

## INTRODUCTION

A survey of the vascular flora of Butte Creek Trail was carried out between early October, 1989 and late December, 1990. In addition, the trail has been visited regularly on field trips sponsored by the Mt. Lassen Chapter of the California Native Plant Society, and a partial species inventory, compiled by trip leaders Wes Dempsey and Barbara Castro, was also consulted. The primary purpose of the survey was to collect data for a study of the vascular flora of Butte County, which has now been published (Oswald & Ahart, 1994).

Butte Creek Trail parallels the west side of the creek on public lands located in T24N R3E sections 27 and 34, which are administered by the Bureau of Land Management. The trailhead is on Doe Mill Rd just west of the bridge over Butte Creek and can be reached from the Skyway just north of Lake De Sabla via Doe Mill Rd (Ponderosa Way) or from Hwy. 32 just south of Forest Ranch Fire Station via Garland and Doe Mill roads (see Figure 1).

From the trailhead, the first section of trail winds along moist, shaded slopes dominated by mixed coniferous forest. South of an access road to a hydroelectric diversion, the canyon walls become more precipitous, with massive, more or less open outcrops interspersed with steep, rocky slopes dominated by canyon oak (*Quercus chrysolepis*). After about 1.6 miles, which is the traditional location for lunch on CNPS field trips, the trail continues but becomes increasingly hazardous and is not recommended. This survey is restricted to this 1.6 mile portion of the trail, together with a short section of Doe Mill Rd from the bridge over Butte Creek to an abandoned homestead just west of the trailhead. Elevations vary from 2100 ft at the trailhead to 1860 ft at the south end of the survey area.

TABLE 1. Numerical analysis of the vascular flora of Butte Creek Trail.

FAMILIES	GENERA	SPECIES'	VARIETIES	TOTAL	NON-NATIVE	CNPS LISTED
67	188	270	1	271	52 (19.2%)	4

<sup>\*</sup> Includes both varieties and subspecies,

The trail is in the yellow pine forest community characterized by Munz (1973). Within this large community, mixed coniferous forest, chaparral, riparian, and rock outcrop associations are recognizable. Geologically, the area is uplifted pre-Cretaceous marine deposits of metamorphic rock, with massive intrusions of Mesozoic ultrabasic (serpentine) rock. Outcrops of the latter are often sparsely vegetated and support taxa indicative of this sub-

strate such as California fescue (Festuca californica) and milkwort jew-elflower (Streptanthus polygaloides).

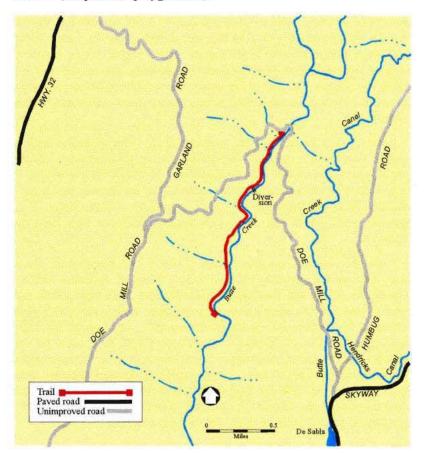


FIGURE 1. Location of the study area.

A total of 271 plant taxa in 67 families and 188 genera was recorded during the survey (see Table 1). About 19 percent of the plants are non-native introductions to the California flora. No study of this kind is ever complete. Although the survey is based on twelve visits, together with the Dempsey and Castro list based on five field trips, a number of species have undoubtedly not been recorded.

Four of the plants recorded in the survey are listed in the CNPS *Inventory of Rare and Endangered Vascular Plants of California* (Smith & Berg, 1988). Dissected-leaf toothwort (Cardamine pachystigma var. dissectifolia)

is in List 3, "Plants about which we need more information—a review list." All of the others are in List 4, "Plants of limited distribution—a watch list." Included are shield-bracted monkey flower (*Mimulus glaucescens*), Humboldt lily (*Lilium humboldtii*), and Sanborn's onion (*Allium sanbornii*).

Nomenclature in the plant list is based upon *The Jepson Manual* (Hickman, 1993). Names used in *A California Flora* (Munz, 1973) are indicated in brackets. Common names are mostly those of Abrams (1923-1960). The date(s) associated with each plant indicate the flowering interval for the plant at the study site, in so far as it could be determined from limited observations. *Early* is applied to days 1 through 10, *mid* to days 11 through 20, and *late* to days 21 through the end of the month. The flowering intervals, together with locations and habitats in which the plants were found, should be considered to be positive but not inclusive statements. Thus, a particular plant might be found at some location other than the ones mentioned, or it might be found blooming before or after the interval indicated. Words such as rare, common, abundant, etc., are entirely subjective.

Some voucher specimens have been collected. They are indicated by collection number and are deposited in the herbarium at California State University, Chico (CHSC).

## REFERENCES

- Abrams, L. 1923-60. Illustrated Flora of the Pacific States. Vols. I-IV.; vol. IV by R. Ferris. Stanford University Press, Stanford.
- Dempsey, W. & B. Castro. Undated partial species inventory of Butte Creek Trail. Unpublished.
- Hickman, J.C., Editor. 1993. *The Jepson Manual. Higher Plants of California*. University of California Press, Berkeley
- Munz, P.A. 1973. A California Flora with Supplement. [Combined edition of Flora (1959) and Supplement (1969)]. University of California Press, Berkeley.
- Oswald, V.H. & L. Ahart. 1994. Manual of the Vascular Plants of butte County, California. California Native Plant Society, Sacramento.
- Skinner, M.W. & B.M. Pavlik. 1994. Inventory of Rare and Endangered Vascular Plants of California. 5th Edition. California Native Plant Society, Sacramento.

## Guide to locations mentioned in the plant list.

0.0 mile	Trailhead.
0.1 mile	Restriction gate.
0.2 mile	Old bridge over intermittent stream.
0.3 mile	Beginning of Black Prince Mining Claim.
0.3+ mile	First new bridge over intermittent stream.
0.4 mile	Second new bridge over intermittent stream.
0.4+ mile	Restriction gate.
0.5 mile	End of Black Prince Mining Claim; access road to hydroelectric diversion dam.
0.6 mile	Restriction gate.
0.7 mile	Small trailside spring with cemented stonework.
0.7+ mile	Up stairway on serpentine outcrop.
0.8 mile	Down stairway on serpentine outcrop.
0.9 mile	Spring-fed drainage with small pool.
1.3 miles	Short switchback on trail.
1.5 miles	Intermittent streamlet with waterfall and pool.
1.6 miles	Intermittent streamlet with small waterfall.
1,6+ miles	Side trail to creek. Traditional end of CNPS hikes and end of study area. Trail continues past this point but becomes hazardous!

Plant names printed in a non-serif typeface, e.g., *Rumex crispus*, are not native to the California flora.

## THE PLANT LIST

## FERNS AND FERN ALLIES

### SELAGINELLACEAE - SPIKE-MOSS FAMILY

Selaginella hansenii Hieron. – Hansen's spike-moss. Locally abundant perennial forming spreading colonies on sunny serpentine outcrops.

Selaginella wallacei Hieron. – Wallace's spike-moss. Locally abundant perennial, often forming colonies alongside the previous species.

## EQUISETACEAE - HORSETAIL FAMILY

Equisetum arvense L. – Common horsetail. Herbaceous perennial (vegetative form) noted along the edge of the creek.

