (Rose & Painter) Macbr.  
Frequent on bajadas and rocky slopes below 4500'; occurs along with var. imparata. March-May. S

LAMIACEAE

Monardella linoides Gray  
HORSEMINT  
ssp. linoides.  
Infrequent in rocks above 4000'. Snake Spring, Cottonwood Canyon, Silver Peak. This is the species J.R. Haller (1959) reported from Granite Pass as M. robisonii Epl. in Munz. June-Aug. P

Salazaria mexicana Torr.  
PAPER-BAG BUSH, BLADDER-SAGE  
Common on south and east bajadas, and open slopes below 5000'. April-May. S

Salvia columbariae Benth.  
CHIA  
var. columbariae.  
Common to abundant throughout the range. April-June. A

Salvia dorrii (Kell.) Abrams  
PURPLE SAGE  
ssp. dorrii.  
Common on east bajadas mostly below 4500'; Cove Spring area, Cottonwood Basin. May. S

Salvia mohavensis Greene.  
MOJAVE SAGE  
Common on rocky slopes above 4000'; Cottonwood Basin, Willow Spring Basin, Bull Canyon. May-June. S

Salvia pachyphylla Epl. ex Munz.  
ROSE SAGE  
Frequent on slopes above 5000'; Cottonwood Basin, Bull Canyon, Bighorn Basin. July-Sept. S

Salvia sp.  
A probable hybrid between S. mohavensis and S. pachyphylla exhibiting characteristics of both. Infrequent at head of Cottonwood Canyon and upper Bull Canyon at about 5600'. S
LENNOACEAE

Pholisma arenarium Nutt. ex Hook. *
Locally common in wash at mouth of Willow Spring Basin and on sandy bajada at mouth of Cottonwood Basin at 4000'. Infrequent elsewhere in sandy washes. April-May, Oct. P

LINACEAE

Linum lewisii Pursh. **
Collected by M.E. Jones in 1930. P

LOASACEAE

Mentzelia albicaulis (Hook.) T. & G. SMALL-FLOWERED BLAZING STAR
Common on bajadas and rocky slopes to Granite Peak; often growing up through shrubs. March-May. A

Mentzelia involucrata Wats. ssp. involucrata.
Infrequent on rocky slopes at lower elevations; Bull Canyon Wash at 2600', west end of range at 3000'. March-May. A

Petalonyx thurberi G. ssp. thurberi.
In sandy areas below 4000'; east of Granite Cove area, along Kelbaker Road, mouth of Willow Spring Basin, and on west bajada at 2200'. May-Sept. P

MALVACEAE

Eremalche exilis (Gray) Greene. **
On dry open slopes at about 4000'; mouth of Willow Spring Canyon. March-May. A

Eremalche rotundifolia (Gray) Greene.
DESERT FIVE-SPOT
On low rocky slopes around the northern border of the range. April-May A

Sphaeralcia ambigua Gray ssp. ambigua.
DEsert MALLOW
Locally abundant on dry rocky slopes, otherwise common throughout. April-June. P

NYCTAGINACEAE

Allionia incarnata L. *
WINDMILLS
On rocky wash margins and slopes between 3200' and 5600'; Bull Canyon, Budweiser Canyon. April-Sept. A-P

Boerhaavia triqueta Wats. **
Near Budweiser Spring, and in Willow Spring Basin at 4000'. Summer annual. Sept.-Dec. A

Mirabilis bigelovii Gray vars. bigelovii, aspera (Greene) Munz., and retrorsa (Heller) Munz.
DESERT FOUR-O-CLOCK
Common throughout the range. April-June. P

OLEACEAE

Forestiera neomexicana Gray.
DESERT-OLIVE
Locally common along washes in Cottonwood Basin between 4200' and 4500'. March-April. S

301
Menodora spinescens  Gray.
Frequent on bajadas and also on the lower slopes of Budweiser Wash at 3500'. March-May. S

ONAGRACEAE

Camissonia boothii (Doug1. in Hook.) BOTTLE CLEANER
ssp. condeusata (Munz) Raven.
Budweiser Wash at 2500' and in sand of Bull Canyon Wash at 2500'. March-May. A

