

RESEARCH REPORT NO. 2

STANFORD UNIVERSITY JASPER RIDGE BIOLOGICAL EXPERIMENTAL AREA

Department of Biological Sciences

April 1, 1962

THE VASCULAR PLANTS OF THE  
JASPER RIDGE BIOLOGICAL EXPERIMENTAL AREA  
OF STANFORD UNIVERSITY

(Revised slightly,  
March 26, 1971, by  
J. H. Thomas.)

Duncan M. Porter

INTRODUCTION

Jasper Ridge and Searsville Lake have long been an important collecting area for the botanists and students of Stanford University. Botanical collections were first made in this area about 1860 by H. N. Bolander and have continued to the present.

Many theses and scientific papers have been written that bear partially or directly on the area. Those that have been used in the present study are those by Cooper (1922), Chaney (1925), Springer (1935), Moeur (1947), and Thomas (1958, 1961). The nomenclature used is the same as that in the latest flora of the area (Thomas, 1961). The standard floras of California (Abrams & Ferris, 1923-1960; Jepson, 1909-1943, 1925; Munz, 1959) have been consulted.

THE VEGETATION OF THE JASPER RIDGE BIOLOGICAL EXPERIMENTAL AREA

The vegetation of Jasper Ridge may be divided into five distinct associations. These are oak-madrone forest, oak-woodland, chaparral, grasslands, and the aquatic flora of Searsville Lake. The areas of transition between the first four associations may be either gradual or abrupt, so there may or may not be an intermingling of their species complexes. In the following lists, only those species either confined to, or indicative of, an association will be listed for that association.

The more densely wooded forest, occurring mainly upon the steep north-facing slopes of the ridge, may be termed the oak-madrone forest. The dominants are Quercus agrifolia and Arbutus menziesii. Indicative species are:

trees: Quercus agrifolia  
Quercus kelloggii  
Umbellularia californica

Aesculus californica  
Arbutus menziesii

shrubs: Rosa californica  
Rosa gymnocarpa  
Rubus ursinus  
Holodiscus discolor

Osmaronia cerasiformis  
Rhamnus crocea ssp. crocea  
Dirca occidentalis

herbs: Adiantum pedatum  
var. aleuticum  
Pityrogramma triangularis  
Polystichum munitum

Aquilegia formosa  
var. truncata  
Thalictrum polycarpum  
Dentaria californica

Pteridium aquilinum  
var. pubescens  
Deschampsia elongata  
Fritillaria lanceolata  
Disporum hookeri  
Smilacina racemosa  
var. amplexicaulis  
Smilacina stellata  
var. sessifolia  
Trillium chloropetalum  
Corallorrhiza striata  
Habenaria unalascensis  
var. elata  
Silene californica

var. californica  
Fragaria californica  
Anthriscus scandicina  
Sanicula crassicaulis  
Trientalis latifolia  
Nemophila heterophylla  
Pholistoma auritum  
Cynoglossum grande  
Satureja douglasii  
Scrophularia californica  
Lonicera hispidula  
Hieracium albiflorum  
Adenocaulon bicolor

The streambank vegetation along San Francisquito Creek may be included as a sub-unit of the oak-madrone forest association, as the two types here intermingle, with many of the species common along the creek being found along its minor tributaries in the oak-madrone forest. Some of these species are also found along Corte de Madera Creek and the moist ravines above Searsville Lake. These are:

trees: Sequoia sempervirens  
Salix laevigata  
Salix lasiandra  
Salix lasiolepis  
Alnus rhombifolia

Umbellularia californica  
Acer macrophyllum  
Acer negundo  
var. californica  
Cornus californica  
Cornus glabrata

shrubs: Corylus californica  
Whipplea modesta  
Grossularia divaricata  
Grossularia leptosma  
Physocarpus capitatus  
Rubus parviflorus  
var. velutinus

Prunus emarginata  
Prunus subcordata  
Amelanchier pallida  
Euonymus occidentalis  
Lonicera involucrata  
Artemisia douglasiana

herbs: Urtica holosericea  
Nasturtium officinale  
Heuchera micrantha  
Conium maculatum  
Heracleum maximum

Mentha pulegium  
Mimulus guttatus  
Baccharis douglasii  
Helenium puberulum  
Senecio mikanoides

The more openly wooded forest, occurring upon the flatter, gently sloping areas of the ridge may be termed the oak-woodland. The characteristic species is Quercus douglasii. Species indicative of this association are:

trees: Quercus douglasii  
  
herbs: Calochortus albus  
Brodiaea lutea  
Montia perfoliata  
Delphinium patens  
Lathyrus vestitus  
ssp. puberulus  
Vicia americana  
var. minor  
Vicia exigua

Clarkia unguiculata  
Caucalis microcarpa  
Castilleja affinis  
Pedicularis densiflora  
Aster chilensis  
Madia exigua  
Eriophyllum lanatum  
var. arachnoideum

The chaparral association is found on the gentle south-facing slopes and flatter

areas on the crest of the ridge. The dominants are Adenostoma fasciculatum, Ceanothus cuneatus var. dubius, and Arctostaphylos crustacea var. crustacea. Indicative species are:

shrubs: Quercus dumosa  
Quercus durata  
Quercus wislizenii  
var. frutescens  
Clematis lasiantha  
Ribes malvaceum  
Adenostoma fasciculatum  
Cercocarpus betuloides  
Prunus ilicifolia  
Photinia arbutifolia  
Ceanothus cuneatus  
var. dubius

herbs: Delphinium californicum  
Lotus scoparius  
Hesperolinon micranthum  
Helianthemum scoparium  
var. vulgare  
Convolvulus occidentalis  
Eriastrum abramsii  
Navarretia heterodoxa  
Scutellaria tuberosa

Ceanothus sorediatus  
Ceanothus thyrsiflorus  
Malacothamnus arcuatus  
Garrya elliptica  
Arctostaphylos crustacea  
var. crustacea  
Eriodictyon californicum  
Lepechinia calycina  
Diplacus aurantiacus  
Artemisia californica

Orobanche bulbosa  
Galium nuttallii  
Sambucus mexicana  
Triodanis biflora  
Aster radulinus  
Lavia hieracioides  
Eriophyllum confertiflorum

Much of the Jasper Ridge, especially along its crest, consists of grasslands. Most of this association is on flat or gently sloping land, but in many places it extends up and over the steeper slopes where the original chaparral has been removed to provide for more grazing area. Here and there, especially on the steeper slopes, individuals of Quercus agrifolia, Q. douglasii, and Q. kelloggii may be encountered. Typical grassland herbs are:

Briza minor  
Bromus carinatus  
Bromus mollis  
Bromus racemosus  
Bromus rubens  
Festuca myuros  
Melica imperfecta  
Poa scabrella  
Elymus glaucus  
Hordeum hystrrix  
Lolium multiflorum  
Lolium tremulentum  
Aira caryophylla  
Avena barbata  
Avena fatua  
Holcus lanatus  
Gastridium ventricosum  
Calochortus luteus  
Brodiaea elegans  
Brodiaea hyacinthina  
Brodiaea laxa  
Brodiaea pulchella  
Sisyrinchium bellum  
Eriogonum nudum  
Eriogonum vimineum

Tillea erecta  
Alchemilla occidentalis  
Lotus micranthus  
Lotus purshianus  
Lotus subpinnatus  
Lupinus densiflorus  
Lupinus bicolor  
var. microphyllus  
Lupinus nanus  
Trifolium barbigerum  
Trifolium bifidum  
var. decipiens  
Trifolium ciliolatum  
Trifolium fucatum  
Trifolium gracilentum  
Trifolium microcephalum  
Trifolium variegatum  
Erodium botrys  
Erodium circutarium  
Erodium obtusiplicatum  
Geranium dissectum  
Geranium molle  
Eremocarpus setigerus  
Clarkia purpurea  
ssp quadrivulnera