Equisetum hyemale L. var. affine (Engelm.) A.A.Eaton – Western scouring rush. Rhizomatous perennial on vernally wet, wooded slopes near the trailhead. [Includes vars. robustum A.A.Eaton & californicum Milde]

## POLYPODIACEAE - FERN FAMILY

Adiantum aleuticum (Rupr.) C.A. Paris – Five-finger fern. Uncommon fern noted on wet outcrops on the east side of the creek. [A. pedatum L. var. aleuticum Rupr.]

Adiantum capillus-veneris L. – Southern maidenhair. Uncommon summer active fern noted in a niche in a shaded outcrop near the south end of the trail.

Adiantum jordanii Müll.Hal. – California maidenhair. Locally abundant fern on shaded slopes and outcrops. Fronds form during the rainy season and then die back during late spring and summer.

Aspidotis densa (Brack.) Lellinger – Indian's-dream. Occasional fern on sunny serpentine outcrops. [Onychium densum Brack.]

Cheilanthes gracillima D.C.Eaton - Lace lip fern. Locally common delicate fern in crevices on sunny outcrops.

Cystopteris fragilis (L.) Bernh. – Brittle fern. Occasion delicate fern on moist, mossy, shaded outcrops.

Dryopteris arguta (Kaulf.) Maxon – Coastal wood fern. Occasional on shaded forest floor and canyon slopes.

Pellaea andromedifolia (Kaulf.) Fée – Coffee fern. Scattered on sunny outcrops and open, brushy slopes.

Pellaea mucronata (D.C.Eaton) D.C.Eaton var. mucronata – Common bird's-foot fern. Common on dry, exposed outcrops.

Pentagramma triangularis (Kaulf.) Yatsk. Windham, & E.Wollenw. ssp. triangularis - Gold-backed fern. Common on both serpentine and

metamorphic outcrops. [Pityrogramma triangularis (Kaulf.) Maxon var. triangularis]

Polypodium calirhiza S.A.Whitmore & A.R.Sm. – Intermediate polypody. Locally abundant on moist, shaded slopes and outcrops from fall into spring, the fronds dying back to the rhizomes in summer. [Polypodium californicum Kaulf., in part]

Polystichum imbricans (D.C.Eaton) D.H.Wagner – Narrow-leaved sword fern. Common evergreen fern on shaded forest slopes and outcrops. [P. munitum (Kaulf.) Presl var. imbricans (D.C.Eaton) Maxon]

Pteridium aquilinum (L.) Kuhn var. pubescens Underw. – Western bracken. Common, often forming colonies on shaded forest floor. The fronds die back to the rhizomes during the winter.

Woodwardia fimbriata Sm. - Giant chain fern. Common large evergreen fern around hillside springs and intermittent drainages.

#### CONIFERS

## CUPRESSACEAE - CYPRESS FAMILY

Calocedrus decurrens (Torr.) Florin – Incense-cedar. Common evergreen tree on wooded canyon slopes. [Libocedrus decurrens Torr.]

#### PINACEAE - PINE FAMILY

Abies concolor (Gord. & Glend.) Lindl. ex Hildebr. – White fir. Tree of mixed coniferous forest listed by Dempsey and Castro.

Pinus lambertiana Douglas - Sugar pine. Occasional tree in mixed coniferous forest.

Pinus ponderosa Douglas ex Lawson & C.Lawson var. ponderosa – Pacific ponderosa pine. Occasional I tree in mixed coniferous forest.

*Pinus sabiniana* Douglas ex D.Don – Gray pine. Listed by Dempsey and Castro but not relocated during this survey. This tree often replaces ponderosa pine on serpentine outcrops in mixed coniferous forest.

Pseudotsuga menziesii (Mirb.) Franco var. menziesii – Douglas-fir. Abundant large tree in mixed coniferous forest.

## TAXACEAE - YEW FAMILY

Taxus brevifolia Nutt. - Pacific yew. Known from a single small tree located in a swale near the head of the trail.

Torreya californica Torr. – Californica-nutmeg. Common small to medium-sized tree on shaded canyon slopes.

#### DICOT FLOWERING PLANTS

#### ACERACEAE - MAPLE FAMILY

Acer circinatum Pursh – Vine maple. Occasional small tree along the creek and hillside drainages. Mid Apr.

Acer macrophyllum Pursh – Big-leaved maple. Common tree on shaded canyon slopes. Mid Apr.

#### ANACARDIACEAE - SUMAC FAMILY

Toxicodendron diversilobum (Torr. & A.Gray) Greene – Poison-oak. Occasional to locally common shrub along the trail and in rocky openings. Early May. [Rhus diversiloba Torr. & A.Gray]

# APIACEAE – CARROT FAMILY [Umbelliferae]

Lomatium utriculatum (Nutt. ex Torr. & A.Gray) J.M.Coult. & Rose – Bladder lomatium. Locally abundant herbaceous perennial on serpentine outcrops. Early Mar–May.

Osmorhiza chilensis Hook. & Arn. – Mountain sweet-cicely. Common herbaceous perennial on wooded slopes. Early May (already in fruit).

Sanicula bipinnatifida Douglas ex Hook. var. flava Jepson – Purple sanicle. Common herbaceous perennial on semi-open canyon slopes. Butte County plants in coniferous forest are typically this yellow-flowered variety. Mid Apr–Jun.

Tauschia kelloggii (A.Gray) J.F.Macbr. – Kellogg's tauschia. Occasional herbaceous perennial on brushy and rocky oak-covered slopes. Mid Apr.

Torilis arvensis (Huds.) Link ssp. arvensis – Common hedge-parsley. Occasional weedy annual along the trail through serpentine outcrops where it grows with, but is less common than, the following subspecies. Early Jul.

Torilis arvensis ssp. purpurea (Ten.) Hayek – Purple hedge-parsley. Common and often locally abundant annual weed in disturbed places along the trail. Early May–Jul.

Yabea microcarpa (Hook. & Arn.) Koso-Pol. – California hedgeparsley. Locally abundant annual in disturbed trailside scree at the first intermittent streamlet south of the switchback. Mid Apr-May. [Caucalis microcarpa Hook & Arn.]

#### APOCYNACEAE - DOGBANE FAMILY

Apocynum cannabinum L. – Indian-hemp. Locally abundant along the edge of the creek. Early Oct. (in fruit).

## ARALIACEAE - GINSENG FAMILY

Aralia californica S.Watson – Elk-clover. Common tall herbaceous perennial in shaded drainages, along streamlets, and along the creek. Early Jul-Aug.

#### ARISTOLOCHIACEAE - PIPEVINE FAMILY

Asarum hartwegii S.Watson – Hartweg's wild ginger. Locally common herbaceous perennial on moist, shaded canyon slopes. Early Apr–May.

#### ASCLEPIADACEAE - MILKWEED FAMILY

Asclepias eriocarpa Benth. – Indian milkweed. Herbaceous perennial listed by Dempsey and Castro but not relocated during this survey.

# ASTERACEAE – SUNFLOWER FAMILY [Compositae]

Adenocaulon bicolor Hook. - Trail-plant. Common herbaceous perennial on shaded forest floor near the trailhead. Early Jul-Aug.

