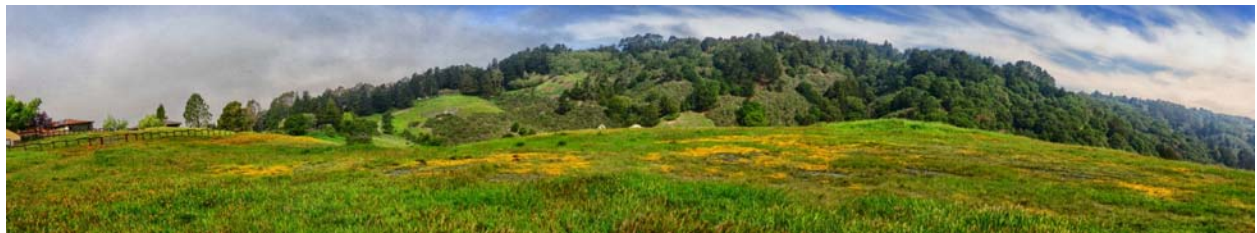


# A Flora of the Serpentine Prairie

Redwood Regional Park, East Bay, California



A Publication for the East Bay Regional Park District  
Compiled by Lech Naumovich  
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The following document represents results from formal and informal plant surveys that have taken place at the Serpentine Prairie, Redwood Regional Park. This document is an updated, annotated version of the EBRPD's 2007 Serpentine Prairie Plant List.

Redwood Regional Park's Serpentine Prairie represents one of the best examples of serpentinite outcrops in the East Bay Hills. The formal location of this site is most easily defined by the former East Bay Park District headquarters, which is now called the *Richard C. Trudeau Conference Center*. The street address for the Center is 11500 Skyline Blvd, Oakland, CA. The main Prairie (Hunt Field) is located at a UTM of 10S 572673, 4184258.



Located at the crest of the East Bay Hills at an average elevation of 1100 ft (335m). This site receives an average 24 inches of precipitation annually, mostly as rainfall. Fog drip is variable in this area, but it may be lower than average at the Prairie proper, where few mature trees remain. The study site is defined loosely by substrate.

The goal of this flora is to document all taxa associated with and growing on serpentine soils, therefore, the underlying geology is best defined as high quality serpentinite. Serpentinite is a metamorphic substrate that is inherently variable, therefore it can be difficult to reliably map this substrate.

The Serpentine Prairie has undergone a phenomenal stewardship revival starting with EBRPD and CNPS volunteer days which helped document and maintain the Prairie, starting in the 80's. The 2008 Serpentine Prairie Restoration Plan set forth a revolutionary plan to restore the Prairie back to its former glory as a grassland/prairie site with limited woody vegetation. This project has largely been a success helping restore acres of grassland from pine forest, while increasing the distribution of the federally endangered Presidio Clarkia (*Clarkia franciscana*) which was once thought to be limited to only a couple thousand individuals.

The Serpentine Prairie is one of the most dynamic landscapes in the East Bay. Precipitation, timing of rainfall, disturbance, and stewardship have fostered a unique system that can be filled with wildflowers for 6 months of the year. The other six it can be a downy sea of green, and conversely a tattered mess of tan. This dynamic nature adds to its mystique, bringing renewal every and senescence every fall. Visiting this place with a naturalist, a camera, and a guidebook can be an enriching experience.

This document utilizes the newest taxonomy available that is widely accepted for the State of California, *The Jepson eFlora, 6<sup>th</sup> Revision* (<http://ucjeps.berkeley.edu/eflora/>). Abbreviation details (Family codes, Rare plant listing status) and explanation of the text and methods may be found in Ertter and Naumovich (2013).

### **Flora Abbreviations:**

82: reported from K. Culligan's 1982 *A Flora of Redwood Regional Park*. Surveys completed 1979-1982.

90 and/or 91: Reported by CNPS in a 1990 survey or 1991 survey.

2012-2018: Reported by L. Naumovich from the years of 2012-2018.

Distribution: 5 possible distribution codes document the distribution and density of taxa listed: L= localized/rare, U = uncommon +/- 5 small ppns, C = common in small patches, present but not a dominant component D = dominant locally or generally ubiquitous, 0 - none present

Family: Three letter abbreviation following the JM2 (2<sup>nd</sup> Edition of the Jepson Manual, print edition)

Rare plant listing status follows Ertter and Naumovich 2013. FE – federally endangered, C(#)- indicates listing on the California Rare Plant Rank system (see: <https://www.wildlife.ca.gov/conservation/plants> ), letters A-C indicate local rarity listing (see: <http://ebcnps.org/native-plants/database-of-rare-unusual-and-significant-plants-of-alameda-and-contra-costa-counties/> ).

Notes are transcribed from the previous survey documents (82,90,91). Syn refers to synonyms used in most recent botanical texts (i.e. Jepson Manual, 1<sup>st</sup> edition).

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### **References**

Serpentine Prairie Restoration Project Information Page: EBRPD

<https://www.ebparks.org/about/stewardship/plants/serpentineprairie.htm>

Skyline Serpentine Prairie – its value, By Steve Edwards, retired Director Regional Parks Botanic Garden

[http://www.ebparks.org/Assets/files/message\\_from\\_steve\\_edwards.pdf](http://www.ebparks.org/Assets/files/message_from_steve_edwards.pdf)

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Skyline Serpentine Prairie at Redwood Regional Park

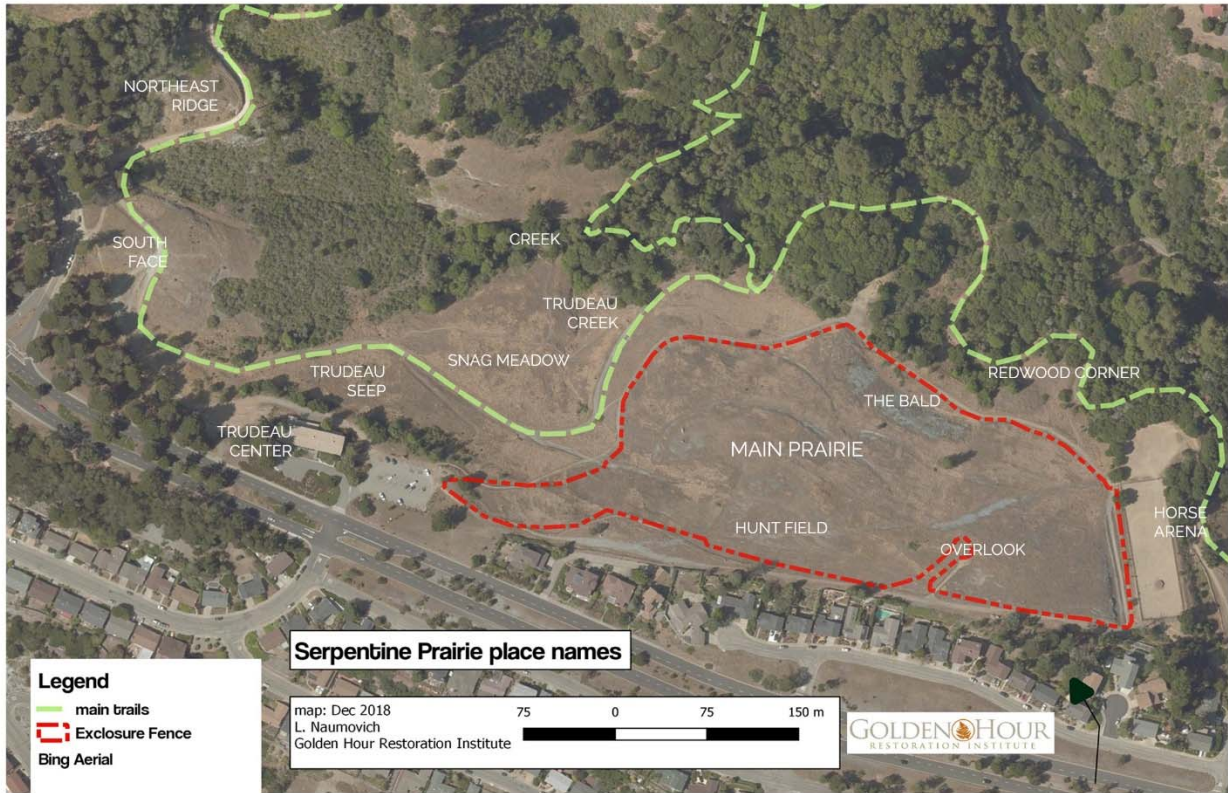
<http://naturalhistorywanderings.com/2010/04/20/skyline-serpentine-prairie-at-redwood-regional-park/>

Redwood Regional Park trail map

[http://www.ebparks.org/Assets/Nav\\_Categories/Parks/Maps/Redwood+map.pdf](http://www.ebparks.org/Assets/Nav_Categories/Parks/Maps/Redwood+map.pdf)

Ertter and Naumovich. 2013. Annotated Checklist of the East Bay Flora. Second Edition. CNPS-East Bay Chapter, Berkeley, CA.