Calandrinia ciliata  
 var. menziesii  
Montia spathulata  
Cerastium viscosum  
Silene gallica  
Delphinium hesperium  
Delphinium variegatum  
 var. californicus  
Eschscholzia californica  
Platystemon californicus  
Athyrsanus pusillus  
Lepidium nitidum  
Centunculus minimus  
Gilia clivorum  
Linanthus androsaceous  
Linanthus bicolor  
Linanthus dichotomus  
Linanthus liniflorus  
Linanthus parviflorus  
Navarretia viscidula  
Phlox gracilis  
Nemophila menziesii  
 var. menziesii  
Nemophila menziesii  
 var. atomaria  
Amsinckia intermedia  
Cryptantha micromeres  
Plagiobothrys nothofulvus  
Plagiobothrys tenellus  
Monardella villosa  
 var. villosa  
Pogogyne serpylloides  
Salvia columbariae  
Cordylanthus pilosus  
Linaria texana  
Orthocarpus attenuatus  
Orthocarpus densiflorus  
Orthocarpus erianthus  
 var. erianthus  
Orthocarpus purpurascens  
 var. purpurascens  
Orthocarpus pusillus  
Plantago erecta

Many of the species listed above are found in the serpentine soil of the meadow on the crest of Jasper Ridge, but those species in the following list are confined solely to this serpentine.

Festuca pacifica  
Sitanion jubatum  
Agrostis microphylla  
Stipa pulchra  
Juncus phaeocephalus  
Calochortus venustus  
Allium amplexens  
Allium breweri  
Allium lacunosum

Clarkia purpurea  
 ssp. viminea  
Oenothera ovata  
Eryngium maculatum  
Lomatium dasycarpum  
Lomatium utriculatum  
Sanicula bipinnatifida  
 ssp. patulum  
Dodecatheon hendersonii  
 ssp. cruciatum  
Microcalyx quadrangularis  
Plectritis ciliosa  
 ssp. insignis  
Plectritis macrocera  
Agoseris grandiflora  
Hypochaeris glabra  
Microseris douglasii  
 ssp. douglasii  
Chaetopappa alsinoides  
Erigeron foliosus  
Grindelia camporum  
Grindelia hirsutula  
Lessingia germanorum  
 var. tenuipes  
Lessingia hololeuca  
 var. hololeuca  
Evax sparsiflora  
Gnaphalium purpureum  
Micropus californicus  
Psilocarphus tenellus  
Helianthella californica  
Wyethia angustifolia  
Achyranthes mollis  
Hemizonia corymbosa  
Hemizonia luzulaefolia  
 ssp. rudis  
Lagophylla ramosissima  
Lavia platyglossa  
 ssp. campestris  
Madia gracilis  
Baeria chrysostoma  
 ssp. gracilis

Brodiaea terrestris  
Arenaria douglasii  
Astragalus gambelianus  
Cryptantha flaccida  
Mimulus douglasii  
Orthocarpus lithospermoides  
Calycadenia multiglandulosa  
 ssp. robusta

Many weedy species have invaded Jasper Ridge that are confined to disturbed areas.

These are in the main found in the well trampled land to the north and west of the ridge abutting upon Searsville Lake, but many of them occur along the roadsides on the ridge proper. Introduced weeds of disturbed areas are:

<u>Bromus commutatus</u>	<u>Rumex acetosella</u>
<u>Bromus rigidus</u>	<u>Rumex crispus</u>
<u>Poa annua</u>	<u>Brassica campestris</u>
<u>Hordeum leporinum</u>	<u>Brassica nigra</u>
<u>Capsella bursa-pastoris</u>	<u>Picris echioides</u>
<u>Raphanus sativus</u>	<u>Sonchus asper</u>
<u>Sisymbrium officinalis</u>	<u>Sonchus oleraceus</u>
<u>Melilotus indicus</u>	<u>Taraxacum officinale</u>
<u>Medicago polymorpha</u> var. <u>vulgaris</u> f. <u>vulgaris</u>	<u>Anthemis cotula</u>
<u>Medicago sativa</u>	<u>Senecio vulgaris</u>
<u>Vicia sativa</u>	<u>Carduus tenuiflorus</u>
<u>Malva parviflora</u>	<u>Centaurea calcitrapa</u>
<u>Convolvulus arvensis</u>	<u>Centaurea melitensis</u>
<u>Plantago lanceolata</u>	<u>Centaurea solstitialis</u>
<u>Dipsacus fullonum</u>	<u>Cirsium vulgare</u>
	<u>Silybum marianum</u>

The aquatic and simiaquatic plants in and around Searsville Lake comprise the last association. These are:

<u>Azolla filiculoides</u>	<u>Polygonum coccineum</u>
<u>Typha latifolia</u>	<u>Polygonum lapathifolium</u>
<u>Sparganium eurycarpum</u>	<u>Polygonum punctatum</u>
<u>Potamogeton foliosus</u> var. <u>macellus</u>	<u>Atriplex patula</u> var. <u>hastata</u>
<u>Potamogeton pusillus</u> var. <u>minor</u>	<u>Lythrum hyssopifolia</u>
<u>Alisma plantago-aquatica</u>	<u>Epilobium adenocaulon</u> var. <u>occidentale</u>
<u>Agrostis exarata</u> var. <u>exarata</u>	<u>Oenanthe sarmentosa</u>
<u>Polypogon monspeliensis</u>	<u>Solidago occidentalis</u>
<u>Paspalum distichum</u>	<u>Gnaphalium palustre</u>
<u>Scirpus acutus</u>	<u>Xanthium strumarium</u>
<u>Iris pseudoacorus</u>	<u>Artemisia biennis</u>

The following annotated list consists of:

82 Families  
273 Genera  
458 Species, Subspecies, and Varieties

ANNOTATED LIST OF THE VASCULAR PLANTS

Class Filicinae

1. Salviniaceae

\*Azolla filiculoides Lam.  
Searsville Lake.

2. Polypodiaceae

Adiantum jordanii Muell.

Reported by Cooper (1922) from the oak-madrone forest.

Adiantum pedatum L. var. aleuticum Rupr.

Dense oak-madrone forest on north-facing slope above San Francisquito Creek.

\*Pellaea mucronata (Eaton) Eaton

Sandstone outcroppings on north-facing slope above San Francisquito Creek.

\*Pityrogramma triangularis (Kaulf.) Maxon

Common in oak-madrone forest, occasional in chaparral.

Polystichum munitum (Kaulf.) Presl.

Dense oak-madrone forest on north-facing slope above San Francisquito Creek.

Pteridium aquilinum (L.) Kuhn var. pubescens Underw.

Oak-madrone forest.

Class Gymnospermae

1. Pinaceae

\*Pseudotsuga menziesii (Mirb.) Franco

Scattered on the north-facing slope above San Francisquito Creek.

2. Taxodiaceae

\*Sequoia sempervirens (Lamb.) Endl.

Common along San Francisquito Creek.

Class Angiospermae

Subclass Monocotyledoneae

1. Typhaceae

\*Typha latifolia L.

Searsville Lake.

2. Sparganiaceas

\*Sparganium eurycarpum Engelm.

Searsville Lake.

3. Potamogetonaceae

\*Potamogeton foliosus Raf. var. macellus Fern.

Searsville Lake.

\*Potamogeton pusillus L. var. minor (Biv.) Fern. & Schub.

4. Alismataceae

\*Alisma plantago-squatica L.  
Searsville Lake.

5. Gramineae

Festuceae

~~x~~ Briza minor L.

Grasslands and openly wooded slopes.

~~x~~ Bromus carinatus H. & A.

Grasslands and openly wooded slopes.

Bromus commutatus Schrad.

Disturbed areas in grasslands.

Bromus laevipes Shear

Reported by Springer (1935) from a "shady slope".

\*Bromus mollis L.

The most common grass in grasslands and on openly wooded slopes.

Bromus racemosus L.

Grasslands and openly wooded slopes.

Bromus rigidus Roth.

Disturbed areas in grasslands.