Camissonia brevipes (Gray) Raven
ssp. brevipes.
Common in washes below 4500'; Granite Pass, Bull Canyon Wash. March-May. A

Camissonia chamaenerioides (Gray) Raven. **
Bull Canyon at 2800'. March-June. A

Camissonia claviformis (Torr. & Frem) Raven **
ssp. claviformis, and aurantica (Wats.) Raven.
Bajadas below 4000'; Budweiser Spring, Willow Spring Basin. March-May. A

Camissonia pallida (Abrams) Raven
ssp. pallida.
Frequent on slopes and in washes below 6000'; Granite Pass, Cottonwood Basin, Willow Spring Basin. March-May. A

Camissonia refracta (Wats.) Raven. **
Mouth of Willow Spring Canyon at 4000'. March-May. A

Camissonia walkeri (Nels.) Raven **
ssp. tortilis (Jeps.) Raven.
Along Kelbaker Road near Granite Pass. May-June. A-P

Epilobium canum (Greene) Raven
ssp. garrettii (Nels.) Raven. [Zauschneria garrettii Nels.]
Locally common in washes and moist slopes; Cove Spring, Cottonwood Basin, Snake Spring; Pinyon-Juniper Woodland. Aug.-Oct. P

Oenothera avita (W. Klein) W. Klein EVENING PRIMROSE
ssp. avita.
Frequent on bajada in Cottonwood Basin and near Coyote Springs. April-June. P

Oenothera caespitosa Nutt. var. marginata (Nutt.) Munz.
Frequent on rocky slopes and in sandy stream-beds to 5600'. April-May. P

Oenothera primiveris Gray. *
Rare on the bajada near Coyote Springs at 3300'. March-May. A

OROBANCHACEAE

Orobanche parishii (Jeps.) Heckard BROOM-RAPE
ssp. parishii.
Rare in the vicinity of Cottonwood Spring, and nearby at 4500'.

PAPAVERACEAE

Eschscholzia glyptosperma Greene. DESERT GOLD POPPY
Infrequent on rocky fans at north side of range at about 2000'. March-May. A

302
Eschscholzia minutiflora Wats.  
Common on sandy bajadas and in washes. March-May.  

**PIGMY POPPY**

PLANTAGINACEAE

Plantago fastigiata Morris. [P. insularis East.]  
**WOOLY PLANTAIN**  
On west bajada and in sandy wash and rocky slopes of Bull Canyon Wash at 2500'. March-May.  

Plantago major L.  
**COMMON PLANTAIN**  
Along Kelbaker Road. April-Sept.  

Plantago purshii R. & S. var. oblonga (Morris) Shinners.  
Common to locally abundant on bajadas and slopes below 6000'. April-June.  

POLEMONIACEAE

Eriastrum diffusum (Gray) Mason  
ssp. diffusum.  
**Coyote Springs at 3200'. March-May.  

Eriastrum eremicum (Jeps.) Mason.  
Common on lower slopes and bajadas. April-June.  

Eriastrum sparsiflorum (East.) Mason  
ssp. harwoodii (Craig) K. Harrison.  
Infrequent on dry slopes at about 6200' in Pinyon-Juniper Woodland. May-June.  

Gilia filiformis Parry ex Gray.  
**Rocky slope of Bull Canyon at 2800'. March-May.  

Gilia hutchinsifolia Rydb.  
**Sandy bottom of Budweiser Canyon at 3900'. April-May.  

Gilia latifolia Wats.  
**Rocky wash west of Bull Canyon Wash at 2500'. March-May.  

Gilia ochroleuca Jones  
ssp. ochroleuca.  
**Cottonwood Spring. April-June.  

Gilia ophthalmoides Brand.  
**On open sandy slopes and bajadas below 4200'; Budweiser Canyon, Cottonwood Spring and Sheep Corral. May-June.  

Gilia scopulorum Jones.  
**Sandy slopes in Cottonwood Canyon at 5000'. April-May.  

Gilia sinuata Dougl. ex Benth.  
**On coarse sand of bajada at mouth of Willow Spring Basin at 3600', and at Twin Springs. April-May.  

Gilia stellata Heller.  
Locally common in Budweiser Canyon at 4000'. March-May.  