Red triangle indicates the Horse Arena. Photo circa 1946.

Presence/Absence survey: X = present, ? = unknown/uncertain, R = Rejected/not present (entire entry is strikethru)				L = localized/rare, U = uncommon +/- 5 small ppns, C = common in small patches, present but not a dominant component D = dominant locally or generally ubiquitous, 0 = none present	Scientific name (Jepson eFlora 6th Revision) bold name = native	Common names are not standardized for plants.	3 letter family code	Rare plant listing status	Notes: Abundance, location, and collection date notes from the 1979-82 (K. Culligan), 1990 & 1991 (CNPS) surveys, and 2012-2018 surveys by Lech Naumovich and associated biologists.	Additional information	
1982	1990	1991	2012-18	Distribution (2012-2018)	* Taxon	Common name	Family	List	Notes (previous versions of doc)	Notes (current)	Interpretive and stewardship info
	X		X	C	<i>Acacia baileyana</i>	Cootamundra wattle	FAB		5/19/90: Prairie.	localized to walkway down from parking lot, found on the NW ridge	Park stewardship efforts have tried to control this plant, but it continues to resprout after treatment. This plant is capable of converting serpentine grasslands and is considered highly invasive. Forms monocultures in serpentine.
		?	R	0	<del><i>Acacia dealbata</i></del>	<del>Cootamundra wattle</del>	<del>FAB</del>				It is believed, but not confirmed that all the Acacia in the Prairie grasslands is <i>baileyana</i> .
	X		?	0	<i>Acacia melanoxylon</i>	Blackwood acacia	FAB			not observed during the study. Species may not be present	
	X		?	0	<i>Acaena pinnatifida</i> var. <i>californica</i>	California acaena	ROS	C			Once this taxon was divided into numerous taxa geographically, now it has been lumped into one. Serpentine races may be unique. Common in mowed and managed areas.
X	X	X	X	C	<i>Achillea millefolium</i>	Yarrow	AST		5/19/90: Prairie. 4/81: Very common in grasslands throughout the park. Serpentine grassland.	widespread	
	X	X	X	U	<i>Achyraea mollis</i>	Blow wifes	AST			uncommon in serpentine	
		X	X	U	<i>Acmispon brachycarpus</i>	Colchita	FAB			Uncommon compared with <i>A. wrangelianus</i> .	Syn: <i>Lotus humistratus</i>
	X		R	0	<del><i>Acmispon glaber</i> var. <i>glaber</i></del>	<del>Deerweed</del>	<del>FAB</del>		5/19/90: Sandstone	Not typical of serpentine here. occasional in scrub.	Syn: <i>Lotus scoparius</i> var. <i>scoparius</i>
	X	X	X	C	<i>Acmispon wrangelianus</i>	California Lotus	FAB			Common in grasslands.	Syn: <i>Lotus wrangelianus</i>
X	X		X	U	<i>Agoseris apargiodes</i> var. <i>apargiodes</i>	Seaside dandelion	AST	A1	5/81: Common, serpentine grassland	5/19/90: Prairie. 5/81: Common. Grassy, open slopes. Above Golden Spike Trail just south of Piedmont Stables.	may have been a misdetermination for <i>A. retrorsa</i> ?
	X		X	U	<i>Agoseris grandiflora</i>	Large-flowered dandelion	AST			very visible in good years	Agoseris is a great restoration plant that can spread on its own, but seeds are simple to collect and can be added to any prairie seed mix.
X			X	C	<i>Agoseris heterophylla</i>	Annual Native Dandelion	AST	C	na 4/81: Occasional. Dry, rocky serpentine outcrops.	Co-occurs w/ <i>A. grandiflora</i> commonly.	
			X	R	<i>Agoseris retrorsa</i>	Spearleaf Native Dandelion	AST		6/2/91: Vouchered.	Limited to serpentine/chert melange outcrop near the Trudeau Center.	Notably difficult to determine to species, bent grass species form dense verdant colonies.
			X	I	<i>Agrostis hallii</i>	Hall's Bent Grass	POA			Under oak tree near below the Trudeau Center.	Forms dense stands and can be great for transplanting as means of colonizing new areas.
		X	X	C	<i>Agrostis pallens</i>	Dune Bent Grass	POA			Found in a few notable 100 ft2 patches in just east of Hunt Field	Few plants near serpentine contact zone.
X	X	X	X	L	<i>Aira carophylla</i>	Silver European Hair Grass	POA		5/19/90: Sandstone.	Redwood Corner, few plants.	
									5/19/90: Prairie. 6/2/91: approx. 20 plants flowering. Trail on ridge S. of headquarters, about 3/4 way to corrals. E. facing slope on E. side of trail, about 20 ft. down from trail. About 30-50 ft. SW (uphill + towards corral) from 2 cypresses and a redwood. In grassland - slightly barren area.	2018 Survey located only 5 plants. This population is steadily and regularly declining. Localized to unweathered serpentine lens.	This bulb grows in one known location on poorly weathered serpentine. Since it has been monitored, this population has declined.
	X	X	X	R	<i>Allium falcifolium</i>	Sickle-leaf Onion	ALL	A2			Limited to the Berkeley Hills, unscented herb.
	X		X	L	<i>Anaphalis margaritacea</i>	Pearly Everlasting	AST		5/19/90: Sandstone.		
X			X	C	<i>Aphanes occidentalis</i>	Lady's Mantle	ROS		4/81: Common on openings in grasslands throughout the park. Serpentine grassland.		
									5/19/90: Sandstone. 8/90: Common on dry, usually south or west facing brushy slopes. Brushy slope below Dunn Trail 1/3 mile north of park headquarters.		Officially this only occurs on serpentine along the contact zone. Found in the South Face.
	X		X	L	<i>Artemisia californica</i>	California Sagebrush	AST		5/19/90: Prairie.	Mainly in NE Ridge area.	
	X		X	L	<i>Artemisia douglasiana</i>	California mugwort	AST				
X			X	C	<i>Astragalus gambelianus</i>	Gambel's/Little Bill Milkvetch	FAB		4/82: Common but apparently only on serpentine. Dry rocky serpentine outcrop near park headquarters.	Common throughout entire site.	
	X	X	X	D	<i>Avena barbata</i>	Slender Wild Oat	POA		5/19/92: Creek.		Typically found in deeper, loamier soils. Dense stands form in areas where soils have been disturbed or fill is present.
			X	L	<i>Avena fatua</i>	Wild Oat	POA			Few plants found when <i>Avena</i> stands are closely surveyed.	
	X	X	X	C	<i>Baccharis pilularis</i>	Coyote Bush	AST		5/19/92: Prairie.		Does not thrive in serpentine and is slow to expand. Should be monitored to ensure it does not form dense stands in the Prairie.
									Limited to only a few plants near the northern end of the Prairie, very close to the trail. Possibly transported by animals from another park?	This plant deserves quick and vigorous removal. It has been shown to quickly colonize grasslands in the East Bay and on the Peninsula and greatly reduce diversity.	
X	X	X	X	C	<i>Brodiaea elegans</i> ssp. <i>elegans</i>	Harvest / Elegant Brodiaea	THE		5/81: Fairly common on grassy slopes and ridge tops. Serpentine grassland.	Found well distributed on drier years.	Tends to be showy on a dry year following a wet year.
X	X	X	X	D	<i>Bromus carinatus</i> var. <i>carinatus</i>	California Brome	POA		4/81: Common on dry, open sites. Serpentine grassland.	forms large stands of > 20% cover in near the Trudeau Center	Has expanded in range and density following mowing/grazing in two successive years. Then can decline more quickly than expected.
	X	X	X	C	<i>Bromus diandrus</i>	Ripgut Brome	POA		5/19/91: Sandstone.		Limited distribution, often denotes where a tree once existed and soils have higher organic content.
	X		X	D	<i>Bromus hordeaceus</i>	Soft Brome	POA		5/19/91: Creek.		Well distributed and very competitive in dry years. Very difficult to treat with mowing due to its diminutive size.
X	X		R	0	<del><i>Bromus japonicus</i></del>	<del>Japanese Brome</del>	<del>POA</del>		5/19/90: Prairie. 4/81: Common. Knoll below Cream Cup Corners, serpentine grassland.	not observed in 2013-8	
		X	X	L	<i>Bromus madritensis</i> ssp. <i>madritensis</i>	Spanish Brome	POA			uncommon in serpentine	