Bromus rubens L.

Grasslands.

Bromus tectorum L.

Reported by Springer (1935) from "open field near picnic grounds".

Festuca elmeri Scribn. & Merr.

Reported by Moeur (1947) from "wooded hillsides".

Festuca myuros L.

Grasslands and disturbed areas.

\*Festuca occidentalis Hook.

"Moist areas in redwoods and redwood-Douglas fir forests...."

(Thomas, 1961). Collected by Rattan (s. n.) at "Searsville."

Festuca octoflora Walt.

Reported by Moeur (1947) from "openly wooded hillside".

\*Festuca pacifica Piper

Serpentine soil in meadow.

\*Melica imperfecta Trin.

Oak madrone forest.

Melica torreyana Scribn.

Reported by Springer (1935) from "grassy field near picnic grounds".

~~x~~ Poa annua L.

Disturbed areas.

\*Poa scabrella (Thurb.) Benth. ex Vasey

Grasslands and openly wooded slopes.

Hordeae

~~x~~ Elymus glaucus Buckl.

Grasslands and openly wooded slopes.

Hordeum brachyantherum Nevski

Reported by both Springer (1935) and Moeur (1947) as limited to the "serpentine of the meadow". Listed as H. nodosum L.

\*Hordeum hystrix Roth.

Grasslands.

Hordeum leporinum Link

Disturbed areas.

- Lolium multiflorum Lam.  
Grasslands and openly wooded slopes.
- Lolium tremulentum L.  
Grasslands and openly wooded slopes.
- Sitanion jubatum Smith  
Serpentine soil in the meadow.

#### Aveneae

- Aira caryophyllea L.  
Grasslands and openly wooded slopes.
- Avena barbata Brot.  
Grasslands and openly wooded slopes.
- Avena fatua L. var. fatua  
Grasslands and openly wooded slopes.
- \*Deschampsia danthonioides (Trin.) Munro ex Benth.  
"Low moist areas where water has stood during the winter and early Spring...."  
(Thomas, 1961). Collected by Mason (May 13, 1921) at "Jasper Ridge."
- \*Deschampsia elongata (Hork.) Munro ex Benth.  
Oak-madrone forest.
- \*Holcus lanatus L.  
Grasslands.
- Koeleria macrantha (Ledeb.) Spreng.  
Reported by Moeur (1947) from "open fields and on openly wooded slopes". Listed as K. cristata (L.) Pers.

#### Agrostideae

- \*Agrostis exarata Trin. var. exarata  
Searsville Lake.
- \*Agrostis microphylla Steud.  
Serpentine soil in the meadow.
- Agrostis semiverticillata (Forsk.) Christ.  
Reported by Moeur (1947) from "wooded hillside". Listed as A. verticillata Vill.
- Gastridium ventricosum (Gouan) Schinz & Thell.  
Grasslands.
- Polypogon interruptus HBK  
Reported by Moeur (1947) from "near the lake shore". Listed as P. lutosus (Poir)  
Hitchc.
- \*Polypogon monspeliensis (L.) Desf.  
Searsville Lake. Abrams 1639 was collected at "Jasper Ridge."
- \*Stipa pulchra Hitchc.  
Serpentine soil in the meadow.

#### Phalarideae

- \*Hierochloe occidentalis Buckl.  
"A common grass in redwoods and redwood-Douglas fir forests...." (Thomas, 1961).  
Rattan (March 1867) was collected at "Searsville."

#### Paniceae

- \*Paspalum distichum L.  
Searsville Lake.

#### 6. Cyperaceae

- Carex barbara Dewey  
Reported by Moeur (1947) from "creek bank".

Cyperus eragrostis Lam.

Probably Moeur's C. virens Michx. from "San Francisquito Creek".

\*Scirpus acutus Muhl. ex Bigel.

Searsville Lake

7. Juncaceae

X Juncus occidentalis (Cov.) Wieg.

Reported by Moeur (1947) from "San Francisquito Creek". Listed as J. tenuis var. congesta Engelm.

Juncus patens Meyer

San Francisquito Creek and wet grasslands.

Juncus phaeocephalus Engelm.

Serpentine soil in the meadow.

X Luzula multiflora (Retz.) Lejeune

Oak-madrone forest and openly wooded slopes.

8. Melanthaceae

X Zygadenus fremontii (Torr.) Torr. ex Wats. var. fremontii

Wooded hillsides and chaparral.

9. Liliaceae

\*Calochortus albus Dougl. ex Benth.

Oak woodland.

\*Calochortus luteus Dougl. ex Lindl.

Grasslands and openly wooded slopes.

\*Calochortus venustus Dougl. ex Benth.

Serpentine soil in the meadow.

\*Chlorogalum pomeridianum (DC.) Kunth

Grasslands and edges of chaparral.

X Fritillaria lanceolata Pursh

Oak-madrone forest.

Lilium pardalinum Kell.

Reported by Moeur (1947) from "deep shade of the redwood area".

10. Convallariaceae

\*Disporum hookeri (Torr.) Nichols.

Oak-madrone forest on north-facing slope above San Francisquito Creek.

\*Scoliopus bigelovii Torr.

"Moist slopes and along creek banks in redwood forests...." (Thomas, 1961).

Collected by Ratian (March 1867) at "Searsville."

\*Smilacina racemosa (L.) Desf. var. amplexicaulis (Nutt.) Wats.

Oak-madrone forest.

X Smilacina stellata (L.) Desf. var. sessilifolia (Baker) Henders.

Oak-madrone forest.

X Trillium chloropetalum (Torr.) Howell

Oak-madrone forest, especially common along streambanks.

11. Amaryllidaceae

\*Allium amplectens Torr.

Serpentine soil in the meadow.

\*Allium breweri Wats.

Serpentine soil of the meadow and adjacent slopes.

\*Allium dichlamydeum Greene

Sandstone outcroppings on north-facing slope above San Francisquito Creek.

\*Allium lacunosum Wats.

Serpentine soil in the meadow.

Allium serratum Wats.

Serpentine soil of the meadow and adjacent slopes.

\*Brodiaea elegans Hoover

Grasslands.

✗ Brodiaea hyacinthina (Lindl.) Baker

Grasslands and openly wooded slopes.

✗ Brodiaea laxa (Benth.) Wats.

Grasslands and openly wooded slopes.

Brodiaea lutea (Lindl.) Mort.

Oak woodland.

\*Brodiaea pulchella (Salisb.) Greene

Grasslands and openly wooded slopes.

\*Brodiaea terrestris Kell.

Serpentine soil in the meadow.

## 12. Iridaceae

Iris macrosiphon Torr.

Reported by Springer (1935) from "edge of the road through the chaparral above the lake."

\*Iris pseudacorus L.

Searsville Lake.

✗ Sisyrinchium bellum Wats.

Grasslands and openly wooded slopes.

## 13. Orchidaceae

\*Corallorrhiza striata Lindl.

Oak-madrone forest.

Habenaria unalascensis (Spreng.) Wats. var. elata (Jeps.) Correll

Oak-madrone forest.

### Subclass Dicotyledoneae

## 14. Salicaceae

Populus trichocarpa T. & G. ex Hook.

Reported from San Francisquito Creek by Chaney (1925).

Salix hindsiana Benth.

Reported by Moeur (1947) from "edge of road above lake."

\*Salix laevigata Bebb.

Corte de Madera Creek, San Francisquito Creek, and marshy area at southern end of Searsville Lake.

\*Salix lasiandra Benth.

Streambanks and marshy area at southern end of Searsville Lake.

\*Salix lasiolepis Benth.

Streambanks and marshy area at southern end of Searsville Lake.

## 15. Juglandaceae

Juglans hindsii Jeps.

Reported from the edge of San Francisquito Creek by both Chaney (1925) (as J. californica Wats.) and Moeur (1947). Specimens of this species are unknown from the Santa Cruz Mountains.

16. Betulaceae

X Alnus rhombifolia Nutt.  
San Francisquito Creek.