Langloisia matthewsii (Gray) Greene.  
**DESSERT CALICO**  
Locally common in sandy washes and on bajadas below 4000'. April-May.  

Langloisia punctata (Cov.) Good.  
**LILAC SUNBONNET**  
Locally common on bajadas and gravelly fans below 4000'. April-June.  

303
Leptodactylon pungens (Torr.) Rydb.  
ssp. hallii (Parish) Mason.  
GRANITE-GILIA, PRICKLY-PHLOX  
Frequent in Pinyon-Juniper Woodland above 4400'. April-June.  
S

Linanthus aureus (Nutt.) Greene  
var. decorus (Gray) Jeps.  
GOLDEN-GILIA  
Locally abundant on sandy bajadas, especially in Willow Spring Basin at 3600'; Common on bajadas throughout, infrequently to Granite Peak. March-June.  
A

Linanthus bigelovii (Gray) Greene. **  
Coyote Springs from 3200' to 3400'. March-May.  
A

Linanthus demissus (Gray) Greene.  
Rare in sandy washes on northwest bajada below 2700'. March-May.  
A

Linanthus jonesii (Gray) Greene. **  
On bajada near northeast end of Granite Cove at 4200'. March-May.  
A

Phlox viridis E. Nels.  
ssp. compacta (Brand) Wherry.  
POLYGONACEAE  
Infrequent on rocky slopes and along washes above 5000' in upper Bull Canyon and on Silver Peak road; Pinyon-Juniper Woodland. April-June.  
P

Chorizanthe brevicornu Torr.  
ssp. brevicornu.  
Frequent on moderate slopes and on flats below 4500'; Budweiser Canyon, Cottonwood Basin. April-May.  
A

Chorizanthe thurberi (Gray) Wats.  
Frequent on bajadas and sandy flats below 6000'; Cove Spring, Cottonwood Basin. April-May.  
A

Chorizanthe rigida (Torr.) T. & G. *  
Locally abundant on desert pavement and moderate rocky slopes below 4000'; north bajada and west end of range. April-May.  
A

Chorizanthe watsonii T. & G.  
Found only in central Cottonwood Basin on bajada at 4250'. April-June.  
A

Eriogonum brachypodium T. & G. **  
Lower Bull Canyon Wash at 2500'. March-Oct.  
A

Eriogonum davidsonii Greene.  
Locally common on sandy slopes and flats above 4300'. May-Sept.  
A

Eriogonum deflexum Torr.  
SKELETON WEED  
Infrequent on rocky slopes and in sandy washes below 4000'; locally abundant on disturbed border of Kelbaker Road. May-Oct.  
A

Eriogonum fasciculatum Benth.  
ssp. polifolium (Benth.) Stokes.  
CALIFORNIA-BUCKWHEAT  
Abundant throughout the range. May-Nov.  
S

Eriogonum heermannii Dur. & Hilg.  
ssp. argensé (Jones) Munz.  
S

304
Eriogonum heermannii Dur. & Hilg. ssp. floccosum (Munz.) Munz. Locally common; found only on Silver Peak between 5800' and 6200'. Aug.-Oct. S


Eriogonum maculatum Heller. Occasional on bajadas below 4000'; Budweiser Canyon, mouth of Cottonwood Basin, east of Cove Spring. May-Oct. A

Eriogonum nidularium Cov. Frequent on bajadas below 4000'; Budweiser Canyon on Twin Springs. May-Sept. A

Eriogonum panamintense Morton ssp. panamintense. Found only on Silver Peak at about 5900'. This is the southern distributional limit of this species. May-Oct. P

Eriogonum plumatella Dur. & Hilg. FLAT TOP Frequent on sandy and rocky bajadas and in washes; mostly below 4500'. Aug.-Oct. P

Eriogonum pusillum T. & G. YELLOW TURBAN Frequent in sandy washes and on bajadas mostly below 4000'. March-June. A

Eriogonum reniforme Torr. & Frem. Frequent in sandy washes and on bajadas mostly at south end of range below 4000'. March-June. A

Eriogonum thomasii Torr. ** Bull Canyon Wash at 2500'. March-June. A

Eriogonum trichopes Torr. ** Along margin of Kelbaker Road east of Cove Spring at 3500'. April-Aug. A