Presence/Absence survey: X = present, ? = unknown/uncertain, R = Rejected/not present (entire entry is strikethru)				L = localized/rare, U = uncommon +/- 5 small ppns, C = common in small patches, present but not a dominant component D = dominant locally or generally ubiquitous, 0 = none present	Scientific name (Jepson eFlora 6th Revision) bold name = native	Common names are not standardized for plants.	3 letter family code	Rare plant listing status	Notes: Abundance, location, and collection date notes from the 1979-82 (K. Culligan), 1990 & 1991 (CNPS) surveys, and 2012-2018 surveys by Lech Naumovich and associated biologists.	Additional information	
1982	1990	1991	2012-18	Distribution (2012-2018)	* Taxon	Common name	Family	List	Notes (previous versions of doc)	Notes (current)	Interpretive and stewardship info
	X		X	L	<i>Bromus madritensis</i> ssp. <i>rubens</i>	Red Foxtail Brome	POA		5/19/90: Prairie + Sandstone.	uncommon in serpentinite	
X	X	X	X	C	<i>Calandrinia menziesii</i>	Magenta Red Maids	MON		5/19/90: Prairie. 3/81: Common on dry benches and outcrops of the serpentine grassland. Near Park HQ.		syn: C. ciliata is misapplied. An important food source for native Californians with dense protein content.
X	X	X	X	C	<i>Calochortus luteus</i>	Yellow Mariposa Lily	LIL	C	5/19/90: Prairie. 5/81: Common, serpentine grassland. Occasional on open, grassy sites along the ridges. Serpentine grassland below Hunt Field.		Highly variable show from year to year. Some years this plant is abundant and other years it's density will be a fraction of the previous year. Incredibly important for insects.
X	X	X	X	C	<i>Calycadenia multiglandulosa</i>	Sticky Rosinweed	AST	A1	8/80: Rare. Serpentine talus behind park headquarters. 7/81: Rare. Dry serpentine outcrop near Hunt Ring. 6/2/91: 2 populations. (1) 800 vegetative plants, above west end of corrals, along road. (2) 83 vegetative plants on serpentine barren near seep on trail going NW from corrals along E. slope.	Abundant on warmer slopes and in flats near the contact zone in southern zone of prairie.	This greater serpentine block may be the only location of this plant in the East Bay Hills. Maybe a unique subspecies of the parent taxon.
X	X	X	X	C	<i>Calystegia subacaulis</i> ssp. <i>subacaulis</i>	Shortstem Morning Glory	CNV		5/19/91: Creek. 5/81: Common, serpentine grassland.		
			X	C	<i>Carduus pycnocephalus</i>	Italian Thistle	AST			Commonly present on "scrape piles" on Hunt Field.	These piles harbor scraped and likely fill soils that often contain a flora of invasives not seen elsewhere on the Prairie. Removal of these piles would reduce non-native weed diversity and dispersal at the Prairie.
	?		R	0	<i>Carex barbae</i>	Santa Barbara Sedge	CYP	B	5/19/90: Creek.	Not present on serpentinite, but in creek just East of the Prairie. Localized in one 100 ft2 patch near the horse arena, ID needs verification.	
			X	D	<i>Carex praegracilis</i>	Deer-bed sedge	CYP				
X			R	0	<i>Carex serratodens</i>	Bifid Sedge	CYP	B			This edaphic sedge is unique, but has not been noted in recent years.
X			X	C	<i>Castilleja densiflora</i> ssp. <i>densiflora</i>	Common Owl's Clover	ORO				This plant is most abundant and showy in the bare, compacted soils of Hunt Field. It occurs in small clonal colonies.
X		X	X	L	<i>Caulanthus lasiophyllus</i>	California Mustard	BRA		4/81: Common. Serpentine grassland.	Rarely found in grassland. Notable popn on Joaquin Miller serpentine.	Syn: <i>Guillenia lasiophylla</i> Ideal management target, plant is very localized on warmer slopes. Not commonly observed.
X	X		X	U	<i>Centaurea melitensis</i>	Tocalote	AST		5/19/90: Sandstone. 5/81: Common. Grasslands and disturbed sites. Serpentine grassland.		A few notable patches persist despite CNPS volunteer management for over 20 years. YST colonies can become serpentine adapted.
X	X	X	X	U	<i>Centaurea solstitialis</i>	Yellow Star Thistle	AST		5/19/90: Creek + Prairie. 8/80: Very common on disturbed sites, trailsides etc. Horse trail through serpentine grassland.		
X	X	X	X	C	<i>Chlorogalum pomeridianum</i> var. <i>pomeridianum</i>	soap plant	AGA		5/19/90: Prairie. 5/81: Common throughout the park on dry open hills and openings in brush and woods. Serpentine grassland.		Common interspersed with <i>Stipa</i> .
			R	0	<i>Cirsium quercetorum</i>	Brownie Thistle	AST		1991: reported by Jeff Greenhouse	Greenhouse is extremely reliable, but this observation is suspect. Not on the Prairie proper.	
	X		R	0	<i>Cirsium</i> sp.	Thistle	AST		5/19/90: Creek.	Likely C. vulgare, no indication this is a rare or unusual <i>Cirsium</i> .	
		X	X	L	<i>Cirsium vulgare</i>	Bull Thistle	AST			Occasional plants in wetter areas.	
X	X		X	D	<i>Clarkia franciscana</i>	Presidio Clarkia	ONA	FE	5/19/90: Prairie. 5/81: Extremely common throughout the serpentine grassland especially on northeast facing slopes. Particularly abundant on and about gravelly outcrops. Previously known only from the Presidio of San Francisco and first discovered in 1979, this plant probably does not occur naturally here. The population appears to be quite stable at this location and at this time is considerably larger than the Presidio populations. Serpentine outcrops behind park headquarters. 6/2/91: 4,800 plants, many locations.	This deserves a treatise and not a simple note. We believe previous population estimates are unreliable. Many plants observed at SP are inconspicuous and difficult to survey. We feel confident our survey methods present a more accurate representation of the population.	This federally endangered annual forb was once distributed to likely 10 times the acreage that it occurs on now. This plant is a poster-child for habitat loss due to development. Habitat stewardship can greatly increase local populations of this plant.
	X		X	L	<i>Clarkia rubicunda</i>	Ruby Chalice Clarkia	ONA			Found both near the creek and just off serpentinite near the contact zone. This plant is highly limited at SP.	Currently this plant is thought to be the evolutionary parent of Presidio Clarkia. The locale is one of the northernmost ppns of this taxon.
X		X	X	U	<i>Claytonia exigua</i> ssp. <i>exigua</i>	Common Pale Claytonia	MON		3/81: Common. Moist serpentine outcrops and banks. Occasional in the serpentine grassland. Serpentine talus about a small spring. 3/82: Steep mossy trail cut, Dunn Trail	Common on cooler slopes.	
X	X	X	X	U	<i>Claytonia perfoliata</i> ssp. <i>perfoliata</i>	Miner's Lettuce	MON		5/19/90: Creek. 3/81: Around a spring in the serpentine grassland.		Possibly other ssp. occur here. Syn: <i>Satureja douglasii</i> . A typically coastal plant found near its inland range limit. The fragrance is incredible.
	X		R	0	<i>Clinopodium douglasii</i>	Yerba Buena	LAM		5/19/90: Creek.		One location in the Trudeau seep, but is not spreading beyond this location.
	X		X	U	<i>Conium maculatum</i>	Poison Hemlock	API		5/19/90: Creek.		
	X		0	0	<i>Corallorhiza maculata</i> var. <i>maculata</i>	Spotted Coralroot	ORC	B	5/19/90: Redwood.	Unlikely for serpentine grasslands.	
X	X	X	X	L	<i>Cortaderia selloana</i>	Smooth Pampas Grass	POA		5/19/90: Creek. 8/82: Common. Escape from cultivation and becoming widely established within the park. Serpentine talus slope near Hunt Field.	Limited to serpentine/chert melange outcrop near the Trudeau Center.	Interestingly, 1-4 plants have been removed every year from the Bald area, and new seedlings appear here regularly.
X		X	X	C	<i>Crassula connata</i>	Sand Pygmy Weed	CRS		3/81: Common on open, dry, often rocky sites, especially within serpentine grassland. Slope above Hunt Field.	Very common in early spring.	
		X	X	L	<i>Cynodon dactylon</i>	Bermuda Grass	POA			Unusual on serpentine.	