Ageratina occidentalis (Hook.) R.M.King & H.Rob. – Western eupatorium. Occasional herbaceous perennial on outcrops on the canyon wall and fairly common on outcrops along the edge of the creek. Early Jul-Aug. [Eupatorium occidentale Hook.]

Agoseris grandiflora (Nutt.) Greene – Large-flowered agoseris. Herbaceous perennial noted on open, rocky slopes. Early Jun.

Agoseris retrorsa (Benth.) Greene – Spear-leaved agoseris. Common herbaceous perennial on open wooded slopes and outcrops. Mid Apr–May.

Artemisia douglasiana Besser – Mugwort. Common herbaceous perennial on the edge of the creek. Early Sep.

Aster chilensis Nees var. chilensis – California aster. Herbaceous perennial noted along the edge of the creek in the Black Prince Claim. Mid Sep.

Aster integrifolius Nutt. – Entire-leaved aster. Herbaceous perennial found on an outcrop on the edge of the creek at the end of the trail. Late Jul. [Oswald 4403]

Aster oregonensis (Nutt.) Cronquist – White-topped aster. Common herbaceous perennial on the edge of the creek. Early Oct (in fruit). [Includes ssp. californicus (Durand) D.D.Keck]

Baccharis salicifolia (Ruiz & Pav.) Pers. – Mule's-fat. Occasional shrubby perennial on the edge of the creek. Early Jul (post-flower). [B. viminea DC.]

Centaurea solstitialis L. – Yellow star-thistle. Weedy annual along the trail through serpentine outcrops. Late Jul-Sep.

Chamomilla suaveolens (Pursh) Rydb. – Common pineapple weed. Locally abundant weedy annual along Doe Mill Rd between the trailhead and the bridge. Mid Apr. [Matricaria matricarioides (Less.) Porter]

Cirsium occidentale (Nutt.) Jeps. var. venustum (Greene) Jeps. – Venus thistle. Herbaceous perennial on serpentine openings. Early Jul-Aug. [Cirsium proteanum J.T.Howell]

Conyza canadensis (L.) Cronquist var. glabrata (A.Gray) Cronquist – Canadian horseweed. Annual on moist soil on the edge of the creek at the end of the trail. Early Sep-Oct.

Conyza floribunda Humb., Bonpl. & Kunth – Many-flowered horseweed. Weedy annual noted along the edge of the creek at the end of the trail. Mid Sep.

Crepis pleurocarpa A.Gray - Naked-stemmed hawk's-beard. Uncommon herbaceous perennial on a shaded slope with serpentine-derived soil between the trailhead and Black Prince Claim. Early Jul-Aug.

Erigeron philadelphicus L. – Philadelphia daisy. Locally common herbaceous perennial wet outcrops along the creek at the end of the trail. Early May–Jun.

Eriophyllum lanatum (Pursh) J.Forbes var. grandiflorum (A.Gray) Jeps. – Large-flowered woolly-sunflower. Common herbaceous perennial on sunny outcrops and brushy slopes. Mid Apr-Aug.

Gnaphalium luteo-album L. – Weedy cudweed. Occasional annual weed on serpentine near the stairways. Late Jan-May.

Hieracium albiflorum Hook. – White-flowered hawkweed. Occasional to locally common herbaceous perennial on brushy banks and semi-open forest floor. Early Jun-Aug.

Hieracium scouleri Hook. var. scouleri – Scouler's hawkweed. Localized herbaceous perennial on serpentine soils on a semi-open canyon slope along a short section of trail at the switchback. This yellow-flowered hawkweed has also been collected on serpentine near Forbestown Reservoir and on granite along Feather Falls Trail approaching Fall River. Early Jul-Aug. [H. cynoglossoides Arv.-Touv., misapplied to California plants. Oswald 4354]

Hypochoeris glabra L. – Smooth cat's-ear. Common annual in sunny locations along the trail through outcrops. Mid Apr–Jul.

Lactuca serriola L. – Prickly lettuce. Occasional annual weed in disturbed soil through outcrops; also noted along Doe Mill Rd at the bridge. Late Juyl-Sep.

Madia elegans D.Don ex Lindl. ssp. vernalis D.D.Keck – Spring madia. Occasional to locally abundant annual on semi-open slopes and on outcrops. Mid Apr–Jul.

Madia exigua (Sm.) A.Gray – Thread-stemmed madia. Small annual on semi-open trailside at the junction the trail and the access road to the hydroelectric diversion dam. May–Jun.

Madia gracilis (Sm.) D.D.Keck - Slender tarweed. Occasional annual on serpentine outcrops. Early May-Jul.

Madia subspicata D.D.Keck - Spiked tarweed. Annual along the trail through the serpentine outcrops and in the disturbed opening at the old homestead near the trailhead. Early May-Jun.

Senecio vulgaris L. – Old-man-in-the-spring. Common weedy annual in open, disturbed places along the trail. Early Mar–May.

Sonchus asper (L.) Hill ssp. asper – Spiny-leaved sow-thistle. Weedy annual in moist, seepy places. Early May–Jul.

Sonchus oleraceus L. - Common sow-thistle. Annual weed noted in a moist place on the first outcrop south of the stairway outcrop. Early Jun-Jul.

Stephanomeria virgata Benth. ssp. pleurocarpa (Greene) Gottlieb – Wand stephanomeria. Common annual on several of the serpentine outcrops. Late Jul-Aug.

Tragopogon dubius Scop. – Yellow salsify. Biennial to perennial herb found in the disturbed opening at the old homestead on Doe Mill Rd near the trailhead. Late May–Jul.

Uropappus lindleyi (DC.) Nutt. – Silverpuffs. Occasional annual on sunny outcrops. Mid Apr. [Microseris lindleyi (DC.) A.Gray; M. linearifolia (Nutt.) Sch.Bip.]

## BERBERIDACEAE - BARBERRY FAMILY

Berberis aquifolium Pursh var. dictyota (Jeps.) Jeps. – Jepson's barberry. Occasional low evergreen shrub on drier wooded and brushy slopes along the trail. Mid Apr. [Berberis dictyota Jeps.; Mahonia dictyota (Jeps.) Fedde]

#### BETULACEAE - BIRCH FAMILY

Alnus rhombifolia Nutt. – White alder. Common small to moderate sized tree along the creek and along springs and drainages on the canyon wall. Late Jan-Feb.

Corylus cornuta Marsh. var. californica (A.DC.) W.M.Sharp – California hazelnut. Common low, shrubby tree on shaded canyon slopes. from the trailhead into the Black Prince Claim. Mid Mar–Apr.

#### BORAGINACEAE - BORAGE FAMILY

Cynoglossum grande Douglas ex Lehm. – Pacific hound's-tongue. Occasional herbaceous perennial on shaded to somewhat open slopes. Late Mar-Apr.

# Brassicaceae – Mustard family [Cruciferae]

Arabis breweri S.Watson var. austiniae (Greene) Rollins – Austin's rockcress. Common perennial on open to semi-open outcrops. Late Jan-Apr.

Athysanus pusillus (Hook.) Green – Petty athysanus. Delicate annual found along the base of outcrops. Late Mar–Apr.

Cardamine oligosperma Nutt. – Western bittercress. Annual forb on moist slopes and outcrops. Late Mar-Apr.

