

# An Initial Assessment of the Plants in the Jean Sweeney Open Space Preserve

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Nineteen plant species were identified in the Jean Sweeney Open Space Preserve in a brief, preliminary plant survey. This is only a small part of the total species present. A complete plant list will probably have between 60 and 80 species identified

## Native Plant Species

Of the nineteen plant species listed, four are native-to-Alameda or likely to be so.

These are:

Numerous Coyote Brush (*Baccharis pilularis* DC.) were found throughout the Preserve. It was last collected in Alameda by Willis L. Jepson in 1891.



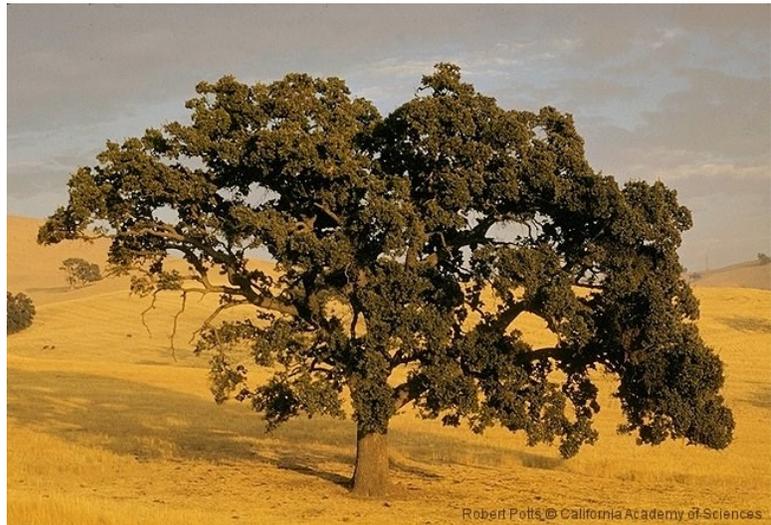
American Birds-Foot Trefoil (*Acmispon americanus* (Nutt.) Rydb. var. *americanus*) is quite common in the grassy areas. It was last collected in Alameda in 1866 by an unknown collector.



One individual of White-Whorl Lupine. (*Lupinus microcarpus* Sims var. *densiflorus* (Benth.) Jeps.) was found. A closely related variety, var. *microcarpus* was collected in Alameda by Willis L. Jepson in 1891.



Seventy Coast Live Oaks (*Quercus agrifolia* Née var. *agrifolia*) were found. While there are no historic collections of Coast Live Oak from Alameda, there is general agreement that the trees were common in Alameda, giving rise to the name of “Encinal.”



## Non-Native (Exotic) Plant Species

Fifteen species are not native to Alameda, and not native to California. Ten of the non-native species are listed as “weeds” by at least one of the various weed-listing agencies.

### Weedy Non-Native Species

The ten weedy species are:

1. Acacia (probably *Acacia melanoxylon* R. Br.)
2. Stinkwort. (*Dittrichia graveolens* (L.) Greuter)
3. French Broom (*Genista monspessulana* (L.) L. A. S. Johnson.)
4. Bird's Foot Trefoil. (*Lotus corniculatus* L.)
5. White Sweet Clover (*Melilotus albus* Medik.)
6. Himalayan Blackberry (*Rubus armeniacus* Focke.)
7. Puncture Vine (*Tribulus terrestris* L.)
8. Uruguayan Pampas Grass (*Cortaderia selloana* (Schult. & Schult. f.) Asch. & Graebn.)
9. Bermuda Grass (*Cynodon dactylon* (L.) Pers.)
10. Smilo Grass (*Stipa miliacea* (L.) Hoover var. *miliacea*)

### Acacia

The large tree-like Acacias in the Preserve are most likely the Blackwood Acacia (*Acacia melanoxylon* R. Br.). They are well-adapted to Alameda, growing quickly, and in some cases competing directly with the native Coast Live Oaks.

In the photo at right, there is an Acacia behind the pole that is competing with the Coast Live Oak in front of the pole.



## Stinkwort

Stinkwort (*Dittrichia graveolens* (L.) Greuter) is an erect, fall-flowering, aromatic annual with a distinct camphor odor that reaches approximately 1m tall, with sticky, glandular-hairy foliage.

Touching stinkwort can cause dermatitis, itchy skin, or blistering.

The most effective treatment method for stinkwort is to handpull plants prior to flowering. This method works best when small numbers of plants are present. Even when pulled, mature and flowering stinkwort plants can use remaining energy to produce seeds. For this reason, all plants in flower or seed should be bagged and disposed of in a way that will prevent seed spread.



Another method would be to use herbicides. Spraying stinkwort is probably the best option for controlling large infestations, but this can be problematic due to the oily/waxy coating on the leaves which can impede herbicide absorption into the plant.

## French Broom (*Genista monspessulana* (L.) L. A. S. Johnson.)

Lack of flowers when this plant was examined makes the identification as French Broom somewhat tentative.

Brooms were originally introduced into North America from the Mediterranean region as ornamental shrubs. Since then, the attractive landscape plants have escaped cultivation to become a destructive weed pest all along the Pacific Coast.

Brooms easily colonize open and disturbed areas, but can also invade undisturbed grassland and forest habitats. The flowers and seeds of brooms contain compounds that can be toxic to humans and cattle, and the foliage is unpalatable and avoided by livestock. In forests, these large, aggressive shrubs outcompete native plants and can form dense thickets, causing fire hazards due to heavy fuel loads.



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**Bird's Foot Trefoil. (*Lotus corniculatus* L.)**

**White Sweet Clover (*Melilotus albus* Medik.)**

These two herbaceous annuals, while generally considered weeds, do not appear to be causing a problem in the Preserve at this time.

