Attachment 2.1 – Site 300 (from Jones & Stokes 2002a)

Annotated Checklist of the Vascular Plants of Lawrence Livermore Laboratory Site 300

This list was compiled from Jones & Stokes (J&S) site surveys performed in May and September, 1997, and March and April, 2002. It also incorporates species reported by BioSystems (BS) (1986). Nomenclature follows *The Jepson Manual* (Hickman 1993), except where noted. Synonyms [in brackets] are provided for plant names used in BioSystems' checklist that have been superceded. Common names generally are taken from *The Jepson Manual* or CalFlora (2000). Introduced species are preceded with an asterisk.

Pterophyta (Ferns)

Pteridaceae (Brake Family)

Pellaea andromedifolia (Kaulf.) Fee. At base of rocks in coastal scrub. Local, uncommon. Coffee fern. (BS, J&S)

Pellaea mucronata (D. Eaton) D. Eaton. Bird's-foot fern. Rock outcrops in blue oak woodland. Uncommon. (J&S)

Pentagramma triangularis (Kaulf.) G. Yatskievych, M. D. Wyndham, & E. Wollenweber. Gold-back fern. Rock outcrops in blue oak woodland. Locally common. [*Pityrogramma triangularis* Kaulf.] (BS, J&S)

Coniferophyta (Conifers)

Cupressaceae (Cypress Family)

Juniperus californica Hook. California juniper. Juniper woodland and scrub, juniper-oak woodland, and scattered in grasslands. Widespread, common. (BS, J&S)

Anthophyta--Dicotyledones

Amaranthaceae (Amaranth Family)

**Amaranthus albus* L. Tumbleweed. Wetlands. Uncommon. (J&S)

Amaranthus blitoides Wats. Prostrate amaranth. (BS)

Amaranthus californicus (Moq.) Wats. California amaranth. Wetlands. Uncommon. (J&S)

Anacardiaceae (Sumac Family)

Toxicodendron diversilobum (T. & G.) Greene. Poison-oak. Poison-oak scrub. Local, in one stand on the west side of Site 300. (BS, J&S)

Apiaceae (Carrot Family)

Apiastrum angustifolium Nutt. Wild celery. Blue oak woodland. Local, uncommon. (BS, J&S)

Bowlesia incana Ruiz Lopez & Pav. Bowlesia. At base of rocks in grasslands. Local, uncommon. (BS, J&S)

Lomatium caruifolium (Hook. & Arn.) Coult. & Rose. Caraway-leaved lomatium. Grasslands. Widespread but uncommon. (BS, J&S)

Lomatium utriculatum (T. & G.) Coult. & Rose. Common lomatium. Grasslands. Widespread but uncommon. (BS, J&S)

Sanicula bipinnata Hook. & Arn. Poison sanicle. Blue oak woodland, coastal scrub. Widespread, common. (BS, J&S)

Sanicula bipinnatifida Hook. Purple sanicle. Grasslands. Local, uncommon. (BS, J&S)

Sanicula crassicaulis DC. Pacific sanicle. Elderberry scrub. Local, uncommon. (J&S)

**Torilis nodosa* (L.) Gaertner. Knotted hedge parsley. (BS)

Yabea microcarpa (Hook. & Arn.) Koso-Polj. California hedge-parsley. Blue oak woodland. Local, uncommon. (BS, J&S)

Asclepiadaceae (Milkweed Family)

Asclepias fascicularis Decne. Narrow-leaf milkweed. Grassland. Uncommon. (BS, J&S)

Asteraceae (Sunflower Family)

Achillea millefolium L. Common yarrow. Grasslands, coastal scrub, blue oak woodland. Widespread, common. [var. *californica* (Pollard) Keck] (BS, J&S)

Achyrachaena mollis Schauer. Blow-wives. Grasslands, vernal pool. Widespread but uncommon. (BS, J&S)

Agoseris grandiflora (Nutt.) Greene. Large-flowered agoseris. Grassland. Local, uncommon. (BS, J&S)

Agoseris heterophylla (Nutt.) Greene. Annual agoseris. Grasslands. Widespread but uncommon. (BS, J&S)

Ancistrocarphus filagineus Gray. Woolly fishhooks. Bare soil in grasslands, coastal scrub. Local, uncommon. [*Stylocline filaginea* (Gray) Gray] (BS, J&S)

Artemisia californica Less. California sage. Coastal scrub. Widespread, common. (BS, J&S)

Baccharis pilularis DC. Coyote brush. Blue oak woodland, along drainage. Local, uncommon. [var. *consanguinea* (DC.) Kuntze] (BS, J&S)

Baccharis salicifolius (Ruiz Lopez & Pav.) Pers. Mule fat. Along stream channels. Local, uncommon. [*B. viminea* DC.] (BS, J&S)

Blepharizonia laxa Greene. Viscid big tarplant. Grasslands, ruderal. Uncommon. [*B. plumosa* ssp. *viscida* Keck; see Baldwin et al. 2001 for nomenclature] (J&S)

Blepharizonia plumosa (Kell.) Greene. Big tarplant. Grasslands, ruderal. Widespread, common (see Figure 2). List 1B in CNPS Inventory. (J&S)

****Carduus pycnocephalus*** L. Italian thistle. Grasslands. Widespread but uncommon. (BS, J&S)

****Carduus tenuiflorus*** Curtis. Slender-flowered thistle. Wetlands, blue oak woodland. Common. (J&S)

Centromadia fitchii (Gray) Greene. Fitch's spikeweed. Ruderal. Local, uncommon. [*Hemizonia fitchii* Gray; see Baldwin 1999 for revised nomenclature] (J&S)

Centromadia pungens (Hook. & Arn.) Greene subsp. ***pungens***. Common spikeweed. Grasslands, ruderal. Local, uncommon. [*Hemizonia pungens* (Hook. & Arn.) T. & G; see Baldwin 1999 for revised nomenclature] (J&S)

****Centaurea melitensis*** L. Tocalote. Grasslands. Local, uncommon. (BS, J&S)

****Centaurea solstitialis*** L. Yellow star-thistle. Grasslands. Uncommon. (BS, J&S)

****Chamomilla suaveolens*** (Greene) Rydb. Pineapple weed. Ruderal. Local, uncommon. (BS, J&S) [*Matricaria matricarioides* (Less.) Porter]

****Cirsium occidentale*** (Nutt.) Jeps. ssp. ***venustum*** (Greene) Jeps. Venus thistle. Grasslands. Local, uncommon. [*C. proteanum* J. Howell] (BS, J&S)

****Cirsium vulgare*** (Savi) Ten. Bull thistle. Freshwater seeps. Local, uncommon. (BS, J&S)

Conyza canadensis (L.) Cronq. Horseweed. Wetlands, ruderal. Uncommon. (BS, J&S)

Coreopsis calliopsidea (DC.) Gray. Leafy-stemmed coreopsis. (BS)

****Cynara cardunculus*** L. Artichoke thistle. Grasslands. Local, uncommon. (J&S)

Deinandra kelloggii (Greene) Greene. Kellogg's tarplant. Grasslands, coastal scrub, ruderal. Common. [*Hemizonia kelloggii* Greene; see Baldwin 1999 for revised nomenclature] (BS, J&S)

Deinandra lobbii (Greene) Greene. Lobb's tarplant. Coastal scrub. Common. [*Hemizonia lobbii* Greene; see Baldwin 1999 for revised nomenclature] (BS, J&S)

****Dittrichia graveolens*** (L.) Greuter. Stinkweed. Ruderal. Local, uncommon. [not in The Jepson Manual; see Preston (1997)] (J&S)

Ericameria linearifolia (DC.) Urb. & J. Wussow. Interior goldenbush. Coastal scrub. Local, uncommon. (BS, J&S)

Erigeron reductus (Cronq.) G. Nesom var. ***angustatus*** (Gray) G. Nesom. California rayless daisy. [*E. inornatus* Gray var. *angustatus* Gray] (BS)