17. Corylaceae

\*Corylus californica (A. DC.) Rose  
Shady streambanks.

18. Fagaceae

\*Quercus agrifolia Nee

The principal oak of the oak-madrone forest, to a lesser extent in the oak-woodland and on openly-wooded slopes.

\*Quercus douglasii H. & A.

The principal oak of the oak-woodland and the openly-wooded slopes, occasionally in the oak-madrone forest.

\*Quercus dumosa Nutt.

Chaparral.

\*Quercus durata Jeps.

Chaparral.

\*Quercus kelloggii Newb.

Oak-madrone forest and oak-woodland.

Quercus lobata Nee

Openly wooded slopes on the lower edges of Jasper Ridge, occasional.

\*Quercus X morehus Kell.

Collected by Fisher (March 19, 1898) on "Jasper Ridge."

\*Quercus wislizenii A. DC. var. frutescens Engelm.

Chaparral.

19. Urticaceae

X Urtica holosericea Nutt.  
Streambeds.

20. Loranthaceae

\*Phoradendron villosum Nutt.

Parasitic on oaks (Quercus agrifolia, Q. douglasii, Q. lobata), and occasionally on Adenostoma fasciculatum.

21. Polygonaceae

\*Chorixanthe diffusa Benth.

Dry rocky areas in chaparral and grasslands.

X Eriogonum nudum Dougl. ex Benth.

Grasslands.

\*Eriogonum vimineum Dougl. ex Benth.

Grasslands.

Polygonum aviculare L.

Reported by Moeur (1947) from "edge of road above the lake."

\*Polygonum coccineum Muhl. ex Willd.

Searsville Lake.

\*Polygonum lapathifolium L.

Searsville Lake.

\*Polygonum punctatum Ell.

Searsville Lake.

\*Rumex acetosella L.

Disturbed areas.

Rumex conglomeratus Murr.

Reported by Moeur (1947) from "along roadsides and near the lake."

Rumex crispus L.

Disturbed areas around Searsville Lake.

Rumex obtusifolius L.

Reported by Springer (1935) from "roadsides, near the lake, and near buildings," and by Moeur (1947) from "edges of the lake and along roadsides."

## 22. Chenopodiaceae

\*Atriplex patula L. var. hastata (L.) Gray

Searsville Lake.

## 23. Portulacaceae

\*Calandrinia ciliata (R. & P.) DC. var. menziesii (Hook.) Macbr.

Grasslands.

✗ Montia perfoliata (Donn ex Willd.) Howell

Oak-woodland and moist openly wooded slopes.

\*Montia spathulata (Dougl.) Howell

Moist grasslands and openly wooded slopes.

## 24. Caryophyllaceae

Arenaria douglasii Fenzl ex T. & G.

Serpentine soil in the meadow.

✗ Cerastium viscosum L.

Grasslands and disturbed areas.

✗ Silene californica Durand

Oak-madrone forest.

Silene gallica L.

Grasslands.

\*Spergularia marina (L.) Griseb. var. marina

Baker (1959) was collected at "Searsville."

✗ Stellaria media (L.) Cyrill

Grasslands, openly wooded slopes, oak-woodland, and oak-madrone forest.

## 25. Ranunculaceae

Actaea arguta Nutt. ex T. & G.

Occasional in dense oak-madrone forest on north-facing slope above San Francisquito Creek.

Aquilegia formosa Fisch. var. truncata (F. & M.) Jones

Oak-madrone woodland.

\*Clematis lasiantha Nutt.

Chaparral.

Clematis ligusticifolia Nutt.

Reported by Springer (1935) from "bank of San Francisquito Creek."

\*Delphinium californicum T. & G.

Chaparral.

Delphinium hesperium Gray

Grasslands.

\*Delphinium patens Benth.

Oak-woodland.

Delphinium variegatum T. & G.

Grasslands and openly wooded hillsides.

\*Ranunculus californicus Benth. var. californicus

Grasslands and openly wooded hillsides.

Ranunculus hebecarpus H. & A.

Reported from the oak-madrone forest by Cooper (1922).

Ranunculus muricatus L.

Reported by Springer (1935) from "moist shady places near the banks of San Francisco Creek".

\*Thalictrum polycarpus (Torr.) Wats.

Oak-madrone forest, occasional in the chaparral.

## 26. Berberidaceae

\*Berberis pinnata Lag.

Sandstone outcroppings on north-facing slope above San Francisquito Creek.

## 27. Lauraceae

\*Umbellularia californica (H. & A.) Nutt.

Streambanks and oak-madrone forest.

## 28. Papaveraceae

X Eschscholzia californica Cham.

Grasslands.

\*Platystemon californicus Benth.

Grasslands.

## 29. Cruciferae

Athyrsanus pusillus (Hook.) Greene

Grasslands.

Brassica campestris L.

Disturbed areas, occasionally in grasslands.

Brassica kabrer (DC.) Wheeler

Reported by Moeur (1947) from "open fields and disturbed areas."

Brassica nigra (L.) Koch

Disturbed areas.

\*Cardamine oligosperma Nutt.

Oak-woodland and moist openly wooded slopes.

Capsella bursa-pastoris (L.) Medic

Disturbed areas and grasslands.

\*Dentaria californica Nutt. var. californica

Oak-madrone forest.

X Lepidium nitidum Nutt.

Grasslands.

\*Nasturtium officinale R. Br.

Streambanks.

Raphanus sativus L.

Disturbed areas.

X Thysanocarpus curvipes Hook. var. curvipes

Openly wooded hillsides.

Thysanocarpus curvipes Hook. var. elegans (F. & M.) Robins.

Reported by Springer (1935) from "openly wooded hillside."

Tropidocarpum gracile Hook.

Reported by Springer (1935) from "open hillsides, especially near the edges of areas of chaparral."

### 30. Crassulaceae

Sedum spathulifolium Hook.

Reported by Moeur (1947) from "shaded moss-covered rocks in the heavily wooded forest."

Tillaea erecta H. & A.

Grasslands.

### 31. Saxifragaceae

Heuchera micrantha Dougl. ex Lindl.

San Francisquito Creek.

Lithophragma affinis Gray

Oak-madrone forest, oak-woodland, and openly wooded slopes.

Lithophragma heterophylla (H. & A.) T. & G.

Reported from the oak-madrone forest by Cooper (1922) (as Tellima heterophylla).

\*Saxifraga californica Greene

Oak-madrone forest, oak-woodland, and openly wooded slopes.

X Tellima grandiflora (Pursh) Dougl. ex Lindl.

Reported by Moeur (1947) from "deep shade of the redwood zone."

### 32. Hydrangeaceae

\*Whipplea modesta Torr.

San Francisquito Creek.

### 33. Grossulariaceae

\*Grossularia californica (H. & A.) Cov. & Britt.

Oak-madrone forest, oak-woodland, openly wooded hillsides, and occasionally at edges of the chaparral.

\*Grossularia divaricata (Dougl.) Cov. & Britt.

Streambanks.

\*Grossularia leptosma Cov.

Streambanks.

X Ribes glutinosum Benth.

Reported by Moeur (1947) from "thicket at the edge of the lake."

\*Ribes malvacium Smith

Chaparral.

### 34. Rosaceae

\*Adenostoma fasciculatum H. & A.

The index plant of the chaparral.

X Alchemilla occidentalis Nutt. ex T. & G.

Grasslands.

\*Cercocarpus betuloides Nutt. ex T. & G.

Chaparral.

\*Fragaria californica C. & S.

Oak-madrone forest on north-facing slope above San Francisquito Creek.

✗ Holodiscus discolor (Pursh) Maxim.

Oak-madrone forest and streambanks.

✗ Physocarpus capitatus (Pursh) Kuntze

Streambanks.

✗ Potentilla glandulosa Lindl.

Oak-woodland and openly wooded hillsides.

Rosa californica C. & S.

Oak-madrone forest.