Eriogonum umbellatum Torr. ssp. ferrissii (A. Nels.) Stokes. Common on rocky slopes and flats above 4000'. June-Sept. S


Oxytheca perfoliata T. & G. SAUCER PLANT Infrequent on moderate slopes and open gravelly flats between 2500' and 4500'. April-June. A

Pterostegia drymarioides F. & M. Common in shade at base of rocks and ledges mostly below 5000'. March-July. A

Rumex hymenosepalus Torr. REFRIGERATOR PLANT, WILD-RHUBARB Infrequent in sandy washes below 4000'. Feb.-May. P

305
PORTULACACEAE

Calyptridium monandrum Nutt. in T. & G.  
SAND-CRESS  
Locally common on sandy bajadas and flats below 6000'; Willow Spring Basin, Cottonwood Basin, Cove Spring area. March-May. A

Claytonia perfoliata Donn. var. utahensis Poelln.  
MINER'S-LETTUCE  
Common in shaded or moist areas above 4000'; Pinyon-Juniper Woodland. April-June. A

RANUNCULACEAE

Anemone tuberosa Rydb.  
WINDFLOWER  
Rare in rock crevices in Playground Wash Canyon at about 4000', and in Bull Canyon at 4000'. April-May. P

Delphinium parishii Gray  
PARISH LARKSPUR  
ssp. parishii.  
Often abundant on open slopes and gravelly bajadas below 4400'; Cove Spring area, mouth of Willow Spring Basin. April-June. P

Myosurus cupulatus Wats.  
MOUSE-TAIL  
Rare at Cottonwood Spring, and on moist sand nearby at 4500'. April-May. A

RHAMNACEAE

Rhamnus ilicifolia Kell.  
EVERGREEN BUCKTHORN  
Frequent on rocky slopes and washes; Pinyon-Juniper Woodland. March-May. S

ROSACEAE

Amelanchier utahensis Koehne  
SERVICE-BERRY  
ssp. covillei (Standl.) Clokey. [A. covillei Standl.]  
Frequent in moist places above 4000' in Pinyon-Juniper Woodland; Cottonwood Spring and Canyon, Snake Spring. April-May. S

Coleogyne ramosissima Torr.  
BLACKBUSH  
Common on bajadas and moderate slopes between 3800' and 5000'; locally abundant in upper Bull Canyon at about 4500', and in Cottonwood Basin. April-June. S

Fallugia paradoxa (D.Don.) Endl.  
APACHE PLUNE  
 Locally abundant in scattered stands from Dripping Spring Pond to Snake Spring. May-June. S

Holodiscus microphyllus Rydb. **  
CREAM-BUSH  
ssp. microphyllus.  

Potentilla saxosa Lemmon ex Greene. **  
CINQUEFOIL  
Cottonwood Spring area and in shady crevices at Snake Spring. April-June. P

Prunus fasciculata (Torr.) Gray.  
DESERT-ALMOND  
Common on dry slopes and washes below 6000'. March-May. S

Parshia glandulosa Curran.  
ANTELOPE BUSH  
Common on moderate slopes above 4000'; locally abundant in Cottonwood Basin between 4200' and 4400'. May-June. S
**RUBIACEAE**

*Galium munzii* Hilend & Howell.
Common in rock crevices and under Pinyons; Pinyon-Juniper Woodland. May-July. P

*Galium parishii* Hilend & Howell.
Common among rocks in Pinyon-Juniper Woodland, mostly above 5000'. June-Aug. P

*Galium stellatum* Kell.
ssp. *eremicum* (Hilend & Howell.) Ehrend.
Common among boulders of dry slopes and canyons below 5000'; Budweiser Canyon, Willow Spring Canyon, Coyote Springs. March-May. P

**RUTACEAE**

*Thamnosma montana* Torr. & Frem.
Common on bajadas and open slopes below 5500'. March-May. S

**SALICACEAE**

*Populus fremontii* Wats.
ssp. *fremontii*.
At Cottonwood Spring, Cove Spring, upper Bull Canyon at 4800', and Bighorn Basin at 4000'. March-April. T

*Salix exigua* Nutt. *
Cottonwood Spring, and ravine north of Cove Spring. March-May. S