Filago californica Nutt. California filago. Thin soils, coastal scrub. Widespread but uncommon. (BS, J&S)

**Filago gallica* L. Narrow-leaved filago. Grasslands. Local, uncommon. [*Logfia gallica* Coss. & Germ.] (BS, J&S)

Gnaphalium californicum DC. California cudweed. Grasslands. Local, uncommon. (J&S)

**Gnaphalium luteo-album* L. Weedy cudweed. Along stream channel. Local, uncommon. (J&S)

Gnaphalium palustre Nutt. Marsh cudweed. Vernal pool, freshwater seep. Local, uncommon. (BS, J&S)

Grindelia camporum Greene. Great Valley gumplant. Grasslands, coastal scrub, blue oak woodland; Widespread, common. (BS, J&S)

Gutierrezia californica (DC.) T. & G. California matchweed. Coastal scrub, grasslands. Widespread, common. [*G. bracteata* Abrams] (BS, J&S)

Helianthus annuus L. Common sunflower. Wetlands. Uncommon. (J&S)

Hesperevax caulescens (Benth.) Gray. Hogwallow starfish. Grasslands, with moist, clay soils. One population (See Figure 2). CNPS List 4. [*Evax caulescens* Benth.] (BS, J&S)

Hesperevax sparsiflora (Gray) Greene. Erect evax. [*Evax sparsiflora* Gray] (BS)

Heterotheca grandiflora Nutt. Telegraph weed. Rock outcrops in grassland. Uncommon. (J&S)

Heterotheca sessiflora (Nutt.) Shinn. ssp. ***echioides*** (Benth.) Semple. Goldenaster. Grasslands. Uncommon. [*H. echioides* Benth.] (BS, J&S)

Holocarpha obconica (Clausen & Keck) Keck. San Joaquin tarplant. Grasslands, coastal scrub. Common. (BS, J&S)

**Hypochaeris glabra* L. Smooth cat's-ear. Grasslands. Widespread but uncommon. (BS, J&S)

**Hypochaeris radicata* L. Rough cat's-ear. Blue oak woodland, grasslands. Local, uncommon. (BS, J&S)

**Lactuca serriola* L. Prickly lettuce. Grassland. Common. (BS, J&S)

Lagophylla ramosissima Nutt. Common hareleaf. Grassland, Common. (J&S)

Lasthenia gracilis (DC.) Greene. California goldfields. Thin soil in grasslands, coastal scrub. Widespread but uncommon. [*L. chrysostoma* (Fisch. & Mey.) Greene; recently segregated from *L. californica* Lindley by Chan (2001)] (BS, J&S)

Lasthenia microglossa (A. DC.) Greene. Small-rayed goldfields. Moist areas in grasslands. Widespread, common (BS, J&S)

Lasthenia minor (A. DC.) Ornduff. Woolly goldfields. Grasslands. Widespread but uncommon. (BS, J&S)

Layia gaillardioides (Hook. & Arn.) DC. Woodland layia. Grasslands. Widespread but uncommon. (BS, J&S)

Layia platyglossa (Fisch. & Mey.) Gray. Tidytips. Grasslands. Local, uncommon. (BS, J&S)

Madia gracilis (Smith) Keck. Slender tarweed. (BS)

Malacothrix coulteri Gray. Snake's-head. Grasslands. Widespread but uncommon. (BS, J&S)

Micropus californicus Fisch. & Mey. Slender cottonweed. Grasslands. Local, uncommon. (BS, J&S)

Microseris acuminata E. Greene. Needle microseris. Grasslands. Local, uncommon. (J&S)

Microseris douglasii (DC.) Schultz-Bip subsp. ***douglasii***. Douglas' microseris. Grasslands. Local, uncommon. (J&S)

Microseris douglasii (DC.) Schultz-Bip subsp. ***tenella*** (Gray) Chambers. Small microseris. Grasslands. Local, uncommon. (BS, J&S)

Monolopia major DC. Cupped monolopia. Grasslands. Widespread, common. (BS, J&S)

Pentachaeta alsinoides Greene. Pentachaeta. Grassland. Local, uncommon. (BS, J&S)

****Picris echioides*** L. Bristly ox-tongue. Freshwater seep. Local, uncommon. (BS, J&S)

Psilocarphus brevissimus Nutt. Woolly marbles. (BS)

Psilocarphus tenellus Nutt. Slender woolly marbles. (BS)

Rafinesquia californica Nutt. California chicory. (BS)

Senecio breweri Davy. Brewer's butterweed. Blue oak woodland. Local, uncommon. (BS, J&S)

****Senecio vulgaris*** L. Common groundsel. Grasslands, coastal scrub. Widespread, common. (BS, J&S)

**Silybum marianum* (L.) Gaertner. Milk thistle. In stream channels. Widespread but uncommon. (BS, J&S)

Solidago canadensis L. Canada goldenrod. (BS)

**Sonchus asper* (L.) Hill. Prickly sow-thistle. Freshwater seeps. Uncommon. (BS, J&S)

**Sonchus oleraceus* L. Common sow-thistle. Ruderal. Widespread but uncommon. (BS, J&S)

Stebbinsoseris heterocarpa (Nutt.) Chambers. Derived microseris. Grasslands. Uncommon. (J&S)

Stephanomeria virgata Benth. var. ***pleurocarpa*** (Greene) Gottlieb. Tall stephanomeria. Grasslands. Uncommon. (J&S)

Stylocline gnaphaloides Nutt. Everlasting nest straw. Rock outcrops in coastal scrub. Local, uncommon. (BS, J&S)

**Taraxacum officinale* Wigg. Common dandelion. (BS)

Uropappus lindleyi (DC.) Nutt. Silver puffs. Grasslands, coastal scrub. Widespread but uncommon. [*Microseris lindleyi* (DC.) Gray] (BS, J&S)

Xanthium strumarium L. Common cocklebur. Freshwater seeps, along stream channels. Uncommon. [var. *canadense* (Miller) T. & G.] (BS, J&S)

Boraginaceae (Borage Family)

Amsinckia eastwoodiae J. F. Macbr. Eastwood's fiddleneck. Moist areas in grasslands. Widespread but uncommon. (J&S)

Amsinckia grandiflora Gray. Large-flowered fiddleneck. Blue oak woodland. Restricted to a single population (see Figure 2). Federally-listed as endangered. (BS, J&S).

Amsinckia lycopsoides Lehm. Tarweed fiddleneck. Grasslands, blue oak woodland. Widespread, common. (J&S)

Amsinckia menziesii (Lehm.) Nels. & Macbr. var. ***intermedia*** (Fisch. & Mey.) Ganders. Common fiddleneck. Grasslands, coastal scrub, blue oak woodland. Widespread, common. (BS, J&S)

Amsinckia menziesii (Lehm.) Nels. & Macbr. var. ***menziesii***. Menzies' fiddleneck. Grasslands. Widespread but uncommon. (BS, J&S)

Amsinckia tessellata Gray var. ***tessellata***. Devil's lettuce. Grasslands, oak woodland, coastal scrub. Widespread, common. (BS, J&S)

Amsinckia vernicosa Hook. & Arn. Green fiddleneck. Clay barrens. Uncommon. (BS)

Cryptantha flaccida (Lehm.) Greene. Weak-stemmed cryptantha. Rock outcrops in grassland. Uncommon. (BS, J&S)

Cryptantha intermedia (Gray) Greene. Common cryptantha. Rock outcrops in grassland. Uncommon. (BS, J&S)

Cryptantha microstachys (Gray) Greene. Tejon cryptantha. (BS)

Heliotropium curassavicum L. Salt heliotrope. Freshwater seeps. Uncommon. [var. *oculatum* (Heller) Jtn.] (BS, J&S)

Pectocarya penicillata (Hook. & Arn.) A. DC. Winged pectocarya. Coastal scrub. Widespread but uncommon. (BS, J&S)