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	X		X	U	<i>Cynosurus echinatus</i>	Hedgehog Dogtail Grass	POA		5/19/90: Sandstone.	Unusual on serpentine.	
	X	X	X	U	<b><i>Danthonia californica</i> var. <i>californica</i></b>	California Oat Grass	POA		5/19/90: Creek.		Forms colonies on cooler slopes.
		X	X	C	<i>Daucus pusillus</i>	Rattlesnake Weed	API				
X	X	X	X	C	<b><i>Dichelostemma capitatum</i> ssp. <i>capitatum</i></b>	Blue Dicks	THE		5/19/90: Prairie. 4/81: Common. Serpentine grassland and grassy openings along the ridges. Serpentine grassland.		Six stamens.
	X		X	C	<b><i>Dichelostemma congestum</i></b>	Ookow	THE		5/19/90: Prairie.		Three stamens.
	X			0	<i>Dryopteris arguta</i>	Coastal Wood Fern	DRY		5/19/90: Creek.		
	X	X	X	D	<b><i>Elymus glaucus</i> ssp. <i>glaucus</i></b>	Blue Wild Rye	POA		5/19/90: Prairie.		
X	X	X	X	C	<b><i>Elymus multisetus</i></b>	Big Squirreltail	POA		5/19/90: Prairie. 5/81: Common. Dry rocky slopes and disturbed sites. Serpentine outcrop.	Well distributed in the Prairie and showy in late spring.	
	X	X	X	U	<b><i>Elymus trachycaulus</i> ssp. <i>trachycaulus</i></b>	Slender Wheatgrass	POA	B	5/19/90: Prairie.		One spikelet per node.
			X	U	<b><i>Elymus triticoides</i></b>	Wet-meadow Wild Rye	POA			Found in a few wetter depressions, typically in marginal serpentine areas.	Syn: <i>Leymus triticoides</i> . This plant rarely has fertile seeds and often reproduces vegetatively.
			X	U	<b><i>Epilobium brachycarpum</i></b>		ONA			Occasional on the site can be mixed with <i>Clarkia</i> and other <i>Epilobium</i> .	
	X	X	R	C	<b><i>Epilobium minutum</i></b>	Chaparral Willowherb	ONA		5/19/90: Creek.	In woodland.	Easily confused with <i>Clarkia</i> . Seeds with pappus are easy to distinguish once mature. Large ppn on the Bald.
	X			0	<b><i>Equisetum arvense</i></b>	Common Horsetail	EQU				
X	X		X	D	<b><i>Eriogonum luteolum</i> var. <i>caninum</i></b>	Tiburon Buckwheat	PLG	C1B	5/19/90: Prairie. 8/80: Common but entirely restricted to serpentine outcrops and immediately surrounding grasslands. This is the only known East Bay location for this rather rare and very restricted serpentine endemic. Bare serpentine outcrop, north slope.		Large dense stands of this plant turn the hillside pinkish-purple in the late summer. This plant can be prolific in some years.
	X		?	L	<b><i>Eriogonum nudum</i> var. ?</b>	Naked-stem Buckwheat	PLG		5/19/90: Sandstone.	Unsure of this location/what this refers to. Needs further review.	
X		X	X	C	<b><i>Eriogonum nudum</i> var. <i>auriculatum</i></b>	Curl-leaf Eared Buckwheat	PLG	A1	8/80: Common on dry, rocky slopes and banks. Rocky, serpentine cliff above Dunn trail. Aug 1980.		Few plants found in the prairie. They are typically small in stature.
	X	X	X	U	<b><i>Eriophyllum confertiflorum</i> var. <i>confertiflorum</i></b>	Golden Yarrow	AST		5/19/90: Creek.		
	X		X	C	<i>Erodium botrys</i>	Long-beaked Filaree	GER		5/19/90: Sandstone.		
		X	X	U	<i>Erodium cicutarium</i>	Red-stem Filaree	GER				
X	X	X	X	D	<b><i>Eschscholzia californica</i></b>	California Poppy	PAP		5/19/90: Prairie. 3/81: Extremely common on grassy, open sites throughout the park. Serpentine grassland.		This plant can respond favorably to an early season mow. In some years, poppies were extremely showy about 3-5 weeks after a management mow. This plant can live for 2+ years.
	X		X	U	<i>Eucalyptus globulus</i>	Blue Gum	MYR		5/19/90: Prairie.		This plant has been successfully eradicated from the Prairie. Invasive euphorbia taxa are known to ebb and flow with wet and dry years, sometimes disappearing almost completely in dry years.
X			X	L	<i>Euphorbia peplus</i>	Petty Spurge	EUP		3/81: Common on moist disturbed sites. Serpentine grassland near creek.	Very limited distribution on serpentine.	
			X	C	<b><i>Euphorbia spathulata</i></b>	Spatulate Spurge	EUP			In and around main prairie. Near contact zone, low quality serpentine soils.	
	?		X	L	<b><i>Eurybia radulina</i></b>	Broadleaf Aster	AST		5/19/90: Creek.		Syn: <i>Aster radulinus</i> A worthwhile eradication target since this species is highly localized and known to be extremely invasive.
	X		X	L	<i>Festuca arundinacea</i>	Tall Fescue	POA		5/19/90: Creek.	Few plants near overlook area.	
X			X	C	<i>Festuca bromoides</i>	Six-weeks Fescue	POA		4/82: Common. Open slopes throughout the park. Serpentine grassland, Hill 2.		Alt: Genus <i>Vulpia</i> . May be the more common of the two native perennial <i>Festucas</i> . These taxa seem to intergrade in the Berkeley Hills area. Both are long lived caespitose co-dominants in the Prairie.
	X	X	X	C	<b><i>Festuca idahoensis</i></b>	Idaho Fescue	POA		5/19/90: Prairie.		
X	X	X	X	C	<b><i>Festuca microstachys</i></b>	Annual Fescue	POA		5/19/90: Prairie. 5/81: Common but restricted to dry sterile sites, mainly on serpentine. Serpentine outcrop.	Common on Prairie. Notable and dense stands of this plant exist in numerous areas.	Alt: Genus <i>Vulpia</i> . Includes all subspecies from 1993 Jepson. (var. <i>ciliata</i> & <i>pauciflora</i> ) Alt: Genus <i>Vulpia</i> . Includes all subspecies from 1993 Jepson. (var. <i>hirsuta</i> & <i>myuros</i> )
	?	X	X	C	<i>Festuca myuros</i>	Rattail Fescue	POA		5/19/90: Sandstone.		Syn: <i>Lolium multiflorum</i> and <i>L. perenne</i> . Now combined taxonomically with the former <i>Lolium perenne</i> . This plant is likely singlehandedly responsible for the reduction of native wildflower diversity and distribution. This vigorous competitor germinates early and quickly overtops smaller annuals competing for light and resources.
X	X	X	X	D	<i>Festuca perennis</i>	Italian Rye Grass	POA		5/19/90: Prairie. 4/81: Extremely common throughout the park. Open slope, disturbed sites, trailsites, etc. Especially common on southeast slopes of the serpentine grasslands.	Common	
		X	X	C	<b><i>Festuca rubra</i></b>	Red Fescue	POA		4/82: Occasional. Moist, usually north facing hillsides. Serpentine grassland.	Mostly on cooler slopes downhill from Trudeau Center.	See note for <i>F. idahoensis</i> .
			X	U	<i>Foeniculum vulgare</i>	Fennel	API			Couple dozen plants persisting near the Overlook.	
	X		R	0	<b><i>Fragaria vesca</i></b>	Woodland Strawberry	ROS		5/19/90: Creek.	Not on serpentine.	
	X	X	X	U	<b><i>Frangula californica</i></b>	California Coffeeberry	RHM		5/19/90: Creek.	Few plants.	Syn: <i>Rhamnus californica</i> ssp. <i>californica</i> .
	?		R	0	<b><i>Galium andrewsii</i> ssp. <i>gatense</i></b>	Serpentine Bedstraw	RUB	C4	5/19/90: Almost certainly a bad ID.	Agreed with previous comment.	
		X	X	U	<i>Galium aparine</i>	Goosegrass Bedstraw	RUB				Native/introduced status not well understood. Currently considered non-native.