*Salix gooddingii* Ball. *
Snake Spring between 4100' and 4500'. S-T

*Salix lasiolepis* Benth. *
Along mountain washes in Pinyon-Juniper Woodland; locally abundant in Bull Canyon between 4200' and 4800', and in Willow Spring Canyon at 4000'. March-May. S-T

**SAXIFRAGACEAE**

*Ribes velutinum* Greene
var. *glanduliferum* (Heller) Jeps.
Frequent in moist or shady places above 5000' in Pinyon-Juniper Woodland. March-May. S

**SCROPHULARIACEAE**

*Antirrhinum filipes* Gray.
TWINING SNAPDRAGON
Found once, twining in shrubs of sandy wash at west side of Willow Spring Basin at 3800'. March-May. A

*Castilleja chromosa* A. Nels.
INDIAN PAINTBRUSH
Common along stream margins on bajadas; infrequent on moderate slopes and flats below 5000'. April-Aug. P

*Castilleja linariaefolia* Benth.
Infrequent in canyons and moist places above 4000' in Pinyon-Juniper Woodland. June-Sept. P

*Keckiella antirrhinoides* (Benth.) Straw
ssp. *microphylla* (Gray) Straw.
Frequent in rocky places and washes above 3400'. April-May. S
**MONKEY FLOWER**

*Mimulus bigelovii* (Gray) Gray

Infrequent on sandy washes and bajadas; Willow Spring Canyon at 4000', northwest end of range at 2500'. March-June. A

*Mimulus guttatus* Fisch. ex DC.

Locally abundant in wet places throughout the range. March-June. P

*Mimulus nasutus* Greene. **

In moist soil by Dripping Spring Pond. March-Aug. P

*Mimulus parishii* Greene.

Common in Bull Canyon stream-bed between 4000' and 4400'. May-Aug. A

*Mimulus pilosus* (Benth.) Wats.

Infrequent in moist sandy places; Cottonwood Spring and Basin, Bull Canyon. April-June. A

*Mimulus rubellus* Gray in Torr.

Frequent in moist sandy places from 3000' to 5500'; Cove Spring Canyon, upper Bull Canyon, Willow Spring Basin. April-June. A

*Penstemon bridgesii* Gray.

BEARD TONGUE

Found once on steep rocky slope near summit of Silver Peak at about 6300' beneath Pinyons. June-Aug. P

*Penstemon eatonii* Gray

ssp. *undosus* (Jones) Keck.

Frequent along rocky washes and slopes between 4000' and 6300'. April-June. P

*Penstemon pseudospectabilis* Jones.

Frequent among rocks and in canyons above 4000', mostly in Pinyon-Juniper Woodland; Willow Spring Basin, Cottonwood Canyon, Bighorn Basin, upper Bull Canyon, Silver Peak. These penstemon populations have been referred to both as *P. pseudospectabilis* and *P. stephensii* Bdg. At higher elevations some populations approach *P. stephensii* in form, however it is doubtful that these two closely related species could maintain specific distinction in the Granite Mountains. Field and herbaria research indicate that the taxonomic relationship between these two species should be critically examined. March-June. P

**SOLANACEAE**

*Datura meteloides* A. DC.

JIMSON WEED

Frequent in sandy places below 4000'; Cove Spring area, Bull Canyon, Budweiser Canyon. May-Oct. P

*Lycium andersonii* Gray.

BOX-THORN

Frequent on bajadas and moderate slopes between 6000'. March-May. S

*Lycium cooperi* Gray.

WOLF-BERRY

Frequent on bajadas, washes and moderate slopes below 5000'. March-May. S

*Nicotiana trigonophylla* Dunal in A. DC.

DESSERT TOBACCO

Common along rocks and on rocky wash margins below 4800'. March-June. B-P

*Physalis crassifolia* Benth.

GROUND-CHERRY

var. *crassifolia*.