Plagiobothrys bracteatus (T. J. Howell) Jtn. Bracted popcorn flower. Vernal pool. Local, uncommon. (J&S)

Plagiobothrys canescens Benth. Soft popcorn flower. Grasslands. Widespread, common. (BS, J&S)

Plagiobothrys stipitatus (Greene) Jtn. var. ***micranthus*** (Piper) Jtn. Small-flowered popcorn flower. Vernal pool. Local, uncommon. (BS, J&S)

Plagiobothrys tenellus (Nutt.) Gray. Grasslands. Local, uncommon. (BS, J&S)

Brassicaceae (Mustard Family)

Athysanus pusillus (Hook.) Greene. Petty athysanus. Rock outcrops in grassland. Widespread but uncommon. (BS, J&S)

****Brassica nigra*** (L.) Czernov. Black mustard. Grasslands. Uncommon. (BS, J&S)

****Capsella bursa-pastoris*** (L.) Medik. Shepherd's purse. Blue oak woodland. Widespread, common. (BS, J&S)

****Cardaria pubescens*** (C. Meyer) Jarmol. White-top. (BS)

****Descurainia sophia*** (L.) Webb. Tansy mustard. Grasslands. Local, uncommon. (BS, J&S)

Erysimum capitatum (Dougl.) Greene. Western wallflower. (BS)

Guillenia flavescens (Hook.) Greene. Yellow-flowered guillenia. Grasslands. Local, uncommon. Flower color varies from pale yellow to lilac within Site 300. Hoover (1936) treated the lilac- to purple-flowered forms as *Streptanthus lilacinus*. [*Caulanthus flavescens* (Hook.) Pays.] (BS, J&S)

Guillenia lasiophylla (Hook. & Arn). Greene. California mustard. Grasslands. Widespread, common. [*Caulanthus lasiophyllus* (Hook. & Arn.) Greene] (BS, J&S)

**Hirschfeldia incana* (L.) Lagr.-Foss. Mediterranean mustard. Grasslands, coastal scrub, ruderal. Widespread, common. [*Brassica geniculata* (Desf.) Ball] (BS, J&S)

Lepidium nitidum (Nutt.) T. & G. Shining peppergrass. Grasslands. Widespread, common. [var. *insigne* Greene] (BS, J&S)

Nasturtium officinale R. Br. Watercress. Freshwater seeps. Local, uncommon. [*Rorippa nasturtium-aquaticum* (L.) Hayek; see Al-Shehbaz & Price (1998) for nomenclature] (BS, J&S)

**Sinapis arvensis* L. Charlock. Grasslands. Uncommon. (J&S)

**Sisymbrium altissimum* L. Tumble mustard. (BS)

**Sisymbrium officinale* L. Hedge mustard. (BS)

**Sisymbrium orientale* L. Oriental mustard. Outcrops in coastal scrub, grasslands. Locally common. (J&S)

Tropidocarpum gracile Hook. Dobie pod. Grasslands. Widespread but uncommon. (J&S)

Thysanocarpus curvipes Hook. var. *curvipes*. Lacepod. Blue oak woodland, grasslands. Widespread, common. (BS, J&S)

Thysanocarpus curvipes Hook. var. *elegans* (Fisch. & Mey.) Rob. Fringepod. Grasslands. Local, uncommon [*T. elegans* Fisch. & Mey.] (BS, J&S)

Callitrichaceae (Water Starwort Family)

Callitriche marginata Torr. California water-starwort. Vernal pool. Local, uncommon. (J&S)

Callitriche verna L. Vernal water-starwort. (BS)

Campanulaceae (Bluebell Family)

Downingia insignis Greene. Cupped downingia. Vernal pool. Local, uncommon. (BS, J&S)

Caprifoliaceae (Honeysuckle Family)

Lonicera interrupta Benth. Chaparral honeysuckle. Along stream, in blue oak woodland. Local, uncommon. (BS, J&S)

Sambucus mexicana C. Presl. Blue elderberry. Elderberry scrub, scattered along stream channels, or at base of rock outcrops. Local, uncommon. (BS, J&S)

Caryophyllaceae (Pink Family)

****Cerastium glomeratum*** Thuill. Mouse-ear chickweed. Grasslands, coastal scrub. Local, uncommon. (BS, J&S)

****Herniaria hirsuta*** L. ssp. ***cinerea*** (DC.) Cout. Gray herniaria. Coastal scrub. Widespread but uncommon. (BS, J&S)

Loeflingia squarrosa Nutt. California loeflingia. (BS)

Minuartia californica (Gray) Mattf. California sandwort. Thin soils in coastal scrub. Local, uncommon (BS, J&S)

Minuartia douglasii (T. & G.) Mattf. Douglas' sandwort. (BS)

Sagina apetala Ard. Dwarf pearlwort. Rock outcrop in grasslands. Local, uncommon. (J&S)

Sagina decumbens (Elliot) T. & G. var. ***occidentalis*** (Wats.) G. Crow. Western pearlwort. (BS)

Silene antirrhina L. Snapdragon catchfly. Grasslands, coastal scrub. Uncommon. (BS, J&S)

****Silene gallica*** L. Common catchfly. Grasslands, coastal scrub. Widespread but uncommon. (BS, J&S)

Spergularia marina (L.) Griseb. Saltmarsh sand-spurry. (BS)

**Stellaria media* (L.) Villars. Common chickweed. Grasslands, blue oak woodland, coastal scrub. Widespread but uncommon. (BS, J&S)

Stellaria nitens Nutt. Shining chickweed. Rock outcrops in grassland, coastal scrub. Widespread but uncommon. (BS, J&S)

Chenopodiaceae (Goosefoot Family)

Atriplex patula L. Spear oracle. (BS)

**Atriplex rosea* L. Tumbling oracle. Ruderal. Uncommon. (J&S)

**Atriplex semibaccata* R. Br. Australian saltbush. Ruderal, grasslands. Local, uncommon. (BS, J&S)

Atriplex serenana Nels. Bractscale. Ruderal. Uncommon. (J&S)

**Chenopodium album* L. Pigweed. Ruderal. Uncommon. (J&S)

Chenopodium californicum (Wats.) Wats. California goosefoot. Grasslands; uncommon. (BS, J&S)

**Chenopodium murale* L. Nettle-leaved goosefoot. Rock outcrops in grasslands. Uncommon. (J&S)

Chenopodium rubrum L. Red goosefoot. (BS)

**Chenopodium vulvaria* L. Stinking goosefoot. (BS)

Monolepis nuttalliana (Schultes) Greene. Poverty weed. (BS)

**Salsola tragus* L. Russian thistle. Grasslands, ruderal. Widespread, common. [*S. kali* L.] (BS, J&S)

Convolvulaceae (Morning-glory Family)

**Convolvulus arvensis* L. Field bindweed. Grasslands. Uncommon. (J&S)

Crassulaceae (Stonecrop Family)

Crassula connata (Ruiz Lopez & Pav.) Berger. Pygmyweed. Rock outcrops in grasslands, coastal scrub. Widespread, common. [*C. erecta* (Hook. & Arn.) Berger] (BS, J&S)

Cucurbitaceae (Gourd Family)

Marah fabaceus (Naudin) Greene. California manroot. Grasslands. Widespread, common. [var. *agrestis* (Greene) K. M. Stocking] (BS, J&S)

Euphorbiaceae (Spurge Family)

Chamaesyce ocellata (Durand & Hilg.) Millsp. Valley spurge. Grasslands. Uncommon. (J&S)

Croton setigerus Hook. Turkey mullein. Grasslands, ruderal. Common. [*Eremocarpus setigerus* (Hook.) Benth.; see Webster (1992) for nomenclature] (BS, J&S)

Euphorbia spathulata Lam. Reticulate-seeded spurge. Blue oak woodland. Local, uncommon. (BS, J&S)

Fabaceae (Pea Family)