**Blackberries**

There are two species of blackberries in the Preserve: the very common Himalayan Blackberry (*Rubus armeniacus* Focke.) and the less-common Thornless Elm-Leaved Blackberry (*Rubus ulmifolius* Schott var. *anoplothysus* Sudre)

The Himalayan blackberries are making the largest thickets, and are the primary berries being picked. They are fairly easy to recognize because of their reddish stems with large prickles (thorns).



The Thornless Elm-Leaved Blackberry are lower growing, and thorn-less with a slight reddish cast to the stems. While they seem to grow with the Himalayan blackberry, the fruit matures later, and they don't seem to be picked as much.

**Puncture Vine (*Tribulus terrestris* L.)**

Puncture Vine is a taprooted herbaceous perennial plant that can also grow as a summer annual. The prostrate stems radiate one to two meters from the center. Continuous flowering is quickly followed by a fruit that easily falls apart into four or five sharp-spined nutlets. The nutlets or "seeds" are hard and bear two to three sharp spines, 10 mm long and 4–6 mm broad point-to-point. These nutlets strikingly resemble goats' or bulls' heads; the "horns" are sharp enough to puncture bicycle tires and lawn mower tires and to cause painful injury to bare feet.



In the Preserve, Puncture Vine is confined to a small

open, gravelly area on the south side, toward the west end.

### **Uruguayan Pampas Grass (*Cortaderia selloana* (Schult. & Schult. f.) Asch. & Graebn.)**

Uruguayan Pampas Grass is a large perennial grass found throughout California. It was introduced as an ornamental plant and for erosion control. Each plume produces up to 100,000 seeds that are widely dispersed by wind and develop without fertilization. Pampas grass quickly colonizes bare ground, but establishment is generally poor where the seedlings must compete with other grasses.



### **Bermuda Grass (*Cynodon dactylon* (L.) Pers.) Smilo Grass (*Stipa miliacea* (L.) Hoover var. *miliacea*)**

These two weedy grasses do not appear to be causing a problem in the Preserve at this time.

### **Suggested Priority Tasks**

Some preliminary thoughts on priority tasks for vegetation management are:

1. Manage Pampas Grass.
  - a. Thin large concentrations.
  - b. Remove young plants.
2. Manage Stinkwort.
3. Begin to prune away the exotic species from the native Coast Live Oaks.
  - a. This task will begin to reduce the amount of French Broom.
4. Develop a plan to manage blackberries. Consider interests of the blackberry pickers, and the portion of all blackberries that are being utilized in the Preserve.

Attached is a preliminary plant list.

# Plant Check List for Jean Sweeney Open Space Preserve, Alameda County, United States.

Edited by Tom Schweich

This list is assembled from personal collections, herbarium vouchers, and published lists. In particular, much of the data is provided by the participants of the Consortium of California Herbaria (<http://ucjeps.berkeley.edu/consortium/>).

For a complete list of Locations included in this Area List, see the Locations Included section, below.

This page is highly summarized. For detail about the distribution of plants, please see: Detailed Area List for Jean Sweeney Open Space Preserve, Alameda County, United States.

## Asteraceae

- [ ] *Baccharis pilularis* DC. Coyote Brush. JS
- [ ] *Diitrichia graveolens* (L.) Greuter. Stinkwort. **WEED**, priority: Moderate. JS

## Fabaceae (Leguminosae)

- [ ] *Acacia* . JS
- [ ] *Acmispon americanus* (Nutt.) Rydb. var. *americanus*. (Syn: *Lotus purshianus* Clem. & E. G. Clem. var. *purshianus* ) American Birds-Foot Trefoil. JS
- [ ] *Genista monspessulana* (L.) L. A. S. Johnson. French Broom. JS
- [ ] *Lathyrus latifolius* L. Perennial Pea Vine. JS
- [ ] *Lotus corniculatus* L. Bird's Foot Trefoil. **WEED**, priority: Moderate. JS
- [ ] *Lupinus microcarpus* Sims var. *densiflorus* (Benth.) Jeps. White-Whorl Lupine. JS
- [ ] *Melilotus albus* Medik. **WEED**, priority: Moderate. JS
- [ ] *Vicia sativa* L. ssp. *sativa*. Spring Vetch. JS

## Fagaceae

- [ ] *Quercus agrifolia* Née var. *agrifolia*. Coast Live Oak. JS

## Plantaginaceae

- [ ] *Plantago coronopus* L. Cut-Leaf Plantain. JS

## Rosaceae

- [ ] *Rubus armeniacus* Focke. Himalayan Blackberry. JS
- [ ] *Rubus ulmifolius* Schott var. *anoplothyrus* Sudre. Thornless Elm-Leaved Blackberry. JS

## Zygophyllaceae

- [ ] *Tribulus terrestris* L. Puncture Vine. JS

## Poaceae (Gramineae)

- [ ] *Cortaderia selloana* (Schult. & Schult. f.) Asch. & Graebn. Uruguayan Pampas Grass. JS
- [ ] *Cynodon dactylon* (L.) Pers. Bermuda Grass. **WEED**. JS
- [ ] *Paspalum dilatatum* Poir. Dallis Grass. JS
- [ ] *Stipa miliacea* (L.) Hoover var. *miliacea*. (Syn: *Oryzopsis miliacea* (L.) Asch. & Schweinf. , *Piptatherum miliaceum* (L.) Coss. ) Smilo Grass. **WEED**. JS

Number of taxa: 19

# Jean Sweeney Open Space Preserve

Coast Live Oaks, 19 July 2013 (n=70)