Cardamine pachystigma (S.Watson) Rollins var. dissectifolia (Detling) Rollins – Dissected-leaf toothwort. Locally common herbaceous perennial on shaded to semi-open serpentine outcrops. Early Mar-Apr. CNPS Inventory List 3. [Dentaria pachystigma S.Watson var. dissectifolia Detling]

Hirschfeldia incana (L.) Lagr.-Foss. – Mediterranean hoary-mustard. Herbaceous perennial noted along the edge of Doe Mill Rd at the bridge. Early Jul-Oct. [Brassica geniculata (Desf.) Ball]

Streptanthus polygaloides A.Gray – Milkwort jewelflower. Locally common annual on serpentine soils of hillside openings and outcrops. Early May–Jul.

Streptanthus tortuosus Kellogg var. tortuosus – Mountain jewelflower. Uncommon annual to biennial on scree of serpentine outcrops. Mid Apr-May.

Thysanocarpus curvipes Hook, var. curvipes – Clasping-leaved fringepod. Occasional annual on serpentine outcrops. Late Mar–May.

#### CALYCANTHACEAE - CALYCANTHUS FAMILY

Calycanthus occidentalis Hook. & Arn. – Western spicebush. Common deciduous shrub in shaded ravines and near streams. Late May–Jul.

## CAPRIFOLIACEAE - HONEYSUCKLE FAMILY

Lonicera hispidula (Lindl.) Douglas ex Torr. & A.Gray var. vacillans A.Gray – Hairy honeysuckle. Common perennial vine trailing on shaded forest floor or climbing on brush. Early Jun–Jul.

Lonicera interrupta Benth. - Chaparral honeysuckle. Perennial vine climbing on brush on the serpentine outcrop with the stairway. Late May-Jun.

Symphoricarpos mollis Nutt. – Creeping snowberry. Trailing perennial forming a localized colony on a wooded slope south of the stairway outcrop. Late May–Jun. [S. acutus (A.Gray) Dieck]

#### CARYOPHYLLACEAE - PINK FAMILY

Cerastium glomeratum Thuill. – Sticky mouse-eared chickweed. Occasional annual weed in disturbed places along outcrops. Mid Apr.

Lychnis coronaria (L.) Desr. – Mullein-pink. Common woolly perennial at the old homestead near the trailhead, from which it has spread to moist, more or less shaded places along the first part of the trail. Early Jul-Aug.

Minuartia douglasii (Fenzl ex Torr. & A.Gray) Mattf. – Douglas' sandwort. Locally abundant slender-stemmed annual on serpentine outcrops. Early May–Jun. [Arenaria douglasii Fenzl ex Torr. & A.Gray]

Petrorhagia dubia (Raf.) G.López & Romo – Grass-pink. Common annual in sunny exposures along outcrops. Mid Apr–Jun. [Kohlrauschia velutina (Guss.) Reichenb.; Tunica prolifera (L.) Scop., misapplied]

Saponaria officinalis L. – Bouncing-bet. Herbaceous perennial on gravel bars along the creek. Mid Sep-Oct.

Silene californica Durand – Indian-pink. Common herbaceous perennial on semi-open slopes all along the trail. Early Jul-Oct.

Stellaria media (L.) Vill. – Common chickweed. Annual forb noted at the base of a shaded, moss-covered outcrop. Early Mar.

Stellaria nitens Nutt. – Shiny starwort. Inconspicuous slender-stemmed annual on loose, moist soil at the base of sunny outcrops. Late Mar–May.

#### CHENOPODIACEAE - GOOSEFOOT FAMILY

Chenopodium ambrosioides L. – Mexican-tea. Annual forb on gravel bars along the creek in the Black Prince Claim. Mid Sep.

#### CONVOLVULACEAE - MORNING-GLORY FAMILY

Calystegia occidentalis (A.Gray) Brummitt ssp. occidentalis – Western morning-glory. Herbaceous vine climbing on brush and scree of serpentine outcrops. Late May–Jul. [Convolvulus occidentalis A.Gray; Calystegia polymorpha (Greene) Munz]

## CORNACEAE - DOGWOOD FAMILY

Cornus nuttallii Audubon ex Torr. & A.Gray – Mountain dogwood. Common small tree on shaded canyon slopes. Mid Apr–May.

Cornus sessilis Torr. ex Durand – Black-fruited dogwood. Common small, shrubby tree along the creek and along streamlets in shaded ravines. Late Mar-Apr.

#### CRASSULACEAE - STONECROP FAMILY

Dudleya cymosa (Lem.) Britton & Rose - Canyon dudleya. Succulent perennial on exposed outcrops. Early May-Jun.

Sedum spathulifolium Hook. - Broad-leaved stonecrop. Common succulent perennial forming colonies on more or less shaded outcrops. Mid Apr-May.

#### CUCURBITACEAE - GOURD FAMILY

Marah watsonii (Cogn.) Greene – Taw manroot. Herbaceous vine trailing on outcrops and climbing on brush. Late Mar-Apr.

## ERICACEAE - HEATH AND WINTERGREEN FAMILY

[Includes Pyrolaceae]

Arbutus menziesii Pursh – Pacific madrone. Occasional small to medium sized, evergreen trees on canyon slopes. Not seen in flower.

Arctostaphylos viscida Parry ssp. viscida – White-leaved manzanita. Common evergreen shrub on serpentine outcrops. Early Mar.

Pyrola picta Sm. – White-veined wintergreen. The leafless form of this herbaceous perennial was seen on a shaded slope in the Black Prince Claim. Late Jun–Jul. [P. aphylla Sm., P. picta forma aphylla (Sm.) Camp.]

#### EUPHORBIACEAE - SPURGE FAMILY

Eremocarpus setigerus (Hook.) Benth. – Turkey-mullein. Annual forb along the edge of Doe Mill Rd near the bridge. Mid Oct.

## FABACEAE - LEGUME FAMILY

[Leguminosae]

Lathyrus latifolius L. – Everlasting pea. Herbaceous perennial at the old home site near the head of the trail. Early Jul.

Lathyrus sulphureus W.H.Brewer ex A.Gray – Snub pea. Occasional perennial herbaceous vine on outcrops and brushy slopes. Mid Apr–May.

Lotus micranthus Benth. - Small-flowered lotus. Locally abundant annual along the trail through serpentine outcrops. Mid Apr-May.

Lupinus albifrons Benth. ex Lindl. var. albifrons – Silver bush lupine. Small shrub on the Dempsey-Castro list which was not relocated during this survey. [L. albifrons var. eminens (Greene) C.P.Sm.]

Medicago lupulina L. – Black medick. Annual forb on moist soil bordering a springy drainage south of section of the trail with the wooden stairways. Late May-Oct.

Melilotus alba Medik. - White sweet-clover. Tall annual forb along the edge of the creek. Early Jul-Oct.

Melilotus officinalis (L.) Pall. – Yellow sweet-clover. A single plant of this annual forb was recorded from a gravel bar in the bed of the creek in Black Prince Claim. Early Jul.

*Trifolium ciliolatum* Benth. – Foothill clover. Occasional annual in openings along the trail through serpentine outcrops. Early May–Jun.

*Trifolium hirtum* All. –Rose clover. Although uncommon along the trail, this is a widespread weedy annual in Butte County. Late May–Jun.

Trifolium microcephalum Pursh - Small-headed clover. Common annual forb on serpentine outcrops. Mid Apr-May.

*Trifolium willdenovii* Spreng. – Tomcat clover. Annual forb along the trail through serpentine outcrops. Early May. [*T. tridentatum* Lindl.]