Astragalus asymmetricus E. Sheldon. Rattleweed. Grasslands. Widespread but uncommon. (BS, J&S)

Astragalus didymocarpus Hook. & Arn. Two-seeded milkvetch. Grassland, coastal scrub. Widespread but uncommon. (BS, J&S)

Astragalus gambelianus E. Sheldon. Grasslands. Widespread but uncommon. (J&S)

Lotus humistratus Greene. Hairy lotus. Grasslands, coastal scrub. Widespread but uncommon. (BS, J&S)

Lotus wrangellianus Fisch. & Mey. Chile lotus. Grasslands. Widespread, common. [*L. subpinnatus* Lagasca] (BS, J&S)

Lupinus albifrons Benth. Bush lupine. Blue oak woodland, coastal scrub. Widespread, common,. often dominant in small stands. (BS, J&S)

Lupinus benthamii Heller. Spider lupine. Grasslands. Uncommon. (BS, J&S)

Lupinus bicolor Lindley. Miniature lupine. Grasslands, coastal scrub, oak woodland. Widespread, common. [var. *umbellatus* (Greene) D. Dunn] (BS, J&S)

Lupinus microcarpus Sims var. ***densiflorus*** (Benth.) Jeps. Chick lupine. Grasslands, blue oak woodland. Widespread, common. [*L. densiflorus* Benth. var. *aureus* (Kell.) Munz and var. *lacteus* (Kell.) C.P. Smith] (BS, J&S)

Lupinus microcarpus Sims var. ***microcarpus***. Chick lupine. [*L. densiflorus* Benth. var. *palustris* (Kell.) C.P. Smith] (BS)

Lupinus succulentus Koch. Arroyo lupine. Grasslands. Widespread, common. (BS, J&S)

****Medicago polymorpha*** L. California bur-clover. Grasslands. Widespread, common. (BS, J&S)

****Melilotus alba*** Medik. White sweet-clover. Ruderal. Uncommon. (BS, J&S)

****Melilotus indica*** (L.) All. Indian sweet-clover. Ruderal. Widespread but uncommon. (BS, J&S)

Trifolium albopurpureum T. & G. var. ***albopurpureum***. Common Indian clover. Grasslands. Widespread but uncommon. (BS, J&S)

Trifolium albopurpureum T. & G. var. ***dichotomum*** (Hook. & Arn.) Isely. Branched Indian clover. [*T. dichotomum* Hook. & Arn.] (BS)

Trifolium ciliolatum Benth. Tree clover. Grasslands. Local, uncommon. (J&S)

Trifolium depauperatum Desv. var. ***amplectans*** (T. & G.) L.F. McDermott. Pale sac clover. [*T. amplectans* T. & G.] (BS)

Trifolium depauperatum Desv. var. ***truncatum*** (E. Greene) Isely. Narrow-leaved sac clover. Grasslands. Local, uncommon. (J&S)

Trifolium gracilentum T. & G. Pinpoint clover. Grasslands, coastal scrub. Widespread, common. (BS, J&S)

****Trifolium hirtum*** All. Rose clover. Grasslands, ruderal. Local, uncommon. (J&S)

Trifolium microcephalum Pursh. Small-headed clover. Grasslands. Local, uncommon. (J&S)

Trifolium microdon Hook. & Arn. Valparaiso clover. (BS)

Trifolium oliganthum Steudel. Few-flowered clover. Coastal scrub. (BS)

Trifolium willdenovii Sprengel. Tomcat clover. Grasslands; coastal scrub, oak woodland. Widespread, common. [*T. tridentatum* Lindley] (BS, J&S)

****Vicia sativa*** L. Common vetch, Grassland. Uncommon. (J&S)

****Vicia tetrasperma*** (L.) Schreber. Slender vetch. (BS)

****Vicia villosa*** Roth ssp. ***varia*** (Host) Corbiere. Winter vetch. (BS)

****Vicia villosa*** Roth ssp. ***villosa***. Hairy vetch. Grassland. Uncommon. (J&S)

Fagaceae (Beech Family)

Quercus douglasii Hook. & Arn. Blue oak. Blue oak woodland, juniper oak woodland. Widespread, common. (BS, J&S)

Quercus lobata Nee. Valley oak. Valley oak woodland, blue oak woodland. Local, uncommon. (BS, J&S)

Geraniaceae (Geranium Family)

****Erodium botrys*** (Cav.) Bertol. Big heronbill. Grassland, coastal scrub. Widespread, common. (BS, J&S)

****Erodium brachycarpum*** (Godron) Thell. Heronbill. Grasslands. Widespread, uncommon. (BS, J&S)

****Erodium cicutarium*** (L.) L'Her. Red-stemmed filaree. Grasslands, coastal scrub, oak woodland. Widespread, common. (BS, J&S)

Erodium macrophyllum Hook. & Arn. Round-leaved filaree. Grassland, on friable clay soil. Restricted to a single population (see Figure 2). CNPS List 2. (J&S)

****Erodium moschatum*** (L.) L'Her. White-stemmed filaree. Grasslands. Local, uncommon. (BS, J&S)

****Geranium dissectum*** L. Cut-leaf geranium. Grasslands. Uncommon. (J&S)

**Geranium molle* L. Dove's-foot geranium. (BS)

Grossulariaceae (Gooseberry Family)

Ribes quercetorum Greene. Oak gooseberry. Elderberry scrub. Local, uncommon. (J&S)

Ribes malvaceum Smith. Chaparral current. Elderberry scrub. local, uncommon. (BS, J&S)

Hippocastanaceae (Buckeye Family)

Aesculus californicus (Spach) Nutt. California buckeye. Blue oak woodland. Local, uncommon. (BS, J&S)

Hydrophyllaceae (Waterleaf Family)

Emmenanthe penduliflora Benth. var. ***penduliflora***. Whispering bells. Coastal scrub. Local, uncommon. (J&S)

Eriodictyon californicum (Hook. & Arn.) Torr. Yerba santa. Coastal scrub. Local, uncommon. (BS, J&S)

Nemophila menziesii Hook. & Arn. Baby blue-eyes. Grasslands. Local, uncommon. (BS, J&S)

Nemophila pedunculata Dougl. Spreading nemophila. (BS)

Phacelia ciliata Benth. Great Valley phacelia. Grasslands. Widespread, common. (BS, J&S)

Phacelia distans Benth. Common phacelia. Rock outcrops in grasslands, coastal scrub. Widespread, common. (BS, J&S)

Phacelia douglasii (Benth.) Torr. Douglas' phacelia. Coastal scrub. Local, uncommon. (BS, J&S)

Phacelia imbricata Greene. Imbricate phacelia. Rock outcrops in grasslands, coastal scrub. Local, uncommon. (BS, J&S)

Phacelia tanacetifolia Benth. Tansy phacelia. Rock outcrops in grasslands, coastal scrub. Widespread, common. (BS, J&S)

Pholistoma membranaceum (Benth.) Constance. White fiesta-flower. Blue oak woodland, base of rock outcrops in grasslands. Local, uncommon. (BS, J&S)

Lamiaceae (Mint Family)

****Lamium amplexicaule*** L. Henbit. (BS)

****Marrubium vulgare*** L. Horehound. Coastal scrub, freshwater seep, ruderal. Widespread but uncommon. (BS, J&S)

****Mentha pulegium*** L. Pennyroyal. Freshwater seep. Local, uncommon. (J&S)

Pogogyne serpylloides (Torr.) Gray. Thyme-like pogogyne. Elderberry scrub. Local, uncommon. (BS, J&S)

Salvia columbariae Benth. Chia. Coastal scrub. Locally common. (BS, J&S)

Salvia mellifera Greene. Black sage. Coastal scrub. Local, uncommon. (BS, J&S)

Stachys albens Gray. White hedgenettle. Freshwater seep. Local, uncommon. (BS, J&S)

Trichostema lanceolatum Benth. Vinegar curls. Grasslands. Common. (BS, J&S)