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1982	1990	1991	2012-18	Distribution (2012-2018)	* Taxon	Common name	Family	List	Notes (previous versions of doc)	Notes (current)	Interpretive and stewardship info
	X		X	L	<b>Galium porrigens var. porrigens</b>	Climbing Bedstraw	RUB		5/19/90: Creek.	NE Ridge area.	
	X	X	X	0	<i>Genista monspessulana</i>	French Broom	FAB		5/19/90: Creek.	Not found in 2018.	Few plants removed near the Overlook area.
	X		X	U	<i>Geranium dissectum</i>	Purpletop Cut-leaf Geranium	GER		5/19/90: Sandstone.	Rarely found.	
X			X	U	<b>Gilia achilleifolia ssp. achilleifolia</b>	California Blue Gilia	PLM	B	3/81 + 4/81: Rare. A single population, serpentine grassland above Cream Cup Corners.	Located on old cut on South Face and in the main Prairie area. Uncommon, but not rare.	
X			X	C	<b>Grindelia camporum var. camporum</b>	Great Valley Gumplant	AST		5/81: Occasional, serpentine grasslands. Hill 2.	Showy stands near the overlook area in very poorly developed soils.	
	X		R	0	<b>Grindelia hirsutula var. hirsutula</b>	Hairy Gumplant	AST		5/19/90: Creek.—	This plant is not on serpentine.	
X	X	X	X	R	<b>Gutierrezia californica</b>	California matchstick	AST		5/19/90: Creek. 8/80: Common on south slopes of serpentine grassland and occasional on sandstone outcrops. Previously thought to be a narrow serpentine endemic, it has recently been found growing in abundance on non-serpentine substrates. Serpentine hillside above creek (Hill 2).	Rare. Limited to sparse rocky areas.	This plant has almost disappeared from the Prairie. Reasons are unknown.
X	X	X	X	D	<b>Hemizonia congesta ssp. luzulaefolia</b>	Hayfield Tarweed	AST		5/19/90: Prairie. 5/81: Common. North slopes of serpentine grassland.	The most common summer annual forb on the Prairie.	Responds well to mowing and produces dense stands in May-Aug.
	X		R	0	<b>Heracleum lanatum</b>	Cow Parsnip	API		5/19/90: Creek.	Not on Serpentine.	
X		X	X	C	<b>Hesperovax sparsiflora var. sparsiflora</b>	Erect Hesperovax	AST		4/82: Common. Dry, barren serpentine outcrops and surrounding grassland.	Forms dense stands in early spring in Hunt Field.	
X	X	X	X	D	<i>Hesperocyparis macrocarpa</i>	Monterey Cypress	CUP		5/19/90: Prairie. 8/82: Intersection of Skyline Blvd. and Joaquin Miller Rd.	Limited mature individuals in the Prairie.	Syn: Cupressus m. Not native to this area, therefore considered invasive for this site, similar to Monterey Pine. This plant is found regularly in the adjacent woodlands and scrub habitat.
	X	X	X	L	<b>Heteromeles arbutifolia</b>	Toyon	ROS		5/19/90: Sandstone.	Limited distribution.	
	X		X	U	<i>Hirschfeldia incana</i>	Shortpod Mustard	BRA		5/19/90: Sandstone.	Limited distribution.	
X	X	X	X	C	<b>Hordeum brachyantherum ssp. brachyantherum</b>	Meadow Barley	POA		5/19/90: Prairie. 4/82: Occasional. Dry flats and trails. Along Dunn Trail behind park headquarters.	Present along trails and where water may pool for short periods. Ceasipitose growth form here.	
			X	U	<b>Hordeum brachyantherum ssp. californicum</b>	California Barley	POA	B	1991: reported by Jeff Greenhouse.	Present and can co-occur with ssp. brachyantherum.	
		X	R	0	<b>Hordeum jubatum</b>	Foxtail Barley	POA			Likely a misdetermination of <i>Elymus multisetus</i> .	
X			X	D	<i>Hordeum marinum ssp. gussoneanum</i>	Mediterranean Barley	POA		5/81: Common in waste places. Horse trail through serpentine grassland.	Common in depression in serpentine, especially in Hunt Field.	
	X	X	X	C	<i>Hordeum murinum ssp. leporinum</i>	Hare Barley	POA		5/19/90: Prairie.	Common around fire roads and trails.	This plant is rarely observed in the interior of established grasslands. May benefit from dog urine and disturbance along the trail. Some plants almost seem perennial.
	X		X	C	<i>Hypochaeris glabra</i>	Smooth Cat's-ear	AST		5/19/90: Sandstone.		
	X		X	C	<i>Hypochaeris radicata</i>	Rough Cat's-ear	AST		5/19/90: Sandstone.		
X		X	X	C	<b>Juncus bufonius var. bufonius</b>	Toad Rush	JUN		5/81: A common and cosmopolitan species. Moist places and dried flats throughout the park. Moist ditch and drying horse trail through serpentine grassland below park headquarters.		This plant is a 1980's addition to the California flora, and may need taxonomic study. May be dispersed by domestic animals. Often found in similar habitat as the native var. <i>bufonius</i> . Often found in drier upland sites. Unique for a taxon in <i>Juncus</i> .
			X	U	<i>Juncus bufonius var. congestus</i>	Clustered toad rush	JUN			Present in small patches often with the native variety.	
	X		X	U	<b>Juncus effusus var. pacificus</b>	Pacific Bog Rush	JUN		5/19/90: Creek.	Occasional near the contact zone. Along we have not noted this taxon, we haven't included wet areas outside of the serpentine proper. Present in the local area.	
X			?	L	<b>Juncus xiphioides</b>	Iris-leaf Rush	JUN		7/81: Occasional. Moist places, springs, and ditches. Serpentine grassland. Drainage ditch along horse trail.		
X	X	X	X	C	<b>Koeleria macrantha</b>	June Grass	POA		5/19/90: Prairie. 5/81: Common especially in the serpentine grassland and along the ridges. Serpentine outcrop.	Well distributed in the Prairie.	
X		X	X	C	<i>Lactuca saligna</i>	Lettuce Willow	AST		8/80: Common throughout the serpentine grassland.	Common in the grassland but rarely becoming well established.	
			X	L	<i>Lamium purpureum</i>	Henbit	LAM			Found near the boundary trail by the homes. Few plants, likely garden escapees.	
X	X	X	X	C	<b>Lasthenia californica</b>	Goldfields	AST		3/81: Common on northeast slopes of serpentine grassland especially in rocky and otherwise rather bare areas. Near Hunt Ring.	Common on Hunt Field. Very showy in wet years.	Historic photos show an even greater distribution of this plant. Recent stewardship has help return large showy displays of this plant.
			X	C	<b>Lasthenia gracilis</b>	Goldfields	AST			Notably difficult to discern from <i>L. californica</i> . Pappus is required.	Now considered the more cosmopolitan of the <i>Lasthenia</i> taxa.
	X	X	X	C	<b>Lepidium nitidum var. nitidum</b>	Threadleaf Peppergrass	BRA		5/19/90: Prairie. 2/81: Common. Moist sites, serpentine grassland.	Occurs irregularly, may be declining.	
									5/19/90: Creek. 3/81: Common but found only on serpentine outcrops and surrounding grasslands on southwest facing slopes. Serpentine outcrop above Dunn Trail.	Located one year but otherwise not evident in most years.	
X	X	X	X	L	<b>Linanthus androsaceus</b>	Pinklobe Linanthus	PLM		4/81: Common. Dry openings and flats. Serpentine grassland.		Syn: <i>Filago californica</i>
X		X	X	U	<b>Logfia californica</b>	California Fluffweed	AST				
		X	X	U	<b>Lomatium dasycarpum ssp. dasycarpum</b>	Hog Fennel Biscuit Root	API				
X		X		U	<b>Lomatium macrocarpum</b>	Sheep Biscuit Root	API		4/81 + 5/81: Common throughout the serpentine grassland.		
X			X	U	<b>Lomatium utriculatum</b>	Spring Gold Biscuit Root	API		2/81: Common. Open, grassy slopes and ridges. Serpentine grassland.		
	X	X	R	0	<b>Loniceria hispidula var. vacillans</b>	Hairy Vine Honeysuckle	CPR		5/19/90: Creek.—	Not on serpentine.	