\*Rosa gymnocarpa Nutt. ex T. & G.

Oak-madrone forest.

Rosa spithamea Wats.

Reported by Springer (1935) from "openly wooded slope at the top of the hill near the lake."

Rubus parviflorus Nutt. var. velutinus (H. & A.) Greene

Streambanks.

\*Rubus ursinus C. & S.

Oak-madrone forest, especially along streambanks.

### 35. Amygdalaceae

✗ Osmaronia cerasiformis (T. & G. ex H. & A.) Greene

Oak-madrone forest.

\*Prunus emarginata (Dougl.) Walp.

Streambanks.

\*Prunus ilicifolia (Nutt. ex H. & A.) Walp.

Chaparral.

\*Prunus subcordata Benth.

Streambanks.

### 36. Malaceae

\*Amelanchier pallida Greene

Streambanks.

\*Photinia arbutifolia (Ait.) Lindl.

Chaparral, occasionally in oak-woodland or oak-madrone forest.

### 37. Fabaceae

\*Astragalus gambelianus Sheldon

Serpentine soil in the meadow.

\*Cytisus maderensis Masf.

✗ Thomas 8594 was collected "in oak-woodland."

Glycyrrhiza lepidota Pursh var. glutinosa (Nutt.) Wats.

Reported by Springer (1935) from "field that was dry, but close to the marshy part of the lake."

Lathyrus vestitus Nutt. ex T. & G. ssp. puberulus (White ex Greene) Hitchc.

Oak-woodland.

Lupinus bicolor Lindl. var. microphyllus (Wats.) Smith

Grasslands.

Lupinus densiflorus Benth.

Grasslands.

Lupinus formosus Greene var. formosus

Reported by Moeur (1947) from "open fields."

- Lupinus nanus Dougl. ex Benth.  
Grasslands.
- Lotus humistratus Greene  
Reported by Moeur (1947) from "grassy hillsides."
- \*Lotus micranthus Benth.  
Grasslands and openly wooded slopes.
- \*Lotus purshianus (Benth.) Clem. & Clem.  
Grasslands and openly wooded slopes.
- \*Lotus scoparius (Nutt.) Ottley  
Chaparral.
- \*Lotus strigosus (Nutt.) Greene  
Collected by Davis (April 10, 1903) on "North slope, Searsville Ridge."
- \*Lotus subpinnatus Lag.  
Grasslands.
- Melilotus albus Desr. ex Lam.  
Reported by Moeur (1947) from "along creek banks."
- Melilotus indicus (L.) All.  
Disturbed areas.
- Medicago arabica (L.) Huds.  
Disturbed areas.
- ✓ Medicago polymorpha L. var. vulgaris (Benth.) Shinners f. vulgaris  
Disturbed areas and grasslands.
- Medicago sativa L.  
Roadsides and disturbed areas.
- ✗ Psoralea physodes Dougl. ex Hook.  
Oak-woodland and oak-madrone forest.
- ✗ Trifolium albopurpureum T. & G.  
Reported by Moeur (1947) from "moist, grassy fields."
- \*Trifolium barbigerum Torr.  
Grasslands and openly wooded slopes.
- \*Trifolium bifidum Gray var. decipiens Greene  
Grasslands and openly wooded slopes.
- Trifolium ciliolatum Benth.  
Grasslands.
- \*Trifolium fucatum Lindl.  
Thomas (1958, p. 460) states, "On Jasper Ridge this plant is very common and almost a weed in low moist areas, especially where cows have overgrazed and have trampled the soil during the rainy season." Grasslands.
- Trifolium gracilentum T. & G.  
Grasslands and openly wooded slopes.
- Trifolium microcephalum Pursh  
Grasslands.
- \*Trifolium tridentatum Lindl.  
Grasslands, openly wooded slopes and oak-woodland.
- \*Trifolium variegatum Nutt.  
Grasslands.
- Trifolium wormskjoldii Lehm.  
Reported by Moeur (1947) from "along stream banks."
- \*Vicia americana Muhl. ex Willd. var. minor Hook.  
Oak-woodland.
- Vicia angustifolia L.  
Reported by Moeur (1947) from "fields and along roadsides."
- Vicia exigua Nutt.  
Oak-woodland.
- Vicia sativa L.  
Disturbed areas.
- Vicia villosa Roth.  
Reported by Moeur (1947) as "mostly along roadsides."

38. Geraniaceae

~~x~~ Erodium botrys (Cav.) Bertol

Grasslands.

Erodium circutarium (L.) L'Her.

Grasslands.

Erodium moschatum (L.) L'Her. ex Ait.

Reported by Moeur (1947) from "fields and pasture lands."

\*Erodium obtusiplicatum (Maire, Weiller, & Wilczek) Howell

Grasslands.

~~x~~ Geranium dissectum L.

Grasslands.

\*Geranium molle L.

Grasslands and openly wooded slopes.

39. Oxalidaceae

\*Oxalis oregana Nutt.

Paulson (Apr. 1915) was collected at "Jasper Ridge near Searsville Lake."

40. Linaceae

\*Hesperolinon micranthum (Gray) Small

Chaparral.

41. Polygalaceae

Polygala californica Nutt.

Reported by Springer (1935) from "under the shade of some of the chaparral shrubs growing on a lightly northward slope."

42. Euphorbiaceae

\*Eremocarpus setigerus (Hook.) Benth.

Disturbed areas in grasslands.

43. Anacardiaceae

~~x~~ Rhus diversiloba T. & G.

Common.

44. Celastraceae

\*Euonymus occidentalis Nutt. ex Torr.

Streambanks.

45. Aceraceae

\*Acer macrophyllum Pursh

Streambanks.

\*Acer negundo L. var. californicum (T. & G.) Sarg.

Streambanks.

46. Hippocastanaceae

Aesculus californica (Spach) Nutt.

Oak-madrone forest, especially along streambanks.

#### 47. Rhamnaceae

- \*Ceanothus cuneatus (Hook.) Nutt. var. dubius Howell  
Chaparral.  
\*Ceanothus sorediatus H. & A.  
Chaparral, occasionally in oak-madrone forest.  
Ceanothus thrysiflorus Esch.  
Chaparral.  
Rhamnus californica Esch. ssp. californica  
Oak-woodland and oak-madrone forest.  
\*Rhamnus crocea Nutt. ssp. crocea  
Oak-madrone forest.

#### 48. Malvaceae

- X Malacothamnus arcuatus (Greene) Greene  
Chaparral.  
Malva parviflora L.  
Disturbed areas.  
Sidalcea malvaeflora (DC.) Gray ex Benth.  
Grasslands.

#### 49. Cistaceae

- \*Helianthemum scoparium Nutt. var. vulgare Jeps.  
Chaparral.

#### 50. Violaceae

- \*Viola ocellata T. & G.  
Dudley (Apr. 1, 1893) was collected from "Hill above Searsville."

#### 51. Datiscaceae

- \*Datista glomerata (Presl) Baill.  
San Francisquito Creek.

#### 52. Thymelaeaceae

- \*Dirca occidentalis Gray  
Oak-madrone forest.

#### 53. Lythraceae

- \*Lythrum hyssopifolia L.  
Searsville Lake.

#### 54. Onagraceae

- Boisduvalia densiflora (Lindl.) Wats.  
Reported by Moeur (1947) from "moist ground around the lake."  
Clarkia purpurea (Curtis) Nels. & Macbr. ssp. quadrivulnera (Dougl.) Lewis & Lewis  
Grasslands and openly wooded hillsides.  
\*Clarkia purpurea (Curtis) Nels. & Macbr. ssp. viminea (Dougl.) Lewis & Lewis  
Grasslands and openly wooded hillsides.  
Clarkia rubicunda (Lindl.) Lewis and Lewis ssp. rubicunda  
Grasslands and openly wooded hillsides. This is probably the species which Sprin  
(1935) and Moeur (1947) list as Godetia amoena (Lehm.) Lilja.

Clarkia unguiculata Lindl.