#### FAGACEAE - OAK FAMILY

Lithocarpus densiflora (Hook. & Arn.) Rehder var. densiflora – Common tan-oak. Common tree on wooded slopes. Late Jul.

Quercus chrysolepis Liebm. var. chrysolepis – Canyon live oak. Abundant evergreen oak on canyon slopes. Flowering interval not determined.

Quercus kelloggii Newb. - California black oak. Occasional deciduous tree in mixed forest. Flowering interval not determined.

## GARRYACEAE - SILKTASSEL FAMILY

Garrya fremontii Torr. - Fremont's silktassel. Occasional evergreen shrub on brushy slopes and serpentine outcrops. Mid Jan.

## GENTIANACEAE - GENTIAN FAMILY

Centaurium muehlenbergii (Griseb.) W.Wight ex Piper – June centaury. Summer annual noted in a drainage just south of the switchback on the trail. Early Jul. [C. floribundum (Benth.) B.L.Rob.]

Centaurium venustum (A.Gray) B.L.Rob. – Canchalagua. Annual forb listed by Dempsey and Castro but not relocated during this survey. [Includes ssp. abramsji Munz]

## GERANIACEAE - GERANIUM FAMILY

Erodium cicutarium (L.) L'Hér. – Red-stemmed filaree. Weedy annual in sunny exposures along the trail through serpentine outcrops. Early Mar-Jul.

Geranium carolinianum L. – Carolina geranium. Annual forb noted under brush along the trail through a serpentine outcrop. Early May.

Geranium molle L. – Dove's-foot geranium. Weedy annual on disturbed serpentine soil near the stairway. Late Mar-Apr.

## GROSSULARIACEAE - GOOSEBERRY FAMILY

[In Saxifragaceae in some floras]

Ribes roezlii Regel var. roezlii - Sierra gooseberry. Prickly shrub on open, brushy outcrops. Early Mar.

#### HIPPOCASTANACEAE - BUCKEYE FAMILY

Aesculus californica (Spach) Nutt. – California buckeye. Small shrubby tree scattered on serpentine slopes. Late May–Jun.

## HYDROPHYLLACEAE - WATERLEAF FAMILY

Nemophila heterophylla Fisch. & C.A.Mey. – Variable-leaved nemophila. Common annual forb on moist outcrops and slopes. Late Mar–Jun.

Phacelia egena (Greene ex Brand) J.T.Howell – Rock phacelia. Common perennial on sunny serpentine outcrops. Mid Apr–Jun.

Phacelia heterophylla Pursh ssp. virgata (Greene) Heckard – Virgate phacelia. Occasional biennial on serpentine outcrops. Early May–Jun.

#### HYPERICACEAE - ST. JOHN'S-WORT FAMILY

Hypericum perforatum L. – Klamathweed. Weedy perennial on the edge of the creek. Early Jul.

# LAMIACEAE – MINT FAMILY [Labiatae]

Melissa officinalis L. – Bee-balm. Locally common herbaceous perennial in moist lowland along the trail in Black Prince Claim, probably having escaped from the homestead. Late Jul-Sep.

Monardella sheltonii Torr. – Shelton's coyote-mint. Uncommon herbaceous perennial noted on a serpentine outcrop. Early Jul-Aug. [M. villosa Benth. ssp. sheltonii (Torr.) Epling]

Prunella vulgaris L. var. lanceolata (Barton) Fernald – Mountain self-heal. Herbaceous perennial listed by Dempsey and Castro but not relocated during this survey.

Scutellaria californica A.Gray - California skullcap. Herbaceous perennial on brushy serpentine outcrops. Late May-Jul.

Stachys pycnantha Benth. – Short-spiked hedge-nettle. Herbaceous perennial listed by Dempsey and Castro but not relocated during this survey.

## LAURACEAE - LAUREL FAMILY

Umbellularia californica (Hook. & Arn.) Nutt. – California bay. Common tree or tall shrub on shaded canyon slopes. Late Jan.

#### OLEACEAE - OLIVE FAMILY

Fraxinus dipetala Hook & Arn. - California ash. Small, shrubby tree on the serpentine outcrops near the stairways. Late Jul (in fruit).

#### ONAGRACEAE - EVENING PRIMROSE FAMILY

Clarkia rhomboidea Douglas – Diamond clarkia. Fairly common annual on serpentine outcrops. Late May–Jul.

Epilobium brachycarpum C.Presl – Tall annual willowherb. Annual forb scattered along the edge of the creek. Late Sep-Oct. [E. paniculatum Nutt. ex Torr. & A.Gray]

Epilobium canum (Greene) Raven ssp. latifolium (Hook.) Raven – California-fuchsia. Locally common herbaceous perennial on serpentine outcrops on the canyon wall and on outcrops bordering the creek. Mid Jul–Nov. [Zauschneria californica Presl ssp. latifolia (Hook.) D.D.Keck]

Epilobium ciliatum Raf. ssp. ciliatum – Fringed willowherb. Locally abundant herbaceous perennial on seepy areas along the trail and on the edge of the creek. Early Jul-Oct. [E. adenocaulon Hausskn. including vars. holosericeum (Trel.) Munz & parishii (Trel.) Munz]

Epilobium minutum Lindl. ex Lehm. – Minute willowherb. Occasional annual on open serpentine slopes. Early May–Jun.

## OROBANCHACEAE - BROOM-RAPE FAMILY

Orobanche fasciculata Nutt. – Clustered broom-rape. Root parasite noted on an open serpentine slope. Host not determined. Early May. [Includes var. franciscana Achey]

Orobanche uniflora L. var. uniflora – Naked broom-rape. Listed by Dempsey and Castro but not found during this survey.

#### PAPAVERACEAE - POPPY FAMILY

[Includes Fumariaceae of some floras]

Dendromecon rigida Benth. – Bush-poppy. Uncommon shrub noted on a serpentine slope below the trail. Early Jul.

Dicentra formosa (Haw.) Walp. – Pacific bleedinghearts. Common herbaceous perennial on shaded slopes, mostly between the trailhead and the Black Prince Claim. Mid Apr–Jun.

## PHILADELPHACEAE – MOCK ORANGE FAMILY

[In Saxifragaceae in some floras]

Philadelphus lewisii Pursh – Mock orange. Deciduous shrub on the edge of serpentine outcrops and on brushy slopes. Early Jun–Jul. [Includes ssp. californicus (Benth.) Munz]

#### PLANTAGINACEAE - PLANTAIN FAMILY

Plantago lanceolata L. – English plantain. Weedy perennial on moist soil bordering the edge of the creek at the end of the trail. Early Jun–Jul.

## POLEMONIACEAE - PHLOX FAMILY

Collomia heterophylla Douglas ex Hook. – Variable-leaved collomia. Locally common annual forb on disturbed banks and outcrops. Mid Apr–Jun.

Gilia capitata Sims ssp. pedemontana V.E.Grant – Foothill globe gilia. Locally common annual on serpentine outcrops. Early May–Aug,

## POLYGALACEAE - MILKWORT FAMILY

Polygala cornuta Kellogg var. cornuta – Sierra milkwort. Occasional herbaceous perennial on wooded and brushy slopes. Late May–Aug.