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1982	1990	1991	2012-18	Distribution (2012-2018)	* Taxon	Common name	Family	List	Notes (previous versions of doc)	Notes (current)	Interpretive and stewardship info
			X	D	<i>Lotus corniculatus</i>	Birdfoot trefoil	FAB			In former roads and trails. Can create notable shows in wet years.	
X			R	0	<i>Lupinus adsurgens</i>	Drew's silky lupine	FAB	A1	5/81: Common. Dry grassy slopes. Serpentine Grassland near horse-ring.	Likely a misdet. of <i>L. formosus</i> . Few plants which are declining near South Face and NE Ridge.	
	X	X	X	L	<i>Lupinus albifrons</i> var. ?	Blue Bush / Silver Lupine	FAB		5/19/90: Prairie.	Occasional in Hunt Field. One location near contact zone downhill from Hunt Field.	
			X	L	<i>Lupinus bicolor</i>		FAB				
			X	R	<i>Lupinus formosus</i> var. <i>formosus</i>	Summer / Woodland Lupine	FAB		5/19/90: Sandstone.		
			X	0	<i>Lupinus microcarpus</i> var. <i>microcarpus</i>	Chick Lupine	FAB		5/19/90: Creek. 5/81: Occasional, serpentine grassland.	Not observed in recent years.	
		X	X	L	<i>Lysimachia arvensis</i>	Scarlet Pimpernel	MRS				Syn: <i>Anagallis arvensis</i>
	X		R	0	<i>Maianthemum racemosum</i>	Fat False Solomon's Seal	RUS		5/19/90: Redwood.	Not on serpentine. Few plants near serpentine contact zone.	Syn: <i>Smilacina racemosa</i> .
	X		R	0	<i>Malva parviflora</i> <i>Marah fabacea</i>	Cheeseweed California Manroot	MLV CUC		5/19/90: Creek.	Not on serpentine.	
		X	X	U	<i>Matricaria discoidea</i>	Pineapple Weed	AST				syn: <i>Chamomilla suaveolens</i> . It's difficult to not mention the remarkable scent of this plant. In former road and trails, not invasive.
		X	X	L	<i>Medicago polymorpha</i>	California Bur Clover	FAB				Few plants in disturbed areas, typically around road cuts.
X	X		X	U	<i>Melica californica</i>	California Melic Grass	POA		5/19/90: Creek. 4/82: Serpentine grassland.	Occasional in grasslands, found in South Face area and main Prairie.	
		X	R	0	<i>Melica imperfecta</i>	Coast Range Melic Grass	POA			In adjacent woodland.	
	X	X	X	U	<i>Melica torreyana</i>	Torrey Melic Grass	POA		5/19/90: Creek.	Present on South Face.	Caespitose plants growing near rock outcrops, mostly under areas with historic pines that were removed in the early 2010's. It will be curious to see if these plants persist.
		X	R	0	<i>Melilotus indica</i>	Sour Clover	FAB			Not observed.	
X			X	U	<i>Micranthes californica</i>	Greene's Saxifrage	SAX		2/81: Rare. Very moist, often mossy, grassy hillsides. Serpentine grassland around the spring.	A rare find on cooler north facing slopes.	Syn: <i>Saxifraga californica</i> .
X			R	0	<i>Microseris acuminata</i>	Sierra Foothill Silverpuffs	AST				
X		X	X	C	<i>Microseris douglasii</i> ssp. <i>douglasii</i>	Douglas Silverpuffs	AST			Fairly common in grassland.	
	X		R	0	<i>Mimulus aurantiacus</i>	Bush Monkey Flower	PHR		5/19/90: Creek.	Not on serpentine, adjacent.	
									2/82: Rare. Restricted to bare, gravelly serpentine outcrops on south facing slopes. Serpentine outcrops above Dunn Trail near park headquarters.	No specific surveys for this plant have ever been repeated. Unknown status.	
X			?	L	<i>Mimulus douglasii</i>	Mickey Mouse Monkey Flower	PHR	B			
X	X		R	L	<i>Mimulus guttatus</i>	Golden Monkey Flower	PHR		6/19/90: Creek. 5/81: Occasional, springs and seeps. Serpentine grassland near the small spring.	Only located once in recent years in Trudeau creek, pop declining.	
X		X	X	C	<i>Minuartia douglasii</i>	Douglas Sandwort	CRY	B	4/81: Occasional on dry bare outcrops, particularly throughout the serpentine grassland.	Obvious, large stands in certain years.	
X	X		R	0	<i>Monardella douglasii</i> ssp. <i>douglasii</i>	Douglas Coyotemint	LAM	A2	5/19/90: Sandstone. 6/79: Rare. Restricted to barren, rocky, dry, serpentine outcrops. Behind park headquarters.	Not relocated, not present currently.	
	?		R	0	<i>Monardella sheltonii</i>	Shelton's Coyotemint	LAM		6/3/90: Reported by CNPS survey but highly suspect.	Not relocated, not present currently.	
			X	C	<i>Monardella villosa</i> ssp. <i>villosa</i>	Common Coyotemint	LAM		5/19/90: Sandstone.	in main prairie.	
	X		R	0	<i>Morella californica</i>	California Bayberry	MYR	A2	5/19/90: Creek.	Not relocated, not present currently.	Syn: <i>Myrica</i>
	X		R	0	<i>Oemleria cerasiformis</i>	Oso Berry	RQS		5/19/90: Creek.	Not on Serpentine.	
	X		R	0	<i>Osmorhiza berteroi</i>	Wood Cicely	API		5/19/90: Redwood.	Not in the Prairie area.	Syn: <i>O. chilensis</i> .
									5/19/90: Creek. 3/81: Fairly common on serpentine outcrops and cliffs on south facing hills.	Few plants located on cliff areas on the South Face. Forms obvious colonies.	
X	X	X	X	L	<i>Pellaea andromedifolia</i>	Coffee Fern	PTR				
	X		R	0	<i>Pellaea mucronata</i> var. <i>mucronata</i>	Bird's-foot Fern	PTR		5/19/90: Creek.		
	X	X	X	C	<i>Pentagramma triangularis</i> ssp. <i>triangularis</i>	Goldenback Fern	PTR		5/19/90: Creek.	Extremely limited on East face rock outcrops on the South Face.	
	X		X	U	<i>Perideridia kelloggii</i>	Kellogg Yampah	API		5/19/90: Prairie.	Assumed to be <i>P. kelloggii</i> in a non-diagnostic phenological state.	Often this plant is difficult to detect until the summer when it is in full flower.
		X	R	0	<i>Perideridia</i> sp.	Yampah	API				
	X	X	R	0	<i>Phacelia imbricata</i> ssp. <i>imbricata</i>	Rock Phacelia	BOR		5/19/90: Creek.	Not on Serpentine.	
	?		R	0	<i>Phalaris minor</i>	Little seed Canary Grass	POA		5/19/90: Creek.	Not relocated.	
		X	X	U	<i>Picris echioides</i>	Bristly Ox-tongue	AST			Limited distribution in the serpentine.	
X	X		R	0	<i>Pinus coulteri</i>	Coulter Pine	PIN	A2	5/19/90: Creek. 8/82: Several trees planted below Park Headquarters in serpentine grassland.	Trees removed, none present.	A favorite tree of David Amme at EBRPD, so this individual was saved from the tree removal/restoration project.
			X	L	<i>Pinus jefferyi</i>	Jeffery Pine	PIN			Planted at Prairie near the Boudary trail. Single individual, mature, with cones.	Seedlings are occasionally located. Mature trees located in adjacent areas, cones and seeds may be transported by wildlife.
X	X	X	X	C	<i>Pinus radiata</i>	Monterey Pine	PIN		5/19/90: Prairie. 3/82: About park headquarters.		