Linaceae (Flax Family)

Hesperolinon californicum (Benth.) Small. California dwarf flax. Grasslands. Uncommon. (BS, J&S)

****Linum usitatissimum*** L. Common flax. Grassland, ruderal. Uncommon. (J&S)

Loasaceae (Loasa Family)

Mentzelia affinis Greene. Hydra stick-leaf. Rock outcrops. Local, uncommon. (BS, J&S)

Mentzelia dispersa Wats. Small-flowered mentzelia. Rock outcrops in grasslands, coastal scrub. Local, uncommon. (J&S)

Malvaceae (Mallow Family)

Eremalche parryi (Greene) Greene. Parry's mallow. Grasslands, on lower canyon slope. Local, uncommon. (BS, J&S)

****Malva parviflora*** L. Cheeseweed. Blue oak woodland. Uncommon. (BS, J&S)

Malvella leprosa (Ortega) Krapov. Alkali mallow. Freshwater seep, grasslands, ruderal. Uncommon. (BS, J&S)

Oleaceae (Olive Family)

Forestiera pubescens Nutt. Desert olive. Along stream. Single stand on west side of Site 300. [*F. neomexicana* Gray] (BS, J&S)

Onagraceae (Evening Primrose Family)

Camissonia boothii (Dougl.) Raven ssp. ***decorticans*** (Hook. & Arn.) Raven. Shredding evening primrose. Coastal scrub. Local, uncommon. (BS, J&S)

Camissonia contorta (Dougl.) Raven. Plains evening primrose. Coastal scrub. Local, uncommon. [*Camissonia cruciata*, an unpublished name based on *Oenothera cruciata* (Wats.) Munz] (BS, J&S)

Camissonia graciliflora (Hook. & Arn.) Raven. Slender-flowered primrose. Open area in grasslands. Local, uncommon. (BS, J&S)

Camissonia hirtella (Greene) Raven. Hairy sun-cups. Coastal scrub. Widespread but uncommon. (BS, J&S)

Camissonia intermedia Raven. Intermediate sun-cups. Coastal scrub. Local, uncommon. (J&S)

Clarkia affinis H. Lewis & M. Lewis. Clarkia. Blue oak woodland, grasslands. Common. (BS, J&S)

Clarkia purpurea (Curtis) Nels. & Macbr. ssp. ***purpurea***. Purple clarkia. Grasslands. Uncommon. (BS, J&S)

Clarkia temblorensis Vasek. Temblor clarkia. Blue oak woodland. Uncommon. (BS, J&S)

Clarkia unguiculata Lindley. Elegant clarkia. Blue oak woodland. Uncommon. (BS, J&S)

Epilobium brachycarpum C. Presl. Panicled willow-herb. Grasslands. Uncommon. (BS, J&S) [*E. paniculatum* T. & G.]

Epilobium canum (Greene) Raven. California fuschia. Coastal scrub. Local, uncommon. [ssp. *mexicana* (C. Presl) Raven] (BS, J&S)

Epilobium cleistogamum (Curran) P. Hoch & Raven. Cleistogamous spike primrose. Vernal pool. Local, uncommon. (J&S)

Epilobium pygmaeum (Speg.) P. Hoch & Raven. Smooth spike-primrose. Vernal pool. (BS)

Orobanchaceae (Broomrape Family)

Orobanche californica Cham. & Schldl. ssp. ***jepsonii*** (Munz) Heckard. Jepson's broom-rape. Coastal scrub. Local, uncommon. (BS, J&S)

Orobanche uniflora L. Naked broom-rape. Grassland, parasitic on *Saxifraga californica*. Local, uncommon. [var. *minuta* (Suksd.) D. B. Achey] (BS, J&S)

Papaveraceae (Poppy Family)

Eschscholzia californica Cham. California poppy. Grasslands. Widespread, common. (BS, J&S)

Eschscholzia rhombipetala Greene. Diamond-petaled poppy. Grasslands. Restricted to two small occurrences (see Figure 2). CNPS List 1B. (J&S)

Papaver californicum A. Gray. Fire poppy. Grasslands. Local, uncommon. (J&S)

Platystemon californicus Benth. Cream cups. Grasslands. Widespread, common. (BS, J&S)

Stylomecon heterophylla (Benth.) G. C. Taylor. Wind poppy. Moist areas in grasslands. Widespread, common. (BS, J&S)

Plantaginaceae (Plantain Family)

Plantago elongata Pursh. Annual coast plantain. [*Plantago bigelovii* Gray] (BS)

Plantago erecta E. Morris. California plantain. Grasslands, coastal scrub. Widespread, common. (BS, J&S)

Plantago lanceolata L. English plantain. (BS)

Platanaceae (Sycamore Family)

Platanus racemosa Nutt. Western sycamore. (BS)

Polemoniaceae (Phlox Family)

Allophyllum divericatum (Nutt.) A.D. Grant & V. Grant. Straggling gilia. (BS)

Eriastrum pluriflorum (Heller) Mason. Many-flowered eriastrum. Grasslands. Local, uncommon. (BS, J&S)

Gilia capitata Sims ssp. ***staminea*** (Greene) V. Grant. Blue field gilia. Rock outcrops in coastal scrub. Widespread, common. (BS, J&S)

Gilia clivorum (Jeps.) V. Grant. Many-stemmed gilia. Grasslands, coastal scrub. Widespread but uncommon. (J&S)

Gilia tricolor Benth. Bird's-eye gilia. Grasslands. Widespread, common. (BS, J&S)

Linanthus bicolor (Nutt.) Greene. Bicolored linanthus. Coastal scrub. Widespread, common (BS, J&S)

Linanthus dichotomus Benth. Evening snow. Coastal scrub. (BS)

Navarretia nigelliformis Greene. Adobe navarretia. Grasslands. Uncommon. (BS, J&S)

Navarretia pubescens (Benth.) Hook. & Arn. Downy navarretia. Grasslands. Uncommon. (J&S)

Phlox gracilis Hook. Slender phlox. Moist areas in grasslands. Widespread, common. (BS, J&S)

Polygonaceae (Buckwheat Family)

Eriogonum angulosum Benth. Angle-stemmed buckwheat. Open areas in grasslands, coastal scrub. Widespread, common. (BS, J&S)

Eriogonum fasciculatum Benth. var. ***polifolium*** (A. DC.) T. & G. California buckwheat. Coastal scrub. Widespread, common. (BS, J&S)

Eriogonum gracile Benth. Slender woolly wild buckwheat. Grasslands. Uncommon. (J&S)

Eriogonum nudum Benth. var. ***pauciflorum*** Benth. Naked-stemmed buckwheat. Grassland. coastal scrub. Widespread, common. According to Professor James Reveal (pers. comm.), var. *pauciflorum* is a southern California entity, and the *Eriogonum nudum* from the Coast Ranges between Mount Diablo and Santa Barbara County may be an undescribed taxon. He suggested that we treat our material as var. *pauciflorum* until he is able to determine whether it is sufficiently distinct to warrant describing it as a new variety. (BS, J&S)

Eriogonum wrightii Benth. var. ***subscaposum*** Wats. Wright's buckwheat. Coastal scrub. Local, uncommon. (J&S)

Eriogonum wrightii Benth. var. ***trachygonum*** (Benth.) Jeps. Wright's buckwheat. (BS)

****Polygonum arenastrum*** Boreau. Common knotweed. (BS)

Pterostegia drymarioides Fisch. & Mey. Pterostegia. At base of rock outcrops and under shrubs, in blue oak woodland, coastal scrub, and grasslands. Widespread, common. (BS, J&S)

****Rumex conglomeratus*** Murray. Whorled dock. (BS)

****Rumex crispus*** L. Curly dock. Freshwater seep. Local, uncommon. (BS, J&S)

Rumex salicifolius J. A. Weinm. var. ***denticulatus*** Torr. Willow dock. Freshwater seep. Local, uncommon. (BS, J&S)