Common in sandy and rocky places mostly below 4000'; Budweiser Canyon, Sheep Corral, Cottonwood Basin, Twin Springs. March-May. P
Physalis hederifolia Gray
var. cordifolia (Gray) Waterfall.
Frequent in sandy and rocky places between 3000' and 6000'; Cottonwood
Spring, Coyote Springs Canyon, and east of Granite Cove. May-June. P

TAMARICACEAE

Tamarix ramosissima Ledeb. +
Locally common on moist sand in Bull Canyon at 3600'. S-T

URTICACEAE

Urtica dioica L. *
ssp. Holosericea (Nutt.) Thorne. [U. holosericea Nutt.]
In moist soil by springs and ponds in the Dripping Spring area. May. P

VISCACEAE

Phoradendron californicum Nutt.
Frequent on Acacia greggii and Prosopis glandulosa. P

Phoradendron juniperinum Engelm. ex Gray
ssp. juniperinum.
Infrequent on Juniperus throughout the range. P

ZYGOPHYLLACEAE

Larrea divaricata Cav.
ssp. tridentata (Sesse & Moc. ex DC.) Felger & Lowe.
[L. tridentata (Sesse & Moc. ex DC.) Cov.]
Common to abundant on bajadas and open slopes below 4000'; infrequent on
slopes to 5000'. May-June, Sept.-Oct. S

CLASS ANGIOSPERMAE

SUBCLASS MONOCOTYLEDONAE

AGAVACEAE

Agave deserti Engelm. *
Infrequent on rocky slopes and flats above 4000'; Snake Spring, Cove Spring
area, Granite Peak area, Bull Canyon. May-June. P

Yucca baccata Torr. *
var. vespertina Mckelvey.
Common on rocky slopes and flats, generally between 4200' and 6000'. May-
June. S

Yucca schidigera Roezl ex Ortgies. *
Common on bajadas and slopes between 3700' and 5000'; rarely to 5750'.
April-May. S

CYPERACEAE

Carex alma Bailey. **
Snake Spring oasis, Cove Spring, Bull Canyon. Summer. P

SEDGE
Eleocharis montevidensis Kunth. var. parishii V. Grant. [E. parishii Britton.] Bull Canyon at 3500'. P

IRIDACEAE

Sisyrinchium halophilum Greene. BLUE-EYED-GRASS Infrequent along intermittent streams in Bighorn Basin at 4100', and at Coyote Springs at 3300'. April-May. P

JUNCACEAE

Juncus bufonius L. ** TOAD RUSH Locally abundant in Bull Canyon, Dripping Spring Pond and Coyote Springs. April-Sept. A


Juncus xiphioides E. Mey. ** Bull Canyon between 3200' and 3500'. May-Oct. P

LILIACEAE

Allium nevadense Wats. NEVADA ONION var. cristatum (Wats.) Ownbey. Rare on rocky slopes at west end of range at 4000'. April-May. P

Calochortus kennedyi Porter var. kennedyi. DESERT MARIPOSA Common on Cove Spring bajada, frequent elsewhere on east bajadas and on dry slopes below 4500'. April-June. P

var. munzii Jeps. Found only on open flat in Bull Canyon at 4500'. April-June. P

Dichelostema pulchella (Salisb.) Heller. var. pauciflora (Torr.) Mort. WILD HYACINTH Locally common on sandy bajadas and among rocks in Cove Spring area at 4100'. March-May. P

Zigadenus brevibracteatus (Jones) Hall. DESERT ZYGADENE Locally common on south and east bajadas; infrequent on open slopes below 5000'. April-May. P

POACEAE

Agropyron trachycaulum (Link) Malte. ** WHEAT GRASS On the Cottonwood/Bull Canyon divide at 5700', and in Bull Canyon at 4800'. June-Aug. P

Agrostis semiverticillata (Forsk.) C. Chr. + [Polypogon semiverticillata (Forsk) Hylander.] Bull Canyon at 3500'. May-June. P

Aristida adscensionis L. ** Rocky slopes along Budweiser Canyon and Wash, and Bull Canyon Wash at 2500'. Feb.-June. A

Aristida glauca (Ness.) Walp. ** Rocky bed of Budweiser Canyon at 3900'. March-May. P

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Aristida parishii Hitchc.
Budweiser and Willow Spring Canyons at about 4000'. April-June. P

Bouteloua aristidoides (HBK.) Griseb. **
GRAMA GRASS
Budweiser Spring. April-Sept. Summer annual.