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1982	1990	1991	2012-18	Distribution (2012-2018)	* Taxon	Common name	Family	List	Notes (previous versions of doc)	Notes (current)	Interpretive and stewardship info
											A diminutive annual that responds well and benefits from mowing and light disturbance. Studies have shown that this is one of the first plants to "wink out" when grasslands are left unmanaged. Host plant to the Bay Checkerspot butterfly which likely occurred here historically.
X	X	X	X	D	<b>Plantago erecta</b>	California Dwarf Plantain	PTG		5/19/90: Prairie. 4/81: Extremely common on dry, open sites throughout the park. Serpentine outcrop 0.5 mi north of park headquarters.	Common in low organic soils throughout the site.	
X	X	X	X	U	<b>Plantago lanceolata</b>	English Plantain	PTG		5/19/90: Sandstone. 4/79: Common, Serpentine Grassland. Cream Cup Corners near park headquarters.	A very occasional weed in disturbed areas near the trail.	
X		X	X	U	<b>Platystemon californicus</b>	Cream Cups	PAP		3/81 + 4/81: Rare. Found only on the moist, north slopes of the serpentine grassland. More abundant in wet years.	Uncommon and highly variable. Short bloom period so detection can be difficult.	A critical plant for Oppler's Longhorn moth which was once observed at this site but never collected.
X			X	U	<b>Plectritis macrocera</b>	Longhorn Plectritis	VAL		5/81: Common especially in serpentine grassland.	Found just east of Hunt Field on the eastern facing slope. Highly variable ppn from year to year.	
X	X		X	C	<b>Poa secunda ssp. secunda</b>	One-side Blue Grass	POA			Occasional in prairie, but does not form notable stands.	
		X	X	L	<b>Polygonum aviculare ssp. depressum</b>	Common Yard Knotweed	PLG			Occasional in Prairie.	Syn: P. arenastrum.
X			X	L	<b>Polypodium calirhiza</b>	Polypody Fern	PLP		2/81: Common on moist banks and among rock outcrops. Some extremely leathery plants growing on rocks below park headquarters were determined to be triploid individuals. Serpentine rock, northeast slope.	Few individuals. Only located in wet areas off serpentine.	
		X	R	0	<b>Polypogon monspeliensis</b>	Annual Rabbitfoot Grass	POA			Not on serpentine.	
	X		0	0	<b>Polystichum munitum</b>	Western Sword Fern	DRY		5/19/90: Creek.	Cooler north facing slopes about Trudeau Creek. Observed in 2008.	
		X		L	<b>Primula hendersonii</b>	Henderson's shooting star	PRM			Woodland plant.	Syn: Disporum hookeri
	X		R	0	<del><b>Prosartes hookeri</b></del>	<del>Fairy Bells</del>	<del>LL</del>		<del>5/19/90: Redwood.</del>		
	X		X	L	<b>Pseudognaphalium californicum</b>	California Everlasting	AST		5/19/90: Sandstone	NE Ridge area.	Syn: Gnaphalium californicum.
					<b>Pteridium aquilinum var. pubescens</b>	Bracken Fern	DST		5/19/90: Creek. 5/81: Occasional, usually under shrubs. Below Dunn Trail near a large serpentine outcrop.	Dominant on east face of NW Ridge.	This remarkable plant may be the most well-distributed vascular plant in the world, ranging from the arctic into the tropics.
X			X	L	<b>Pterostegia drymarioides</b>	Pink Creeper	PLG			As noted previously.	
					<b>Quercus agrifolia var. agrifolia</b>	coast live oak	FAG			Seedlings thru 10-20 year old trees located on serpentine. Occasional mature tree.	This species is tolerant of serpentine soils here, but not on all sites. It may be the combination of fog drip and dry nitrogen input. Sudden Oak Death has never been observed here.
	X		R	0	<del><b>Quercus wislizenii var. wislizenii</b></del>	<del>interior live oak</del>	<del>FAG</del>		<del>5/19/90: Sandstone.</del>	Near serpentine contact zone.	
X	X	X	X	C	<b>Ranunculus californicus</b>	California Buttercup	RAN		5/19/90: Creek. 3/81: Common on open grassy sites throughout the park. Serpentine grassland.	Showy on cooler slopes. Unusual on serpentine, occasional in ruderal areas.	
	X		X	L	<b>Raphanus sativus</b>	Wild Radish	BRA				
		X	X	C	<b>Rigiopappus leptocladus</b>	Bristle-head	AST	B	6/2/91: 500+ plants, mostly in fruit. All along the road on the N. side of corrals.	Showy in certain years. Growing in one localized area with coyote brush and a thicket near a home on the western prairie boundary.	Syn: Rubus discolor
	X		X	0	<b>Rubus armeniacus</b>	Himalayan Blackberry	ROS			In Trudeau Creek.	
	X		X	0	<b>Rubus ursinus</b>	California Blackberry	ROS		5/19/90: Creek.	Can become dominant in areas of the main Prairie.	A notable invasive that fluxes between high cover and lower cover. Responds to precipitation.
	X	X	X	C	<b>Rumex acetosella</b>	Sheep Sorrel	PLG		5/19/90: Creek. 5/81: Common on disturbed sites. Serpentine grassland below Hunt Field.		
X		X	X	U	<b>Rumex crispus</b>	Curly Dock	PLG			Needs to be surveyed. Possible on the Prairie in wetter areas.	
		X	?	L	<b>Rumex obtusifolius</b>	Bitter Dock	PLG		5/81: Occasional in waste places. Serpentine grassland below Hunt Field.		
X		X	X	L	<b>Rumex pulcher</b>	Fiddle Dock	PLG			Same as previous note.	
X			?	L	<b>Rumex transitorius</b>	Ovate Willow Dock	PLG	B	8/80: Rare. Serpentine grassland near the head of West Fork.	Needs to be surveyed. Possible on the Prairie in wetter areas.	Syn: Rumex salicifolius var. transitorius.
	X	X	X	L	<b>Sambucus nigra ssp. caerulea</b>	Blue Elderberry	ADX			Few individuals, mostly in transitional soils.	Syn: Sambucus mexicana.
X	X	X	X	C	<b>Sanicula bipinnatifida</b>	Purple Sanicle	API		5/19/90: Creek. 3/81: Common on open, grassy slopes. Serpentine grassland.	Present, but does not form notable stands.	
	X		R	0	<del><b>Sanicula crassicaulis</b></del>	<del>Pacific Woodland Sanicle</del>	<del>API</del>		<del>5/19/90: Creek.</del>	Near serpentine contact zone.	
X	X		X	U	<b>Sanicula tuberosa</b>	Turkey Pea / Tuberos Sanicle	API		2/81: Common but restricted to northeast slopes of the serpentine grassland.	Occasional in the Prairie.	
X			R	0	<del><b>Scabiosa atropurpurea</b></del>	<del>Pincushion</del>	<del>DPS</del>		<del>8/80: Garden escape. Disturbed site near Hunt Ring, serpentine grassland.</del>		
		X	X	U	<b>Scrophularia californica</b>	California Figwort	SCR			Near scrub margins/ecotones.	An important host plant for the Chalcidon checkerspot butterfly. It is often found feeding on this and Plantago erecta in the South Face area. This plant is found just off the serpentine. This plant is not appropriate for serpentine, although one tree persists in the Prairie.
	X		X	L	<b>Sequoia sempervirens</b>	Coast Redwood	CUP		5/19/90: Creek.	One mature tree in Prairie area.	
	X		X	L	<b>Sidalcea malvaeflora ssp. ?</b>	Common Checkerbloom	MLV		5/19/90: Sandstone	With unique assemblage of plants found on the North Ridge area.	Two ssp. intergrade in the East Bay Hills (per Erter and Naumovich 2013). Needs study.