Portulacaceae (Purslane Family)

Calandrinia ciliata (Ruiz Lopez & Pav.) DC. Red maids. Grasslands, ruderal. Widespread, common. (BS, J&S)

Claytonia exigua T. &. G. Common montia. Rock outcrops. Local, uncommon. [*C. spathulata* Dougl. var. *exigua* (T. & G.) Robinson and var. *tenuifolia* (T. & G.) Munz] (BS, J&S)

Claytonia parviflora Hook. var. ***parviflora***. Narrow-leaved miner's lettuce. Blue oak woodland. Widespread but uncommon. (BS, J&S)

Claytonia perfoliata Willd. Miner's lettuce. Blue oak woodland, coastal scrub. Widespread, common. (BS, J&S)

Claytonia rubra (Howell) Tidestrom. Red miner's lettuce. Grasslands. Uncommon. (J&S)

Primulaceae (Primrose Family)

Androsace elongata L. ssp. ***acuta*** (Greene) G. Robb. California androsace. Moss-covered rock outcrops and open areas in adjacent grassland. Widespread and common, but restricted to highly localized microhabitat sites (see Figure 2). CNPS List 4. (BS, J&S)

Dodecatheon hendersonii Gray. Mosquito bills. Grasslands. Locally common. (BS, J&S)

Ranunculaceae (Buttercup Family)

Delphinium gypsophilum Ewan ssp. ***gypsophilum***. Gypsum-loving larkspur. Grasslands. Restricted to several occurrences along the east side of Site 300 (see Figure 2). CNPS List 4. (BS; J&S)

Delphinium hesperium Gray. Western larkspur. (BS)

Delphinium hesperium Gray ssp. ***pallescens*** (Ewan) H. Lewis & Epling. Pale western larkspur. Blue oak woodland, grasslands. Common. (J&S)

Delphinium parryi Gray. Parry's larkspur. Blue oak woodland, grasslands. Common. (J&S)

Delphinium patens Benth. Coastal scrub, oak woodland. Spreading larkspur. Widespread, common. (BS, J&S)

Ranunculus canus Benth. Sacramento Valley buttercup. Grasslands. Local, uncommon. [var. *laetus* (Greene) Benson] (BS, J&S)

Ranunculus hebecarpus Hook. & Arn. Pubescent-fruited buttercup. (BS)

**Ranunculus muricatus* L. Prickle-fruited buttercup. Wetlands. Uncommon. (J&S)

Ranunculus sceleratus L. Celery-leaved buttercup. (BS)

Rosaceae (Rose Family)

Aphanes occidentalis (Nutt.) Rydb.. Western ladies'-mantle. Grasslands, oak woodland. Widespread but uncommon. (BS, J&S)

Heteromeles arbutifolia (Lindley) Roemer. Toyon. Blue oak woodland. Local, uncommon. (BS, J&S)

Prunus virginiana L. var. *demissa* (Nutt.) Torr. Western choke-cherry. Elderberry scrub. Local, uncommon. (BS, J&S)

Rubus leucodermis Torr. & Gray. Blackcap raspberry. (BS)

Rubus ursinus Cham. & Schldl. California blackberry. Elderberry scrub. Local, uncommon. (J&S)

Rubiaceae (Madder Family)

Galium aparine L. Common bedstraw. Blue oak woodland, grasslands. Widespread but uncommon. (BS, J&S)

**Galium parisiense* L. Wall bedstraw. Ruderal, grasslands. Widespread but uncommon. (J&S)

Galium porrigens Dempster var. *tenue* (Dempster) Dempster. Climbing bedstraw. Blue oak woodland. Local, uncommon. (BS, J&S)

Salicaceae (Willow Family)

Populus fremontii Wats. Fremont cottonwood. Fremont cottonwood riparian forest, valley oak woodland. Local, uncommon. (BS, J&S)

Salix laevigata Bebb. Red willow. Great Valley willow scrub, Fremont cottonwood riparian forest . Local, uncommon. (BS, J&S)

Salix lasiolepis Benth. Arroyo willow. Great Valley willow scrub. Local, uncommon. (J&S)

Saxifragaceae (Saxifrage Family)

Lithophragma affine Gray. Woodland star. (BS)

Lithophragma parviflorum (Hook.) Torrey & A. Gray var. ***parviflorum***. Moist areas in grasslands. Widespread, common. (J&S)

Saxifraga californica Greene. California saxifrage. Moist areas in grasslands. Widespread, common. (BS, J&S)

Scrophulariaceae (Figwort Family)

Castilleja attenuata (Gray) Chuang & Heckard. Valley tassels. Grasslands. Local, uncommon. [*Orthocarpus attenuatus* Gray] (BS, J&S)

Castilleja exerta (Heller) Chuang & Heckard. Purple owl's-clover. Grasslands, coastal scrub, blue oak woodland. Widespread, common. [*Orthocarpus purpurascens* Benth.] (BS, J&S)

Castilleja foliolosa Hook. & Arn. Ash-grey Indian paintbrush. Coastal scrub. Local, uncommon. (BS, J&S)

Collinsia heterophylla Buist. Chinese houses. Blue oak woodland. Locally common. (BS, J&S)

Collinsia sparsiflora Fisch. & Mey. Few-flowered blue-eyed Mary. (BS)

Collinsia sparsiflora Fisch. & Mey. var. ***collina*** (Jeps.) V. Newsom. Remote-flowered blue-eyed Mary. Rock outcrops and open, moist areas in grasslands. Widespread, common. (BS, J&S)

Linaria canadensis (L.) Dum.-Cours. Blue toadflax. [*L. texana* Scheele] (BS)

Mimulus aurantiacus Curtis. Bush monkey flower. Elderberry scrub. Local, uncommon. (BS, J&S)

Mimulus guttatus DC. Seep-spring monkey flower. Freshwater seep, vernal pool. Uncommon. [*M. nasutus* Greene] (BS, J&S)

Mimulus latidens (Gray) Greene. Broad-toothed monkey flower. (BS)

Scrophularia californica Cham. & Schldl. California figwort. Rock outcrops in blue oak woodland, elderberry scrub. Local, uncommon. (BS, J&S)

Veronica peregrina L. ssp. ***xalapensis*** (Kunth) Pennel. Purslane speedwell. Vernal pool. Local, uncommon. (BS, J&S)

Solanaceae (Nightshade Family)

Datura wrightii Regel. Jimson weed. Ruderal, Great Valley willow scrub. Uncommon. (J&S)

****Nicotiana acuminata*** Hook. var. ***multiflora*** (Philippi) Reiche. Many-flowered tobacco. Freshwater seep. Uncommon. (J&S)

****Nicotiana glauca*** Graham. Tree tobacco. Along streams. Local, uncommon. (BS, J&S)

Nicotiana quadrivalvis Pursh. Indian tobacco. [*N. bigelovii* (Torr.) Wats.] (BS)

Solanum americanum Miller. Small-flowered nightshade. Ruderal. Uncommon. [*S. nodiflorum* Jacq.] (BS, J&S)

Solanum umbelliferum Eschsch. Blue witch. Grasslands. Uncommon. (BS, J&S)

Urticaceae (Nettle Family)

Hesperocnide tenella Torr. Western nettle. Rock outcrops in grasslands, coastal scrub. Local, uncommon. (BS, J&S)

Urtica dioica L. subsp. ***holosericea*** (Nutt.) Thorne. Hoary nettle. Freshwater seep. Local, uncommon. (BS, J&S)

****Urtica urens*** L. Dwarf nettle. Ruderal, blue oak woodland. Local, uncommon. (BS, J&S)

Valerianaceae (Valerian Family)

Plectritis brachystemon Fischer & C. Meyer. Short-spurred plectritis. Moist areas in grasslands. Local, uncommon. (J&S)