Oak-woodland.

\*Epilobium adenocaulon Hausskn. var. occidentale Trel.

Searsville Lake.

Epilobium paniculatum Nutt.

Reported by both Springer (1935) and Moeur (1947) to occur along roadsides through the chaparral.

Epilobium franciscanum Barbey

Reported by both Springer (1935) and Moeur (1947) to occur in the moist area near Searsville Lake.

\*Oenothera ovata Nutt.

Grasslands.

## 55. Umbelliferae

X Anthriscus scandicina (Weber) Mansf.

Oak-madrone forest.

X Caucalis microcarpa H. & A.

Oak-woodland.

Conium maculatum L.

Streambanks.

\*Eryngium aristulatum Jeps.

Moist grasslands.

\*Foeniculum vulgare Mill.

Disturbed areas.

X Heracleum maximum Bartr.

Streambanks.

Lomatium dasycarpum (T. & G.) C. & R.

Grasslands.

X Lomatium macrocarpum (H. & A.) C. & R.

Reported by Moeur (1947) from "open hillsides."

Lomatium utriculatum (Nutt.) C. & R.

Grasslands and openly wooded slopes.

\*Oenanthe sarmentosa Presl.

Searsville Lake.

X Osmorhiza chilensis H. & A.

Reported by Moeur (1947) from "shady woods near San Francisquito Creek."

Perideridia gairdneri (H. & A.) Mathias

Reported by Moeur (1947) from "both open and openly wooded hillsides" (as Carum gairdneri Gray).

Perideridia kelloggii (Gray) Mathias

Reported by Springer (1935) from "dry open hillsides" (as Carum kelloggii Gray).

Sanicula bipinnatifida Dougl. ex Hook.

Grasslands.

\*Sanicula crassicaulis Poepp. ex DC.

Oak-madrone forest.

Sanicula laciniata H. & A.

Reported by Springer (1935) from "edges of a road cut through the chaparral."

Tauschia kelloggii (Gray) Macbr.

Reported by Springer (1935) from "an openly wooded slope," as Velaea kelloggii (Gray) C. & R.

Torilis nodosa (L.) Gaertn.

Reported by Moeur (1947) from "openly wooded hillsides."

## 56. Cornaceae

X Cornus californica C. A. Mey

San Francisquito Creek.

Cornus glabrata Benth.  
Streambanks.

57. Garryaceae

\*Garrya elliptica Dougl.  
Chaparral.

58. Ericaceae

\*Arbutus menziesii Pursh  
Dominant with Quercus agrifolia in the oak-madrone forest.

\*Arctostaphylos canescens Eastw.  
Abrams 4990, collected on "Jasper Ridge," bears the notation, "A. canescens"  
Eastwood? Poor specimen. A. E."

\*Arctostaphylos crustacea Eastw. var. crustacea  
Chaparral.

59. Primulaceae

\*Anagallis arvensis L.  
Grasslands, oak-woodland, and disturbed areas in the chaparral.

\*Centriculus minimus L.  
Moist grasslands.

\*Dodecatheon clevelandii Greene ssp. patulum (Greene) Thompson  
Grasslands and openly wooded slopes.

\*Dodecatheon hendersonii Gray ssp. cruciatum (Greene) Thompson  
Grasslands and openly wooded slopes.

\*Trientalis latifolia Hook.  
Oak-madrone forest.

60. Gentianaceae

X Centaurium davyi (Jeps.) Abrams  
Reported by Springer (1935) from "openly wooded slopes."  
\*Microcalyx quadrangularis (Lam.) Griseb.  
Grasslands.

61. Apocynaceae

Vinca major L.  
Reported by Moeur (1947) from "bank of San Francisquito Creek."

62. Convolvulaceae

Convolvulus arvensis L.  
Disturbed areas.

Convolvulus occidentalis Gray  
Chaparral.

X Convolvulus subcaulis (H. & A.) Greene  
Reported by Moeur (1947) from "meadows and pasture lands."

63. Polemoniaceae

X Collomia heterophylla Hook.  
Reported by Moeur (1947) from "shaded areas of the wooded slopes."  
\*Eriastrum abramsii (Elmer) Mason  
Chaparral.

- \*Gilia achilleaefolia Benth.  
Grasslands, oak-woodland, and oak-madrone forest.
- \*Gilia clivorum (Jeps.) Grant  
Grasslands.
- Linanthus ambiqus (Rattan) Greene  
Reported by Moeur (1947) from "open hillsides."
- Linanthus androsaceus (Benth.) Greene  
Grasslands and openly wooded slopes.
- \*Linanthus bicolor (Nutt.) Greene  
Grasslands and openly wooded slopes.
- \*Linanthus dichotomus Benth.  
Grasslands.
- \*Linanthus liniflorus (Benth.) Greene  
Grasslands.
- \*Linanthus parviflorus (Benth.) Greene  
Grasslands and openly wooded slopes.
- \*Navarretia heterodoxa (Greene) Greene  
Chaparral.
- \*Navarretia viscidula Benth.  
Grasslands.
- ✗ Pholox gracilis (Hook.) Greene  
Grasslands and openly wooded slopes.

#### 64. Hydrophyllaceae

- \*Eriodictyon californicum (H. & A.) Torr.  
Chaparral.
- \*Nemophila heterophylla F. & M.  
Oak-madrone forest.
- \*Nemophila menziesii H. & A. var. menziesii  
Grasslands.
- Nemophila menziesii H. & A. var. atomaria (F. & M.) Chandler  
Grasslands.
- Phacelia californica Cham.  
Reported by Moeur (1947) from "rocky hillsides."
- Phacelia imbricata Greene  
Reported by Springer (1935) from "dry rocky hillsides" (as P. californica var. imbricata Jepson).
- Pholistoma auritum (Lindl.) Lilja ex Lindb.  
Oak-madrone forest.

#### 65. Boraginaceae

- Allocarya chorisiana (Cham.) Greene  
Reported by Moeur (1947) from "open fields."
- ✗ Amsinckia intermedia F. & M.  
Grasslands.
- \*Cynoglossum grande Dougl. ex Lehm.  
Oak-madrone forest.
- \*Cryptantha flaccida (Dougl.) Greene  
Serpentine soil in the meadow.
- Cryptantha leiocarpa (F. & M.) Greene  
Reported by Springer (1935) from "the more open places in the chaparral."
- \*Cryptantha micromeres (Gray) Greene  
Dry, rocky grasslands.
- Cryptantha torreyana (Gray) Greene var. pumila (Heller) Johnston  
Reported by Moeur (1947) from "dry hillside."

- ~~X~~ *Heliotropium curassavicum* L. var. *oculatum* (Heller) Johnston ex Tidestrom  
Reported by Springer (1935) from "along the side of the road very close to the  
lake."
- \**Pectocarya pusilla* (A. DC.) Gray  
"Chaparral, open woods, and on serpentine...." (Thomas, 1961, p. 290).
- Plagiobothrys nothofulvus* (Gray) Gray  
Grasslands.
- \**Plagiobothrys tenellus* (Nutt.) Gray  
Grasslands.

## 66. Verbenaceae

*Verbena lasiostachys* Link.  
Disturbed areas.

## 67. Labiatae

- \**Lepechinia calycina* (Benth.) Epling  
Chaparral.
- ~~X~~ *Melissa officinalis* L.  
Reported by Moeur (1947) from "creek banks."
- Mentha arvensis* L. var. *lanata* Piper  
Reported by Springer (1935) as "Frequent in moist places - near the overflow from  
the watering trough, and at the edge of the lake."
- \**Mentha pulegium* L.  
Searsville Lake and San Francisquito Creek.
- \**Monardella villosa* Benth. var. *villosa*  
Grasslands and openly wooded slopes.
- \**Pogogyne serpylloides* (Torr.) Gray  
Grasslands.
- Prunella vulgaris* L. ssp. *lanceolata* (Barton) Hulten  
Reported by Moeur (1947) from "banks of San Francisco Creek" (as *Brunella vulgaris* L)
- \**Salvia columbariae* Benth.  
Grasslands.
- Satureja douglasii* (Benth.) Briq.  
Oak-madrone forest.
- \**Scutellaria tuberosa* Benth.  
Chaparral.
- Stachys bullata* Benth.  
Openly wooded slopes, oak-woodland, and oak-madrone forest.
- ~~X~~ *Stachys pycnantha* Benth.  
Reported by Springer (1935) from "edge of the lake."