#### POLYGONACEAE - BUCKWHEAT FAMILY

Eriogonum nudum Douglas ex Benth. var. pubiflorum Benth. – Hairy-flowered buckwheat. Occasional herbaceous perennial noted in openings at the diversion dam and along Doe Mill Rd at the bridge. Early Jul–Sep.

Polygonum arenastrum Jord. ex Boreau – Common knotweed. Annual forb noted on sand between boulders along the edge of the creek. Early Oct.

Polygonum lapathifolium L. - Willow-weed. Annual forb on the edge of the creek in Black Prince Claim. Mid Sep.

Polygonum persicaria L. – Lady's-thumb. Occasional annual forb on wet sand and gravel along the edge of the creek. Early Jul-Sep.

Rumex acetosella L. - Sheep sorrel. Weedy perennial on the edge of the creek. Early Oct. [R. angiocarpus Murb.]

Rumex crispus L. - Curly dock. Perennial weed seen in a disturbed area at the diversion dam. Early Jun.

#### PORTULACACEAE - PURSLANE FAMILY

Claytonia parviflora Douglas ex Hook. – Small-flowered miner's-lettuce. Locally abundant annual on shaded banks and outcrops. Late Mar-May. [Montia perfoliata (Donn) Howell forma parviflora (Douglas ex Hook.) J.T.Howell]

Claytonia rubra (Howell) Tidestr. ssp. rubra – Northern miner's-lettuce. Atypical annual plants tending toward C. parviflora were noted on shady banks. Late Mar–Apr. [Montia perfoliata (Donn ex Willd.) Howell var. depressa (A.Gray) Jeps., misapplied]

Montia parvifolia (Moç. ex DC.) Greene – Small-leaved montia. Herbaceous perennial on a moist, shaded jumble of rocks near the edge of the creek in Black Prince Claim. Mid Apr.

#### PRIMULACEAE - PRIMROSE FAMILY

Trientalis latifolia Hook. – Pacific starflower. Common herbaceous perennial on shaded forest floor. Mid Apr–May.

## RANUNCULACEAE - BUTTERCUP FAMILY

Aquilegia formosa Fisch. – Crimson columbine. Fairly common herbaceous perennial on shaded forest floor between the trailhead and the south end of Black Prince Claim. Early Jul-Aug. [Includes var. truncata (Fisch. & C.A.Mey.) Baker]

Clematis lasiantha Nutt. - Chaparral clematis. Deciduous woody vine climbing on brush on sunny outcrops. Mid Apr-May.

Clematis ligusticifolia Nutt. – Virgin's-bower. Occasional deciduous woody vine climbing on brush near the creek. Early Jul-Aug.

Delphinium hesperium A.Gray var. hesperium – Western larkspur. Locally abundant on open serpentine outcrops. Late May–Jun. [Oswald 4274]

Delphinium nudicaule Torr. & A.Gray – Red larkspur. Locally common on open and brushy outcrops. Late Mar–May.

Isopyrum occidentale Hook. & Arn. – Western rue-anemone. Locally abundant herbaceous perennial under brush and on shaded slopes near serpentine outcrops. Late Mar-May.

Ranunculus occidentalis Nutt. – Western buttercup. Occasional herbaceous perennial on open and brushy slopes. Late Mar-Apr. [Includes var. eisenii (Kellogg) A.Gray]

#### RHAMNACEAE - BUCKTHORN FAMILY

Ceanothus cuneatus (Hook.) Nutt. var. cuneatus – Buckbrush. Locally common evergreen shrub on open slopes. Mid Apr.

Ceanothus integerrimus Hook. & Arn. – Deerbrush. Common deciduous shrub on wooded slopes. Early May–Aug.

Rhamnus ilicifolia Kellogg – Holly-leaved redberry. Occasional evergreen shrub on brushy slopes and outcrops. Mid Apr–Jun. [R. crocea Nutt. ssp. ilicifolia (Kellogg) C.B.Wolf]

Rhamnus rubra Greene – Serra coffeeberry. Occasional deciduous shrub on brushy slopes and along the creek. Early May. [Includes ssp. obtusissima (Greene) C.B.Wolf]

Rhamnus tomentella Benth. ssp. tomentella – Hoary coffeeberry. Occasional evergreen shrub on semi-open banks and outcrops. Early Jun–Jul. [R. californica Eschsch. ssp. tomentella (Benth.) C.B.Wolf]

#### ROSACEAE - ROSE FAMILY

Amelanchier utahensis Koehne – Utah service-berry. Deciduous shrub on a cut-bank at the junction of the trail and the access road to the diversion dam. Late Apr–May. [Our plants previously referred to A. pallida Greene]

Cercocarpus betuloides Nutt. ex Torr. & A.Gray var. betuloides – Birch-leaved mountain-mahogany. Common shrub on dry open slopes and outcrops. Mid Apr.

Heteromeles arbutifolia (Lindl.) M. Roem. – Toyon. Occasional shrub on brushy serpentine slopes. Late Jun–Jul.

*Physocarpus capitatus* (Pursh) Kuntze – Ninebark. Occasional shrub on the rocky banks of the creek. Late May–Jun.

Potentilla glandulosa Lindl. ssp. glandulosa – Sticky cinquefoil. Occasional herbaceous perennial on semi-open outcrops. Early May-Jun.

Rosa californica Cham. & Schltdl. – California rose. Listed by Dempsey and Castro but not relocated during this survey.

Rosa gymnocarpa Nutt. – Bald-hip rose. Common shrubby perennial on wooded slopes. Early May–Jun.

Rubus discolor Weihe & Nees – Himalayan blackberry. Locally abundant weedy bramble in moist places. Flowering period not determined. [R. procerus P.J.Müll.]

Rubus laciniatus Willd. – Cut-leaved blackberry. Weedy bramble in a moist, shaded ravine south of the stairways. Early Jul.

Rubus ursinus Cham, & Schltdl. – California blackberry. Common dioecious perennial with trailing to weakly climbing canes on moist slopes and shaded flats between the trailhead and the access road to the hydroelectric dam. Plants with pinhead glands on the calyx are the var. macropetalus (Douglas ex Hook.) R.Br. Early May. [R. vitifolius Cham. & Schltdl.; R. macropetalus Douglas ex Hook.]

## RUBIACEAE - MADDER FAMILY

Crucianella angustifolia L. - Crosswort. Locally abundant weedy annual along the trail through the serpentine outcrops. Late May-Jul.

Galium aparine L. - Cleavers. Locally common annual on disturbed trail edges. Mid Apr-Jun.

Galium bolanderi A.Gray – Bolander's bedstraw. Occasional herbaceous perennial on brushy and semi-open banks. Late May-Jun.

Galium parisiense L. – Wall bedstraw. Weedy annual on disturbed trailside. Late May-Jun.

Galium porrigens Dempster var. tenue (Dempster) Dempster – Narrowleaved climbing bedstraw. Uncommon perennial with a semi-woody base climbing on brushy banks and outcrops. Late Jan-Jul. [G. nuttallii A.Gray, in part]

Galium sparsiflorum W.Wight ssp. glabrius Dempster & Stebbins – Few-flowered bedstraw. Occasional trailside perennial on brushy slopes. Mid May-Jun.

Galium triflorum Michx. – Sweet-scented bedstraw. Herbaceous perennial in moist, shaded woods and along the edge of the creek from the trailhead into the Black Prince Claim. Early Jul-Sep.