Bouteloua barbata Lag. **

Bromus diandrus Roth. + **
RIPGUTGRASS
Budweiser Canyon, southeast spur of range, south of Cove Spring. April-June. A

Bromus rubens L. +
FOXTAIL CHESS
Abundant throughout the range. March-May. A

Bromus tectorum L. +
CHEAT GRASS
Locally abundant in Cottonwood Basin at 5000'; frequent elsewhere. April-May. A

Bromus trinii Desv. in Gay. +
Common in sandy areas below 5000'. March-May. A

Eragrostis cilianensis (All.) E. Mosher. + **
LOVEGRASS
By Dripping Spring Pond. June-Dec. A

Erioneuron pulchellum (HBK.) Tateoka. **
FLUFFGRASS
Cottonwood Wash, and on sandy desert 7 miles south of Kelso on Kelbaker Road at about 2500'. Feb.-May. P

Hilaria rigida (Thurb.) Benth. ex Scribn.
Upper Bull Canyon at 4500'. Feb.-June. P

Melica frutescens Scribn. **
GALLETA GRASS
Willow Spring Canyon, Budweiser Canyon in the sandy canyon-bottom at about 3700', and upper Cottonwood Canyon at 5200'. March-May. P

Melica imperfecta Trin.
Frequent below 5200'. April-May. P

Muhlenbergia microsperma (DC.) Kunth. **
Muhlenbergia porteri Scribn. **
Budweiser Wash and Canyon, and Bull Canyon Wash at about 2500'. March-May. A

Muhlenbergia rigens (Benth.) Hitch. **
Rocky floor of Budweiser Canyon at about 3900', and Coyote Springs at 3200'. June-Sept. P

Oryzopsis hymenoides (R. & S.) Ricker.
COTTONWOOD CANEGRASS
Snake Spring at 4000'; upper Cottonwood Basin and upper Bull Canyon to 5200'. May-July. P

Poa bigelovii Vasey & Scribn. **
BLUESTEM GRASS
Coyote Springs at 3300'. March-May. A

Poa fendleriana (Steud.) Vasey. **
MUTTONGRASS
Snake Spring at 4000'; upper Cottonwood Basin and upper Bull Canyon to 5200'. May-July. P
Poa scabrella (Thurb.) Benth.  
Snake Spring area at 4000' and 4200', Cottonwood Basin at 4700'.  Feb.-June.  P.

Polypogon monspeliensis (L.) Desf.  BEARDGRASS  
Cottonwood Spring, Budweiser Canyon, Bull Canyon, Dripping Spring Pond.  
April-Aug.  A

Schismus barbatus (L.) Thell.  **  
On sandy bottom of Budweiser Canyon at about 3800', Bull Canyon Wash at 2500'.  March-April.  A

Sitanion jubatum J.G. Sm.  SQUIRRELTAIL  
Cottonwood Spring area, plateau east of Granite Peak at 6200'.  May-June.  P

Sitanion longifolium J.G. Sm.  
Common above 5000' in Pinyon-Juniper Woodland, frequent elsewhere above the bajadas.  April-May.  P

Sporobolus cryptandrus (Torr.) Gray.  **  DROPSEED  
Bull Canyon at 4000'.  May-Aug.  P

Stipa parishii Vasey.  *  
[S. coronata Thurb. var. depauperata (Jones) Hitchc.]  
Upper Cottonwood Basin at 5200'.  May-Aug.  P

Stipa speciosa Trin. & Rupr.  SPEARGRASS  
Common in rocky areas throughout the range.  April-June.  P

Tridens muticus (Torr.) Nash.  **  
On rocky slopes of Budweiser Canyon at about 3900'.  Spring and autumn.  P

Vulpia myuros (L.) K.C. Gmel.  ** [Festuca myuros L.]  FESCUE  
Cottonwood Spring area at 4400'.  March-May.  A

Vulpia octoflora (Walt.) Rydb. [Festuca octoflora Walt.]  SIX-WEEKS FESCUE  
Budweiser Canyon, Coyote Springs, and Cottonwood Canyon at 5500'.  April-June.  A

TYPHACEAE

Typha domingensis Pers.  *  CAT-TAIL  
Dripping Spring Pond, Budweiser Spring, and in lower Bull Canyon at 5600'.  June-July.  P