## 68. Solanaceae

- \**Petunia parviflora* Juss.  
Searsville Lake.
- Solanum nodiflorum* Jacq.  
Reported by Moeur (1947) from "the dry bed of San Francisquito Creek." (as *S. nigrum* L.).
- ~~X~~ *Solanum umbelliferum* Esch.  
Oak-madrone forest, less common in the chaparral.

## 69. Scrophulariaceae

- Antirrhinum vexillo-calculatum* Kell.  
Reported by Springer (1935) from "edge of the shady area at the margin of the  
lake." (as *A. vagans* Gray).
- \**Castilleja affinis* H. & A.  
Oak-woodland.

Castilleja foliolosa H. & A.

Reported by Springer (1935) from "dry hillsides" and "the edge of the chaparral."

Collinsia heterophylla Buist ex Grah.

Oak-madrone forest and oak-woodland.

Collinsia sparsiflora F. & M. var. collina (Jeps.) Newsom

Reported by Springer (1935) from "steep, moist, open hillside above San Francisco Creek" (as C. sparsiflora F. & M.)

Cordylanthus pilosus Gray

Grasslands and openly wooded slopes.

\*Diplacus aurantiacus (Curtis) Jeps.

Chaparral.

\*Linaria texana Scheele

Grasslands.

\*Mimulus douglasii (Benth.) Gray

Serpentine soil in the meadow.

\*Mimulus guttatus DC.

Streambanks.

\*Orthocarpus attenuatus Gray

Grasslands.

\*Orthocarpus densiflorus Benth.

Grasslands.

\*Orthocarpus erianthus Benth. var. erianthus

Grasslands.

Orthocarpus faucibarbatus Gray var. albidus (Keck) Howell

Reported by both Springer (1935) and Moeur (1947) from the serpentine soil of the meadow (as O. faucibarbatus Gray).

\*Orthocarpus lithospermoides Benth.

Serpentine soil of the meadow.

Orthocarpus purpurascens Benth. var. purpurascens

Grasslands.

X Orthocarpus pusillus Benth.

Openly wooded hillsides.

\*Pedicularis densiflora Benth. ex Hook.

Oak-woodland.

\*Scrophularia californica C. & S.

Oak-madrone forest, occasional in chaparral.

70. Orobanchaceae

\*Orobanche bulbosa Beck

Chaparral.

Orobanche fasciculata Nutt.

Reported by Springer (1935) from "dry open hillside."

71. Plantaginaceae

\*Plantago erecta Morris

Grasslands.

\*Plantago lanceolata L.

Disturbed areas.

\*Plantago major L.

Reported by Moeur (1947) from "near the lake,"

72. Rubiaceae

Galium aparine L.

Grasslands, oak-woodland, and oak-madrone forest.

Galium californicum H. & A.

Reported by Cooper (1922) from chaparral and oak-madrone forest.

\*Galium murale (L.) All.

Grasslands, chaparral, and oak-woodland.

X Galium nuttallii Gray

Chaparral.

Galium trifidum L. var. subbiflorum Wieg.

Reported by both Springer (1935) and Moeur (1947) from "shady woods."

Galium triflorum Michx.

Reported by Moeur (1947) from "woody thickets and openly forested slopes."

\*Sherardia arvensis L.

Thomas 4996 was collected at "Jasper Ridge. Small draw on south side of ridge."

73. Caprifoliaceae

X Lonicera hispidula Dougl. ex Lindl.

Oak-madrone forest.

Lonicera involucrata (Richards) Banks ex Spreng

Streambanks.

X Sambucus mexicana Presl ex DC.

Chaparral.

X Symporicarpos albus (L.) Blake var. laevigatus (Fern.) Blake

Chaparral, oak-woodland, and oak-madrone forest.

74. Dipsacaceae

X Dipsacus fullonum L.

Disturbed areas.

75. Valerianaceae

Plectritis ciliosa (Greene) Jeps. ssp insignis (Suksd.) Morey

Grasslands.

Plectritis macrocera T. & G.

Grasslands and openly wooded slopes.

76. Cucurbitaceae

X Marah fabaceus (Naud.) Greene

Chaparral, oak-woodland, and oak-madrone forest.

77. Campanulaceae

\*Triodanis biflora (R. & P.) Greene

Chaparral.

78. Compositae

Cichorieae

X Agoseris grandiflora (Nutt.) Greene

Grasslands and openly wooded slopes.

X Hieracium albiflorum Hook.

Oak-madrone forest.

X Hypochaeris glabra L.

Grasslands and openly wooded slopes.

\*Lactuca saligna L.

Thomas 8074 was found "Growing in serpentine rock crevice."

\*Microseris douglasii (DC.) Sch.-Bip. ssp. douglasii

Grasslands and openly wooded slopes.

Microseris heterocarpa (Nutt.) Chambers

Reported by Moeur (1947) as "in fields and on open hillsides" (as Uropappus lindleyi var. leucocarpus Jepson.)

X Picris echioides L.

Disturbed areas.

X Rafinesquia californica Nutt.

Reported by Springer (1935) from "openly wooded slopes."

Sonchus asper (L.) Hill

Disturbed areas in moist grasslands and openly wooded slopes.

X Sonchus oleraceus L.

Disturbed areas.

Stephanomeria virgata Benth.

Disturbed areas.

Taraxacum officinale Weber

Disturbed areas.

Astereae

Aster chilensis Nees

Oak-woodland and openly wooded slopes.

\*Aster radulinus Gray

Chaparral, occasionally on openly wooded slopes.

\*Baccharis douglasii DC.

Streambanks.

\*Baccharis pilularis DC. var. consanguinea (DC.) Kuntze

Chaparral and openly wooded slopes.

\*Chaetopappa alsinoides (Greene) Keck

Grasslands and openly wooded slopes.

\*Erigeron foliosus Nutt.

Grasslands.

Erigeron philadelphicus L.

Reported by Springer (1935) from "open hillside near the bank of a drying stream."

\*Grindelia camporum Greene

Grasslands.

Grindelia hirsutula H. & A.

Grasslands and openly wooded slopes.

\*Lessingia germanorum Cham. var. tenuipes Howell

Grasslands.

Lessingia hololeuca Greene var. hololeuca

Grasslands.

\*Solidago californica Nutt.

Openly wooded slopes.

X Solidago occidentalis (nutt.) T. & G.

Searsville Lake.

Inuleae

\*Adenocaulon bicolor Hook

Oak-madrone forest.

Anaphalis margaritacea (L.) Gray

Reported by both Springer (1935) and Moeur (1947) from both open and openly wooded hillsides.

- \**Evax sparsiflora* (Gray) Jeps.  
Grasslands.
- \**Gnaphalium californicum* DC.  
"Fairly common in poor soils, in chaparral, and on dry ridges...." (Thomsa, 1961,  
p. 355).
- Gnaphalium chilense* Spreng.  
Reported by Moeur (1947) from "dry, open hillside."
- ~~x~~ *Gnaphalium luteo-album* L.  
Reported by Moeur (1947) from "along the side of the road above the lake."
- \**Gnaphalium palustre* Nutt.  
Searsville Lake.
- Gnaphalium purpureum* L.  
Grasslands.
- ~~x~~ *Micropus californicus* F. & M.  
Grasslands and openly wooded slopes.
- ~~x~~ *Psilocarphus tenellus* Nutt.  
Grasslands and openly wooded slopes.