#### RUTACEAE - RUE FAMILY

Ptelea crenulata Greene – Hoptree. Listed by Dempsey and Castro but not relocated during this survey. Perhaps confused with California ash, Fraxinus dipetala.

## SALICACEAE - WILLOW FAMILY

Populus fremontii S. Watson ssp. fremontii – Fremont's cottonwood. Occasional deciduous tree near the creek and near hillside springs. Flowering interval not determined.

Salix exigua Nutt. – Sandbar willow. Listed by Dempsey and Castro and to be expected on sandbars along the creek. [S. hindsiana Benth.]

Salix lasiolepis Benth. - Arroyo willow. Shrubby willow noted on the edge of the creek. Flowering interval not determined.

Salix lucida Muhl. ssp. lasiandra (Benth.) E.Murray – Yellow willow. Listed by Dempsey and Castro and to be expected along the edge of the creek. [S. lasiandra Benth.]

Salix melanopsis Nutt. - Dusky willow. Small willow forming shrubby colonies on the edge of the creek. Mid Apr.

## SAXIFRAGACEAE - SAXIFRAGE FAMILY

Darmera peltata (Torr. & A.Gray) Voss – Indian-rhubarb. Common herbaceous perennial on the rocky edges of the creek and also in one of the hillside streamlets south of the stairways. Mid Apr. [Peltiphyllum peltatum (Torr. ex Benth.) Engl.]

Heuchera micrantha Douglas ex Lindl. – Crevice alumroot. Common herbaceous perennial on shaded outcrops and trailside banks. Mid Apr–Jun. [Includes var. erubescens (A.Braun & C.D.Bouché) Rosend.]

Saxifraga californica Greene – California saxifrage. Locally abundant herbaceous perennial on moist, mossy outcrops. Early Apr.

*Tellima grandiflora* (Pursh) Douglas ex Lindl. – Fringecups. Occasional herbaceous perennial on shaded slopes and outcrops. Late May–Jun.

## SCROPHULARIACEAE - FIGWORT FAMILY

Antirrhinum vexillo-calyculatum Kellogg ssp. intermedium D.M. Thomps. – Wiry snapdragon. Locally common annual on scree of serpentine outcrops and also on the edge of Doe Mill Rd near the bridge. Early Jul-Oct. [A. breweri A.Gray, in part; Oswald 4355]

Castilleja applegatei Fernald ssp. pinetorum (Fernald) T.I.Chuang & Heckard – Wavy-leaved Indian-paintbrush. Common herbaceous perennial in sunny openings in brush and on outcrops. Mid Apr–Sep.

Collinsia tinctoria Hartw. ex Benth. – Sticky Chinese-houses. Locally common annual on brushy serpentine outcrops. Late May–Aug.

Keckiella breviflora (Lindl.) Straw var. glabrisepala (D.D.Keck) N.H.Holmgren – Gaping keckiella. Small shrub on rocky slopes and outcrops. Early Jul-Aug. [Penstemon breviflorus Lindl. ssp. glabrisepalus D.D.Keck]

Keckiella corymbosa (Benth.) Straw – Redwood keckiella. Common small, shrubby perennial in crevices on serpentine outcrops. Mid Jul–Nov. [Penstemon corymbosus Benth.]

Minulus aurantiacus Curtis – Bush monkey-flower. Common small shrubby perennial on serpentine outcrops. Early May-Aug. [M. bifidus Pennell; Diplacus grandiflorus (Lindl.) Groenl.]

Minulus cardinalis Douglas ex Benth. – Scarlet monkey-flower. Common herbaceous perennial on moist, rocky banks along the creek. Mid Jul-Sep.

Minulus glaucescens Greene – Shield-bracted monkey-flower. Annual forb in localized populations on moist rocky slopes and outcrops. Mid Apr–Jul. CNPS Inventory List 4.

Mimulus guttatus Fisch. ex DC. - Common monkey-flower. Annual forb noted on a gravel bar in the Black Prince Claim. Mid Jul.

Mimulus kelloggii (Curran ex Greene) Curran ex A.Gray – Kellogg's monkey-flower. Locally abundant annual on loose, scree-like slopes of serpentine outcrops. Late Mar–Jun.

Mimulus moschatus Douglas - Musk monkey-flower. Annual forb found on a gravel bar in the Black Prince Claim. Early Jul.

Mimulus nasutus Greene – Snouted monkey-flower. Annual forb in moist crevices on sunny serpentine outcrops. This monkey-flower is included in M. guttatus in The Jepson Manual. Late Mar-May.

Penstemon laetus A.Gray var. leptosepalus Greene ex A.Gray – Western gray beardtongue. Herbaceous perennial listed by Dempsey and Castro but not relocated during this survey.

Tonella tenella (Benth.) A.Heller – Small-flowered tonella. Delicate annual found on rocky trailside through a semi-open, tree-covered slope south

of the stairways in 1986. This population was the first recent record of this plant for Butte County, but it has since been found near Big Chico Creek upstream from the end of Bidwell Park. Mid Apr. [Oswald 1067]

Verbascum thapsus L. – Woolly mullein. Occasional weed on rocky drainages and on the edge of the creek. Mid Jul-Sep.

#### VERBENACEAE - VERVAIN FAMILY

Verbena lasiostachys Link var. scabrida Moldenke – Western vervain. Herbaceous perennial on moist soil on the edge of the creek at the south end of the trail. Early Jul. [V. robusta Greene]

#### VIOLACEAE - VIOLET FAMILY

Viola odorata L. – English violet. Introduced perennial at the homestead and escaped on a moist, shaded slope near the trailhead. Late Feb-Mar.

Viola sheltonii Torr. - Shelton's violet. Herbaceous perennial forming a localized population on a brushy, shaded slope south of the stairways. Late Mar-Apr.

## VITACEAE - GRAPE FAMILY

Vitis californicus Benth. - California wild grape. Climbing woody vine at scattered locations along the trail. Early Jun.

## MONOCOT FLOWERING PLANTS

#### CYPERACEAE - SEDGE FAMILY

Carex deweyana Schwein. ssp. leptopoda (Mack.) Calder & R.L.Taylor – Short-scaled sedge. Tufted perennial on the edge of a streamlet on a shaded slope at the south end of the trail. Late May. [C. leptopoda Mack.; Oswald 4275]

Carex multicaulis L.H.Bailey - Many-stemmed sedge. Common tufted perennial on dry forest floor. Late Mar.

Carex nudata W.Boott – Torrent sedge. Common, densely tufted perennial on the rocky edges of Butte Creek. Mid Apr.

Carex subfusca W.Boott – Rusty slender sedge. Tufted perennial along the streamlet at the south end of the trail. Late May.

#### IRIDACEAE - IRIS FAMILY

*Iris hartwegii* Baker ssp. *hartwegii* – Hartweg's iris. Herbaceous perennial on wooded slopes from the trailhead through the Black Prince Claim. Late Apr–Jun.

#### JUNCACEAE - RUSH FAMILY

Juncus patens E.Mey. - Spreading rush. Tufted perennial noted at the first springy drainage south of the switchback in the trail. Early Jul (in fruit).

Luzula comosa E.Mey. var. subsessilis S.Watson – Sessile wood-rush. Tufted herbaceous perennial on wooded slopes at the south end of Black Prince Claim. Mid Apr. [L. subsessilis (S.Watson) Buchenau]

# LILIACEAE – LILY FAMILY [Includes Amaryllidaceae]

Allium membranaceum Ownbey ex Traub – Papery onion. Locally common herb from a perennial bulb on more or less shaded forest and outcrop slopes. Mid Apr–Jun.