Plectritis ciliosa (Greene) Jeps. subsp. ***insignis*** (Susksd.) D. Morey. Long-spurred plectritis. Blue oak woodland, grasslands. Widespread but uncommon. (BS, J&S)

Plectritis congesta (Lindley) A. DC. Pink plectritis. (BS)

Plectritis macrocera Torrey & A. Gray. White plectritis. Grasslands. Local, uncommon. (J&S)

Verbenaceae (Vervain Family)

Verbena bracteata Lagasca & J.D. Rodriguez. Prostrate vervain. Vernal pool. Local, uncommon. (J&S)

Violaceae (Violet Family)

Viola pedunculata T. &. G. Johnny jump-up. Grasslands. Local, uncommon. (J&S)

Viola purpurea Kell. ssp. ***quercetorum*** (M. Baker & J. Clausen) R. J. Little. Foothill violet. [*V. quercetorum* M. Baker & J. Clausen] (BS)

Viscaceae (Mistletoe Family)

Phoradendron villosum (Nutt.) Nutt. Oak mistletoe. Blue oak woodland. Local, uncommon. (BS, J&S)

Vitaceae (Grape Family)

Vitus californica Benth. California wild grape. Along stream in blue oak woodland. Local, uncommon. (J&S)

Anthophyta--Monocotyledones

Cyperaceae (Sedge Family)

Cyperus eragrostis Lam. Umbrella sedge. Vernal pool. Local, uncommon. (BS, J&S)

Eleocharis macrostachya Britton. Creeping spikerush. Vernal pool. Local, uncommon. [*E. palustris* (L.) Roemer & Schultes] (BS, J&S)

Scirpus acutus Bigelow. Hard-stem bulrush. (BS)

Scirpus fluviatilis (Torr.) Gray. River bulrush. (BS)

Iridaceae (Iris Family)

Sisyrinchium bellum Wats. Blue-eyed grass. Grasslands. Local, uncommon. (J&S)

Juncaceae (Rush Family)

Juncus balticus Willd. Baltic rush. Freshwater seep. Local, uncommon. (BS, J&S)

Juncus bufonius L. Toad rush. Freshwater seep. Local, uncommon. (BS, J&S)

Juncus occidentalis (Cov.) Wieg. Western rush. [*Juncus tenuis* Willd. var. *congestus* Engelm.] (BS)

Juncus oxymeris Engelm. Pointed rush. (BS)

Juncus patens E. Meyer. Spreading rush. Freshwater seep. Local, uncommon. (BS, J&S)

Juncus xiphioides E. Meyer. Iris-leaved rush. Freshwater seep. Local, uncommon. (J&S)

Juncaginaceae (Arrowgrass Family)

Lilaea scilloides (Poiret) Hauman. Flowering quillwort. Vernal pool. Local, uncommon. (BS, J&S)

Lemnaceae (Duckweed Family)

Lemna miniscula Herter. Least duckweed. [*L. minuta* Kunth] (BS)

Liliaceae (Lily Family)

Allium crispum Greene. Crinkled onion. Grasslands. Local, uncommon. (BS, J&S)

Allium serra D. McNeal & F. Ownbey. Serrated onion. Grasslands, blue oak woodland. Widespread, common. [*A. serratum* Wats.] (BS, J&S)

Brodiaea elegans Hoover. Harvest brodiaea. Grasslands. Common. (BS, J&S)

Calochortus clavatus Wats. ssp. ***pallidus*** (Hoov.) Munz. Mariposa lily. Grasslands. Uncommon. (BS, J&S)

Calochortus venustus Benth. Mariposa lily. Grasslands. Uncommon. (BS, J&S)

Chlorogalum pomerideanum (DC.) Kunth. Soap plant. Grasslands. Widespread, common (BS, J&S)

Dichelostemma capitata Alph. Wood. Blue dicks. Grasslands, blue oak woodland. Widespread, common. Rolf Berg (1996) argues that this species should be treated as *Dipterostemon capitatus* (Benth.) Rydb. on the basis of its distinctive embryogenesis. [*D. pulchellum* (Salisb.) Heller] (BS, J&S)

Fritillaria agrestis Greene. Stinkbells. Grasslands. Local, uncommon (see Figure 2). CNPS list 4. (BS, J&S)

Triteleia hyacinthina (Lindley) Greene. White hyacinth. Grasslands. Uncommon. (BS, J&S)

Triteleia laxa Benth. Ithuriel's spear. Grasslands, blue oak woodland, coastal scrub. Widespread, common. (BS, J&S)

Poaceae (Grass Family)

Alopecurus carolinianus Walter. Carolina foxtail. Vernal pool. Local, uncommon. (J&S)

Alopecurus saccatus Vasey. Pacific foxtail. Vernal pool. Local, uncommon. [*A. howellii* Vasey] (BS, J&S)

****Avena barbata*** Link. Slender wild oat. Grasslands, coastal scrub, blue oak woodland. Widespread, common. (BS, J&S)

****Avena fatua*** L. Wild oat. Grasslands. Widespread but uncommon. (BS, J&S)

****Bromus arenarius*** Labill. Australian brome. Grasslands. Uncommon. (BS, J&S)

Bromus carinatus Hook. & Arn. California brome. Blue oak woodland, grasslands. Local, uncommon. [*B. marginatus* Steudel] (BS, J&S)

****Bromus diandrus*** Roth. Ripgut brome. Grasslands, coastal scrub, blue oak woodland. Widespread, common. (BS, J&S)

****Bromus hordeaceus*** L. Soft chess. Grasslands, coastal scrub, blue oak woodland. Widespread, common. [*B. mollis* L., *B. molliformis* Godron] (BS, J&S)

****Bromus japonicus*** Murr. Japanese brome. (BS)

****Bromus madritensis*** L. subsp. ***madritensis***. Foxtail chess. Grasslands, blue oak woodland. Widespread but uncommon. (BS, J&S)

****Bromus madritensis*** L. subsp. ***rubens*** (L.) Husnot. Red brome. Grasslands, coastal scrub, blue oak woodland. Widespread, common. [*B. rubens* L.] (BS, J&S)

****Bromus sterilis*** L. Poverty brome. (BS)

****Bromus tectorum*** L. Cheat grass. Grasslands. Uncommon. (BS, J&S)

****Crypsis schoenoides*** (L.) Lam. Swamp timothy. Vernal pool. Local, uncommon. (J&S)

****Cynodon dactylon*** (L.) Pers. Bermuda grass. Freshwater seep, ruderal. Local, uncommon. (J&S)

Deschampsia danthonioides (Trin.) Benth. Annual hairgrass. Vernal pool. Local, uncommon. (BS, J&S)

Distichlis spicata (L.) Greene. Saltgrass. Grasslands, Freshwater seep. Local, uncommon. [var. *stricta* (Torr.) Beetle] (BS, J&S)

Elymus elymoides (Raf.) Swezey. Squirreltail. [*Sitanion hystrix* (Nutt.) J. G. Smith] (BS)

Elymus glaucus Buckley. Blue wildrye. Oak woodlands. Local, uncommon. (BS, J&S)

Elymus multisetus (J. G. Smith) Davy. Big squirreltail. Grasslands, blue oak woodland. Common. [*Sitanion jubatum* J. G. Smith] (BS, J&S)

****Gastridium ventricosum*** (Gouan) Schinz & Thell. Nitgrass. Grasslands. Local, uncommon. (J&S)

Hordeum depressum (Scribner & J. G. Smith) Rydb. Low barley. Swale in grasslands. Local, uncommon. (BS, J&S)

****Hordeum marinum*** Hudson ssp. ***gussoneanum*** (Parl.) Thell. Mediterranean barley. Vernal pool. Local, uncommon. [*H. geniculatum* All.] (BS, J&S)

****Hordeum murinum*** L. ssp. ***leporinum*** (Link) Arcang. Foxtail barley. Grasslands. Widespread, common. [*H. leporinum* Link] (BS, J&S)