#### Heliantheae

- \**Helianthella californica* Gray  
Grasslands and openly wooded slopes.
- \**Wyethia angustifolia* (DC.) Nutt.  
Grasslands.

#### Madieae

- \**Achyranthes mollis* Schauer  
Grasslands.
- \**Calycadenia multiglandulosa* DC. ssp. *robusta* Keck  
Serpentine soil in the meadow.
- \**Hemizonia corymbosa* (DC.) T. & G.  
Grasslands.
- \**Lagophylla ramosissima* Nutt.  
Grasslands.
- \**Layia hieracioides* (DC.) H. & A.  
Chaparral.
- ~~x~~ *Layia platyglossa* (F. & M.) Gray ssp. *campestris* Keck  
Grasslands.
- \**Madia exigua* (Smith) Gray  
Oak-woodland.
- \**Madia gracilis* (Smith) Keck  
Grasslands and openly wooded slopes.
- Madia madioides* (Nutt.) Greene  
Reported by Moeur (1947) from "heavily wooded slopes."
- Madia sativa* Molina  
Disturbed areas.

#### Ambrosieae

- ~~x~~ *Xanthium strumarium* L.  
Searsville Lake.

#### Helenieae

- Baeria chrysostoma* F. & M. ssp. *gracilis* (DC.) Ferris  
Grasslands.

- X Eriophyllum confertiflorum (DC.) Gray  
Chaparral.  
\*Eriophyllum lanatum (Pursh) Forbes var. arachnoideum (Fisch. & Ave-Lall.) Jeps.  
Oak-woodland.  
X Helenium puberulum DC.  
Streambanks.

Monolopia gracilens Gray  
Reported by Springer (1935) from "near the edge of the chaparral above the lake,"  
and by Moeur (1947) from "openly wooded hill-slopes."

#### Anthemideae

Achillea millefolium L. var. californica (Pollard) Jeps.  
Oak-woodland and oak-madrone forest.

X Anthemis cotula L.  
Grasslands and disturbed areas.

\*Artemisia biennis Willd.  
Searsville Lake.

\*Artemisia californica Less.  
Chaparral, often forming thick stands in which it is the dominant shrub.

Artemisia douglasiana Bess.  
Streambanks.

Matricaria matricarioides (Less.) Porter  
Disturbed areas.

#### Senecioneae

\*Arnica discoidea Benth.  
Mason (May 18, 1921) was collected "Near redwood area, Jasper Ridge."

\*Senecio aronicoides DC.  
Chaparral and openly wooded slopes.

Senecio breweri Davy  
Reported by Moeur (1947) from "openly wooded areas."

\*Senecio mikanioides Otto  
Streambanks.

X Senecio vulgaris L.  
Disturbed areas.

#### Cynareae

\*Carduus tenuiflorus Curtis  
Disturbed areas.

Centaurea calcitrapa L.  
Disturbed areas.

X Centaurea melitensis L.  
Disturbed areas in grasslands and along the roads.

Centaurea solstitialis L.  
Disturbed areas.

Cirsium brevistylum Cronq.  
Reported by Springer from "a place kept moist by the overflow of a watering  
trough." (as C. edule Nutt.).

Cirsium occidentale (Nutt.) Jeps.  
Reported by Moeur (1947) from "dry, openly wooded slopes."

X Cirsium proteanum Howell  
Reported by Springer (1935) from "dry, more openly wooded slopes." (as C. occidentale var. venustum Jepson).

- X Cirsium vulgare (Savi) Tenore  
Disturbed areas.  
Silybum marianum (L.) Gaertn.  
Disturbed areas.
- 

As you can see, this list of the vascular plants of Jasper Ridge is not complete. Nor are there specimens in the Dudley Herbarium representing each of the taxa listed. There are many reasons for this, mainly historical.

For some years I have been slowly completing the list and getting specimens. A separate herbarium case housed the plants from Jasper Ridge. This is available for use, but only after receiving permission to do so. If you come across plants that you do not think are in the list, please communicate this to me. We can then get a good sample for a permanent herbarium specimen.

I will be glad to help with identification of specimens, but there is a limit to my time. If you want help with identification, please be sure that you have enough plant material so that it can be identified. Sterile grass blades - no thank you.

John H. Thomas  
March 26, 1971

## ADDITIONS TO THE FLORA OF JASPER RIDGE

### 2. Polypodiaceae

\*Dryopteris arguta (Kaulf.) Watt.

Among redwoods

\*Polypodium californicum Kaulf.

Rock crevices and on rocks among mosses in shade.

### 3. Potamogetonaceae

\*Potamogeton illinoensis Morong

Edge of Searsville Lake near bridge.

### 4. Alismataceae

\*Echinodorus berteroii (Spreng.) Fassett

Dry lake bed at Searsville Dam.

### 5. Gramineae

\*Festuca eastwoodae Piper

Open oak woodlands.

\*Poa howellii V. & S.

Between Searsville Dam and redwood area.

\*Scribnaria bolanderi (Thurb.) Hack.

Chaparral.

\*Calamagrostis koelerioides Vasey

Oak woodland.

\*Stipa lepida Hitchc.

Grasslands.

\*Phalaris tuberosa L. var. stenoptera (Hack.) Hitchc.

Along San Francisquito Creek below Searsville Dam.

### 7. Juncaceae

\*Juncus bufonius L.

Grassy meadows in oak woodland.

### 11. Amaryllidaceae

\*Brodiaea congesta Sm.

Oak woodland.

### 13. Orchidaceae

\*Corallorrhiza maculata Raf.

Without specific locality.

### 19. Urticaceae

\*Urtica urens L.

In shade at base of sandstone outcroppings below Searsville Dam.

22. Chenopodiaceae

\*Chenopodium ambrosioides L. var. ambrosioides  
Below Searsville Dam.

22a. Amaranthaceae

\*Amaranthus albus L.  
Dry lake bed near Searsville Dam.

24. Caryophyllaceae

\*Sagina apetala Ard. var. barbata Fenzl ex Ledeb.  
Edge of road in oak woodland.

25. Ranunculaceae

\*Ranunculus hebecarpus H. & A.  
Moist, shaded slopes near Searsville Lake.

29. Cruciferae

\*Brassica geniculata (Desf.) Ball  
Disturbed, grassy slope above Searsville Lake.

37. Fabaceae

\*Lathyrus latifolius L.  
Along San Francisquito Creek below Searsville Dam.  
\*Lupinus latifolius Agardh var. latifolius  
Oak woodlands.  
\*Trifolium amplectens T. & G.  
Open serpentine grasslands.  
\*Trifolium microdon H. & A.  
Oak woodlands.

54. Onagraceae

\*Boisduvalia stricta (Gray) Greene  
Along road in oak woodland.  
\*Epilobium minutum Lindl. ex Hook.  
Chaparral.

54a. Haloragidaceae

\*Myriophyllum brasiliense Camb.  
Mud at edge of Searsville Lake near bridge.

55. Umbelliferae

\*Scandix pecten-veneris L.  
Oak woodlands.

## 61a. Asclepiadaceae

\*Asclepias fascicularis Decne.

Edge of grassland bordering chaparral at Westridge end of Ridge.

## 64. Hydrophyllaceae

\*Phacelia rattanii Gray

Edge of chaparral.

## 65. Boraginaceae

\*Myosotis latifolia Poir.

Below Searsville Dam.

## 69. Scrophulariaceae

\*Kickxia spuria (L.) Dumort.

Along San Francisquito Creek near Searsville Dam.

\*Veronica persica Poir.

Grassy slope near Searsville Dam.

## 78. Compositae

\*Crepis vesicaria L. ssp. taraxacifolia (Thuill.) Thell.

Oak woodland.

\*Conyza canadensis (L.) Cronq.

Edge of road above Searsville Lake.

\*Gnaphalium beneolens Dav.

Edge of lake at Searsville Dam.

\*Rigiopappus leptocladus Gray

Chaparral.

\*Wyethia glabra Gray

Oak woodland.