Allium sanbornii A.W.Wood var. sanbornii – Sanborn's onion. Summer-flowering perennial on scree of the first serpentine outcrop south of Black Prince. Late Jul-Aug. CNPS List 4.

Calochortus tolmiei Hook. & Arn. – Pussy-ears. Common perennial from a bulb on brushy slopes and outcrops. Early Apr–May.

Chlorogalum pomeridianum (DC.) Kunth var. pomeridianum – Wavyleaved soap-plant. Herbaceous perennial noted in brush on a serpentine outcrop. Early Jul (in early fruit).

Dichelostemma capitatum A.W.Wood ssp. capitatum — Bluedicks. Common herbaceous perennial on open serpentine slopes. Late Mar–Jun. [Brodiaea pulchella (Salisb.) Greene Dichelostemma pulchellum (Salisb.) A.Heller]

Dichelostemma multiflorum (Benth.) A.Heller – Round-toothed ookow. Occasional herbaceous perennial on serpentine outcrops. Late May–Jun. [Brodiaea multiflora Benth.]

Dichelostemma volubile (Kellogg) A.Heller – Twining ookow. Common herbaceous perennial with the flowering scape twining on brush and rocks. Early May–Jun. [Brodiaea volubilis (Kellogg) Baker]

*Erythronium multiscapoideum* (Kellogg) A.Nelson & P.B.Kenn. – Sierra fawn-lily. Locally abundant herbaceous perennial on serpentine slopes. Early Mar–Apr. [E. hartwegii S.Watson]

Fritillaria affinis (Schult.) Sealy var. affinis – Checkered fritillary. Listed by Dempsey and Castro but not relocated during this survey. [F. lanceolata Pursh]

Fritillaria recurva Benth. – Scarlet fritillary. Scattered perennial on wooded slopes between the trailhead and the south end of the Black Prince Claim and also on the wooded slope between the two waterfalls at the south end of the trail. Late Mar-Apr.

Lilium humboldtii Roezl & Leichtlin ex Duch. ssp. humboldtii – Humboldt lily. Occasional tall, herbaceous perennial on dry, openly wooded slopes. Late Jun–Jul. CNPS List 4.

Smilax californica (A.DC.) A.Gray – California greenbrier. Woody vine climbing on brush on moist, shaded slopes. Early May.

#### ORCHIDACEAE - ORCHID FAMILY

Corallorhiza maculata Raf. - Spotted coralroot. Listed by Dempsey and Castro but not relocated during this survey.

# POACEAE – GRASS FAMILY [Gramineae]

Achnatherum lemmonii (Vasey) Barkworth – Lemmon's needlegrass. Tufted perennial on serpentine outcrops. Early Jun. [Stipa lemmonii (Vasey) Scribn.]

Agrostis exarata Trin. var. monolepis (Torr.) Hitchc. – Awned spike bentgrass. Perennial grass found at the shaded, spring-fed streamlet crossing the trail between the stairways and the switchback. Late Jul. [Oswald 4404]

Aira caryophyllea L. – Silver European hairgrass. Locally abundant annual on the edges of the trail through serpentine outcrops. Mid Apr.

Avena barbata Pott ex Link – Sender wild oat. Common annual grass in serpentine openings. Mid Apr.

Bromus diandrus Roth - Ripgut brome. Common weedy annual on disturbed trailside through serpentine openings. Early Apr. [B. rigidus Roth, misapplied]

Bromus hordeaceus L. - Soft chess. Occasional weedy annual in sunny exposures along the trail through serpentine outcrops. Mid Apr. [Bromus mollis L.]

Bromus laevipes Shear – Woodland brome. Uncommon tufted perennial noted on trailside banks just south of Black Prince Claim, Early Jun.

Bromus madritensis L. ssp. madritensis – Foxtail chess. Occasional trailside weed. Early May.

Bromus madritensis ssp. rubens (L.) Husn. – Red brome. Weedy annual in disturbed places on outcrops and along the trail. Mid Apr.

Bromus vulgaris (Hook.) Shear – Narrow-flowered brome. Tufted perennial found at trailside in moist woods near the second intermittent stream south of the trailhead. Early Jun. [Oswald 4276]

Elytrigia intermedium (Host) Nevski ssp. intermedium – Intermediate wheatgrass. Rhizomatous perennial on serpentine at the stairway. Late Jul. [Agropyron intermedium (Host) P.Beauv. var. intermedium]

Festuca californica Vasey - California fescue. Common and locally abundant, tufted perennial on openly wooded slopes and a good indicator of serpentine soils. Late Mar.

Festuca elmeri Scribn. & Merr. – Elmer's fescue. Locally common perennial forming small tufts on shaded slopes south of the stairways. Early Jun. [Oswald 4273]

Festuca occidentalis Hook. - Western fescue. Occasional tufted perennial on wooded slopes. Early May.

Festuca rubra L. – Red fescue. Occasional tufted perennial along the trail through wooded slopes. Late Apr.

Holcus lanatus L. - Common velvetgrass. Perennial grass noted on the edge of the creek at the south end of the trail. Early Jul.

Hordeum murinum L. ssp. leporinum (Link) Arcang. – Hare wall barley. Weedy annual noted in disturbed soil at the site of the diversion dam. Early May. [Hordeum leporinum Link]

Lolium temulentum L. – Darnel. Annual grass at the homesite near the trailhead and also along the trail through Black Prince Claim. Early Jun.

Melica californica Scribn. – California melic. Occasional tufted perennial on serpentine outcrops. Mid Apr.

Melica geyeri Munro – Geyer's melic. Locally abundant perennial on semi-open, brushy and rocky, wooded slopes south of the stairways. Early May. [Oswald 4272]

Melica harfordii Bol. - Harford's melic. Common perennial on semiopen slopes. Early Jun.

Melica torreyana Scribn. – Torrey's melic. Tufted perennial on shaded slopes and brushy outcrops south of the stairways. Mid Apr.

Panicum acuminatum Sw. var. acuminatum — Western panicgrass. Tufted perennial on the rocky edge of the creek. Early Oct. [Panicum occidentale Scribn.; P. pacificum Hitchc. & Chase]

Poa pratensis L. ssp. pratensis – Kentucky bluegrass. Rhizomatous perennial at the homesite and along the first section of trail. Early Jun.

Poa secunda J.Presl ssp. secunda – One-sided bluegrass. Occasional tufted perennial on outcrops and semi-open slopes. Mid Apr. [P. scabrella (Thurb.) Benth. ex Vasey]

Polypogon interruptus Humb., Bonpl. & Kunth – Ditch beardgrass. Tufted perennial on moist soil along streamlets. Early Jun.

*Trisetum canescens* Buckley – Nodding oatgrass. Uncommon tufted perennial at scattered locations along the trail. Early Jun.

Vulpia microstachys (Nutt.) Munro var. microstachys – Small fescue. Locally abundant small annual in openings along the trail. Early May. [Festuca microstachys Nutt.]

Vulpia myuros (L.) C.C.Gmel. var. hirsuta (Hack.) Asch. & Graebn. – Foxtail fescue. Locally abundant annual on disturbed trail edges in openings. Mid Apr. [Festuca megalura Nutt.]

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