Presence/Absence survey: X = present, ? = unknown/uncertain, R = Rejected/not present (entire entry is strikethru)				L = localized/rare, U = uncommon +/- 5 small ppns, C = common in small patches, present but not a dominant component D = dominant locally or generally ubiquitous, 0 = none present	Scientific name (Jepson eFlora 6th Revision) bold name = native	Common names are not standardized for plants.	3 letter family code	Rare plant listing status	Notes: Abundance, location, and collection date notes from the 1979-82 (K. Culligan), 1990 & 1991 (CNPS) surveys, and 2012-2018 surveys by Lech Naumovich and associated biologists.	Additional information	
1982	1990	1991	2012-18	Distribution (2012-2018)	* Taxon	Common name	Family	List	Notes (previous versions of doc)	Notes (current)	Interpretive and stewardship info
X	X	X	X	C	<i>Silene gallica</i>	Windmill Pink	CRY		5/19/90: Creek. 4/81: Common weed along trails and on disturbed sites. Especially common on serpentine outcrops.		
	X		R	0	<i>Silene laciniata</i> ssp. <i>californica</i>	California Pink	CRY	B	5/19/90: Creek.—	Not observed.	Syn: <i>Silene californica</i> . A worthwhile stewardship target, even though it does not establish on the Prairie.
	X		X	L	<i>Silybum marianum</i>	Milk Thistle	AST		5/19/90: Creek.	Few individuals observed over the years under trees and in wetter areas.	
	X	X	X	C	<i>Sisyrinchium bellum</i>	Blue-eyed Grass	IRI		5/19/90: Prairie	Well distributed	
	X		R	0	<i>Solanum americanum</i>	Small-flower Nightshade	SOL		5/19/90: Prairie.—	Not relocated.	
	X		X	R	<i>Sonchus asper</i> ssp. <i>asper</i>	Prickly Sow Thistle	AST		5/19/90: Sandstone. 5/81: Common waste places. Serpentine grassland.		
	X	X	X	L	<i>Spergularia bocconii</i>	Boccone Sand Spurry	CRY				
X		X	X	C	<i>Spergularia rubra</i>	Ruby Sand Spurry	CRY		3/81: Common on dry, disturbed sites and trails. Dunn Trail near Hunt Ring.		
	X	X	R	0	<i>Stachys rigida</i> var. ?	Common Rigid Hedge Nettle	LAM		5/19/90: Creek.—	Not relocated on Prairie, likely in creek.	Syn: <i>Stachys ajugoides</i> var. <i>rigida</i> .
	X		X	C	<i>Stellaria media</i>	Common Chickweed	CRY		5/19/90: Creek.		
X	X		X	L	<i>Stephanomeria virgata</i> ssp. <i>pleurocarpa</i>	Twiggy Wreath Plant	AST		5/19/90: Creek. 9/80: Fairly common, serpentine grassland especially along trails. Dunn Trail 0.1 mile north of park headquarters.	Late summer annual that can be difficult to detect. In South Face area.	
	X	X	X	C	<i>Stipa lepida</i>	Foothill Needle Grass	POA			Few stands near the ecotones with scrub. Some <i>S. lepida</i> is found in areas where trees were removed.	Syn: <i>Nasella</i>
X	X	X	X	D	<i>Stipa pulchra</i>	Purple Needle Grass	POA		5/19/90: Prairie. 5/81: Common especially throughout the Serpentine Grassland where its large clumps dominate the northeast facing slopes. Serpentine grassland.	Common with fantastic stands in Hunt Field.	Syn: <i>Nasella</i> . Bunchgrass that is purported to live up to 50 years and is a fundamental constituent of the Prairie.
	X		R	0	<i>Symphoricarpos albus</i> var. <i>laevigatus</i>	Bush / Common Snowberry	GPR		5/19/90: Redwood.—	Not on serpentine.	
	X	X	X	L	<i>Toxicodendron diversilobum</i>	Poison Oak	ANA		5/19/90: Prairie.	One notable bramble that is well established on Hunt Field.	
	X		X	L	<i>Toxicoscordium fremontii</i>	Fremont's Star Lily	MEL		5/19/90: Sandstone.	Northeast Ridge area	Syn: <i>Zigadenus</i> f.
	X		X	C	<i>Tragopogon porrifolius</i>	Purple Salsify	AST		5/19/90: Creek.	In area near Overlook.	
	X		R	0	<i>Trientalis latifolia</i>	Star Flower	MRS		5/19/90: Redwood.—	Not on serpentine.	
			X	L	<i>Trifolium albopurpureum</i> var. <i>albopurpureum</i>	Rancheria Clover	FAB			Occasional plants found throughout main prairie.	
		X	X	C	<i>Trifolium dubium</i>	Shamrock Clover	FAB				
			X	L	<i>Trifolium glomeratum</i>	Clustered Clover	FAB			Couple dozen plants found with <i>Lotus c.</i> and <i>Trifolium hirtum</i> .	
			X	C	<i>Trifolium gracilentum</i>	Pinpoint Clover	FAB			Occasional plants found throughout main prairie.	
		?	X	D	<i>Trifolium hirtum</i>	Rose Clover	FAB		Questionable ID	Well distributed especially on former roads and trails. Ppn has increased notably in past 5 years.	This plant deserves attention and may be increasing in range on the Prairie.
			X	L	<i>Trifolium hybridum</i>	Alsike Clover	FAB			In Redwood Corner Area, 30+ inds.	
			X	C	<i>Trifolium microcephalum</i>	Small-headed Clover	FAB			Occasional plants found throughout main prairie.	
X			X	C	<i>Trifolium microdon</i>	Thimble Clover	FAB		4/82: Common. Grassy slopes throughout the park. Serpentine grassland behind park headquarters.	Common.	
			X	C	<i>Trifolium willdenovii</i>	Tomcat Clover	FAB			Present and showy on Prairie.	
			X	L	<i>Triphysaria pusilla</i>	Dwarf Orthocarpus	ORO			Occasional individuals.	
X			?	L	<i>Triteleia hyacinthina</i>	White Triteleia	THE		1980: Rare. Serpentine grassland. Seen but not collected.		This unique lily seems to show itself irregularly, especially in areas that have been disturbed/soil has been scraped the prior fall/winter.
									5/19/90: Prairie. 5/81: Common. Serpentine grassland and open grassy areas along Eastridge and Westridge. Serpentine grassland near park headquarters.	Common and showy in late spring, especially on slope directly east of the Trudeau Center.	White <i>T. laxa</i> can be located annually, needs to be checked against <i>T. hyacinthina</i> ID.
X	X	X	X	C	<i>Triteleia laxa</i>	Ithuriel's Spear	THE				This is not appropriate for the Prairie and seedlings of this plant should be managed.
	X		X	L	<i>Umbellularia californica</i>	California Bay Laurel	LAU		5/19/90: Prairie.	Few trees remain.	
									5/81: Very common, serpentine grassland. 4/81: Fairly common especially in serpentine grassland. Serpentine grassland near park headquarters.		
X		X	X	C	<i>Uropappus lindleyi</i>	Silverpuffs	AST				
	X		X	L	<i>Verbena lasiostachys</i> var. <i>scabrida</i>	Robust Vervain	VRB		5/19/90: Redwood	Occasional individuals located in association with oaks near the South Face area.	
			X	C	<i>Vicia benghalensis</i>	Purple Vetch	FAB			Found interspersed with large stands of <i>V. sativa</i> .	
	X		R	0	<i>Vicia gigantea</i>	Giant Vetch	FAB		5/19/90: Creek.—	Not relocated.	
		X	X	D	<i>Vicia sativa</i> ssp. <i>nigra</i>	Narrowleaf Vetch	FAB			Well distributed and dominates large areas in wet years.	Note that ssp. <i>sativa</i> likely present upon further survey.
			X	D	<i>Vicia villosa</i> ssp. <i>varia</i>	Winter Vetch	FAB		5/82: Common and invasive. Serpentine grassland below Hunt Field and behind park headquarters.	Well distributed and dominates large areas in wet years.	
X			X	C	<i>Vicia villosa</i> ssp. <i>villosa</i>	Hairy Vetch	FAB		5/81: Rare. Serpentine grassland.		All vicias co-occur and haven't been fully evaluated for distribution/density. The sole host plant for the Callippe Silverspot butterfly which was once known to occur at the Prairie.
	X		X	L	<i>Viola pedunculata</i>	Johnny-Jump-Up	VIO		5/19/90: Sandstone.	NE Ridge population.	
X			R	0	<i>Woodwardia fimbriata</i>	Giant Chain Fern	BLE		10/80: Rare. Along bank of West Fork, serpentine grassland.	Riparian, not on serpentine.	
	X		X	L	<i>Wyethia angustifolia</i>	Narrow-leaf Mule's Ear	AST		5/19/90: Sandstone.	Occasional in grassland & on NE Ridge	
	X		X	U	<i>Zeltnera muhlenbergii</i>	Monterey Centaury	GEN		6/2/91: None seen this year by seep at bottom of serpentine barren.		syn: <i>Centaureum muhlenbergii</i>