Koeleria macrantha (Ledeb.) J. A. Schultes. Prairie junegrass. Grasslands. Local, uncommon. [*K. cristata* (L.) Pers., *K. nitida* Nutt.] (BS, J&S)

****Koeleria phleoides*** (Villars) Pers. Bristly junegrass. Open, thin-soiled areas in grasslands, coastal scrub. Local, uncommon. [*K. gerardii* (Villars) Shinners] (BS, J&S)

****Lamarckia aurea*** (L.) Moench. Goldentop. Coastal scrub. Widespread but uncommon. (BS, J&S)

Leymus triticoides (Buckley) Pilger. Creeping wildrye. Grasslands, freshwater seep. Common. [*Elymus triticoides* Buckley] (BS, J&S)

****Lolium multiflorum*** Lam. Italian ryegrass. Grasslands, vernal pool. Common. (BS, J&S)

****Lolium perenne*** L. Perennial ryegrass. Swale in grasslands. Local, uncommon. (J&S)

Melica californica Scribner. California melic. Rock outcrops in grasslands, blue oak woodland. Local, uncommon (BS, J&S)

Nassella cernua (Stebbins & Love) Barkworth. Nodding needlegrass. Grasslands. Common. [*Stipa cernua* Stebbins & Love] (BS, J&S)

Nassella pulchra (A. Hitchc.) Barkworth. Purple needlegrass. Grasslands. Common. [*Stipa pulchra* A. Hitchc.] (BS, J&S)

****Phalaris paradoxa*** L. Paradox canary grass. Swale in grasslands; Local, uncommon. (J&S)

****Poa annua*** L. Annual bluegrass. Grasslands. Local, uncommon. (BS, J&S)

****Poa bulbosa*** L. Bulbous bluegrass. Grasslands. Local, uncommon. (BS, J&S)

Poa secunda J. S. Presl. One-sided bluegrass. Grasslands. Widespread, common. [*P. scabrella* (Thurb.) Vasey] (BS, J&S)

****Polypogon interruptus*** Kunth. Ditch beard grass. Freshwater seep. Local, uncommon. (BS, J&S)

****Polypogon monspeliensis*** (L.) Desf. Annual rabbit's-foot grass. Freshwater seep, vernal pool. Local, uncommon. (BS, J&S)

****Schismus arabicus*** Nees. Arabian grass. Rock outcrops in grasslands, ruderal. Widespread but uncommon. (BS, J&S)

****Schismus barbatus*** (L.) Thell. Mediterranean grass. Coastal scrub. Widespread but uncommon. (J&S)

****Taeniatherum caput-medusae*** (L.) Nevski. Medusa-head. (BS)

****Vulpia bromoides*** (L.) S. F. Gray. Foxtail fescue. Grasslands. Uncommon. (J&S)

Vulpia microstachys (Nutt.) Benth. var. ***ciliata*** (Beal) Leonard & Gould. Ciliate fescue. Blue oak woodland, grasslands. Widespread but uncommon. (J&S)

Vulpia microstachys (Nutt.) Benth. var. ***confusa*** (Piper) Leonard & Gould. Hairy-leaved fescue. Grasslands. Widespread but uncommon. (BS, J&S)

Vulpia microstachys (Nutt.) Benth. var. ***pauciflora*** (Beal) Leonard & Gould. Few-flowered fescue. Grasslands. Widespread but uncommon. (BS, J&S)

****Vulpia myuros*** (L.) C. Gmelin. Rattail fescue. Grasslands. Widespread but uncommon. (BS, J&S)

Vulpia octoflora (Walter) Rydb. var. ***hirtella*** (Piper) Henrard. Eight-weeks fescue. Coastal scrub. Local, uncommon. (BS, J&S)

Potamogetonaceae (Potamogeton Family)

**Potamogeton crispus* L. Crispate-leaved pondweed. (BS)

Typhaceae (Cattail Family)

Typha angustifolia L. Narrow-leaved cattail. Cattail wetland, freshwater seep. Local, uncommon. (BS, J&S)

Typha domingensis Pers. Southern cattail. (BS)

Typha latifolia L. Broad-leaved cattail. Cattail wetland, freshwater seep. Local, uncommon. (BS, J&S)

Excluded Species

BioSystems' survey included a number of taxa from Site 300 that appear to be erroneously reported. These taxa include:

Alyssum alyssoides (L.). This species does not occur in central western California; possibly a misidentification of erect-fruited *Lepidium nitidum* T. & G.

Fritillaria bicolor Lindley. Misidentification of *Fritillaria agrestis* Greene.

Gilia capitata Sims ssp. *abrotanifolia* (Greene) V. Grant. This is a southern California subspecies; probably a misidentification of ssp. *staminea*.

Hordeum pusillum Nutt. This is a synonym of *H. intercedens* Nevski, a southern California species; possibly a misidentification of *H. depressum*.

Lagophylla glandulosa Gray. This is a late summer- to fall-blooming species that does not occur in central western California; probably a misidentification of *Lagophylla ramosissima*.

Plagiobothrys hystriculus (Piper) Jtn. This species, which is presumed to be extinct, is endemic to Solano County; possibly a misidentification of *Plagiobothrys acanthocarpus* (Piper) Jtn.

Plagiobothrys tener (Greene) Jtn. This species does not occur in central western California; possibly a misidentification of *Plagiobothrys trachycarpus* (Gray) Jtn. or a typographic error for *P. tenellus* (Nutt.) Gray.

Plantago eriopoda Torr. This species does not occur in central western California; possibly a misidentification of *Plantago lanceolata*.

Poa palustris L. This is a montane species that does not occur in central western California; possibly a misidentification of *Poa pratensis* L.

Ribes divericatum Dougl. This species is coastal and does not occur in the interior foothills; probably a misidentification of *R. quercetorum* Greene.

Thelypodium lemmonii Greene. This species occurs in the central to southern South Coast Ranges but not as far north as Alameda County. Probably a misidentification of *Guillenia flavescens*.

Triteleia elegans. This is not a valid name; probably a typographic error for *Brodiaea elegans*.

References

Al-Shehbaz, I. A., and R. A. Price. 1998. Delimitation of the genus Nasturtium (Brassicaceae). *Novon* 8: 124-126.

Baldwin, B. G. 1999. New combinations and new genera in the North American tarweeds. *Novon* 9: 462-471.

Baldwin, B. G., R. E. Preston, B. L. Wessa, and M. Wetherwax. 2001. A biosystematic and phylogenetic assessment of sympatric taxa in *Blepharizonia* (Compositae-Madiinae). *Systematic Botany* 26: 184-194.

Berg, R. Y. 1996. Development of ovule, embryo sac and endosperm in *Dipterostemon* and Dichelotemma (Alliaceae) relative to taxonomy. *American Journal of Botany* 83: 790-801.

BioSystems Analysis, Inc. 1986b. A rare plant survey of Site 300, Lawrence Livermore National Laboratory, San Joaquin County, California. November 1986. Santa Cruz, CA. Prepared for Science Applications International Corporation, Pleasanton, CA.

CalFlora: Information on California plants for education, research and conservation. [web application]. 2000. Berkeley, California: The CalFlora Database [a non-profit organization]. Available: http://www.calflora.org/.

Chan, R. 2001. Taxonomic changes and a new species in *Lasthenia* Sect. *Amphiachaena* (Compositae: Heliantheae sensu lato). *Madroño* 48(3): 205-210.

Hickman, J. C. (ed.). 1993. *The Jepson manual*. University of California Press, Berkeley, CA.

Hoover, R. F. 1936. *New California plants*. Leaflets of Western Botany 1:225–232.

Preston, R. E. 1997. *Dittrichia graveolens* (Asteraceae), new to the California weed flora. *Madroño* 44: 200-203.

Reveal, James. Professor. University of Maryland, College Park. October 15, 1997 - E-mail.

Webster, G. L. 1992. Realignment in American *Croton*. *Novon* 2: 269-273.