

Invasive Plant Management on The Santa Lucia Preserve: A Landowner's Guide



Preserve Member Rich Griffith and the streamside meadow he is reclaiming from broom and hemlock. Spring 2017

Updated October 2021

Invasive species are on the march throughout California, jeopardizing the beauty and biodiversity of the land, damaging streams and watersheds, and increasing the risk of wildfire. Here on The Preserve, the Santa Lucia Conservancy, Santa Lucia Preserve Community Service District, the Ranch and Golf Clubs, and Preserve landowners and neighbors are teaming up on weed management activities and we could use your help. You can support our efforts by treating four key species commonly found on Openlands throughout the Preserve that are increasing fire fuels and posing a threat to our native plants and animals.

The care shown by Preserve owners and landscape contractors in implementing the Prohibited Plant List (attached) has been remarkably effective for avoiding impacts seen on neighboring properties. However, some of the most aggressive invaders are still finding their way into our Homelands, Openlands and Wildlands. This guide outlines how to identify some of our top invasive species of concern, their threats to The Preserve, and Conservancy-approved invasive weed treatments for Homelands and Openlands. When working in the Openlands, following these guidelines is necessary to protect people, sensitive habitat, and wildlife. Conservancy staff are always available to assist in assessing and addressing your invasive species challenges. These are four groups of invasives of particular concern on The Preserve:



 ${\tt 1.'French\ Broom'}\ {\it Genista\ monspessulana}$



3. 'Invasive Thistles' *Carduus spp.*, *Silybum sp.*, *Circium spp*.



2.'Poison Hemlock' Conium maculata



4.'Stinkwort' Dittrichia graveolens

Effective control of these invasive species requires persistent management. Experts at seed dispersal, invasive plants often 'return' after initial treatments due to a reservoir of seeds in the topsoil (called a seedbank). Our best approach for achieving long-term control of these weeds is two-fold:

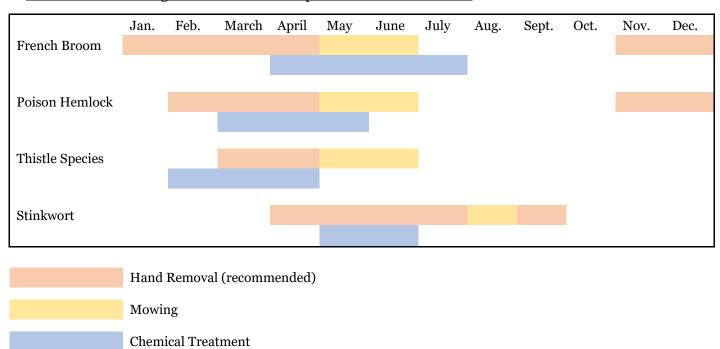
- 1. Deplete the seedbank by removing plants each year before flowers mature and continue to do so for several years until we have diminished the seedbank in the soil.
- 2. Manage for a desired condition: have a plan for what will replace the weeds and actively promote those species. The Conservancy can help you design and implement a simple restoration plan called an Openlands Management Plan. To request one of these free Openlands Management Plans please contact the Conservancy at (831) 626-8595 or visit https://slconservancy.org/slcstaff/ to contact our Ecological Management department directly.

THE GOOD NEWS: most weed species respond significantly after 2-3 seasons of consistent, timely control, reducing the effort required in future years to monitoring and managing new seedlings.

Where removal activities have left patches of bare dirt larger than a square foot (around the size of a dinner plate), seeding of native grasses may be appropriate. Please consult Conservancy staff to determine the best options to use on your property. Appropriately sourcing seed mixes can avoid the risk in introducing new, potentially worse weeds to The Preserve.

Please take a few minutes to observe whether these plants are present in your Homelands or Openlands. If present, we strongly encourage you to remove these plants at your earliest convenience. Your landscaping contractor or Resident Services can assist you, using the methods below.

<u>Invasive Weed Management Timetable – Optimal Treatment Periods</u>



Chemical treatment of invasive plants is permitted in the Homelands. Please consult with the Conservancy prior to use in the Openlands to protect community health and sensitive resources.

1. French Broom (*Genista monspessulana*) is a perennial woody shrub from the Mediterranean that is invading grasslands, chaparral, woodlands, and riparian areas throughout California. Plants can grow a foot or more per year and reach a height of 5-15 feet. The shrub can be identified from the small soft leaves which grow in sets of 3 leaflets. Bright yellow flowers blossom from January-September. Once pollinated, the flowers form 'pea pods' from May through late summer. These pods then pop during the

driest time of year, producing huge sets of seeds. A single bush can produce thousands of seeds, enabling it to overwhelm native vegetation in a wide variety of conditions. French broom changes native soil conditions by altering nitrogen levels, enhancing its own population. Stands of French broom increase fire risk by creating continuous and often dense ladder fuel which can increase the rate of spread and intensity of wildfire.







'French Broom' Genista monspessulana

Treatment: Although these shrubs grow quickly, their roots develop slowly and remain shallow in the soil. Plants can be pulled by hand or with the use of a weed wrench during the rainy season from November - April. This timing is optimal for removing plants before they form or set seed. Manual removal also has the benefit of flushing the otherwise long-lived seed bank, provided additional control is conducted in following years. Once mature plants are removed, the next generation of young plants will not produce flowers or seeds until their second year. This next generation can then be easily pulled and in doing so, reduce the populations by as much as 70-80%, making them much more manageable. Conducting manual 'weed patch' management every other year for five years with annual follow-up monitoring and maintenance thereafter is the most effective means to achieve long term eradication. Weed wrenches are available by loan through the Santa Lucia Conservancy upon request.

Herbicide treatment to control French Broom may impact non-target species and pests. Always read herbicide labels before use and contact Conservancy staff with any questions. Use of foliar spot spraying is recommended for dense stands of French Broom where there will be little impact on non-target species using triclopyr (Garlon 4 Ultra). Aminopyralid (Milestone) may also be added to the mix to increase effectiveness. Spray leaves until wet but not dripping. In areas where French Broom is mixed in dense stands of coastal scrub, use of a cut stump treatment or basal bark treatments is preferred. Cut plants below all branches and apply herbicide directly to the cut stump surface. French Broom treated with herbicides must be removed after they have been killed to reduce fire risk. (See table below for herbicide rates for each treatment.)

Note: Although mowing broom plants can lower fuels and reduce seed production in the short term, plants often resprout even after repeated mowing, making them harder to control in the long term. In this case, herbicides may be required to kill previously mowed plants with extensive root systems. *Please note: herbicide use in the Openlands requires coordination with the Conservancy.*

Please be sure to avoid damage to these Native Look-a-Likes:

<u>Yellow Bush Lupine</u> (*Lupinus arboreus*): This is the largest of our native lupines and the only lupine with yellow flowers on the Preserve. Compared to French broom, the flowers tend to grow in more compact columns and the leaves are composed of 5-7 leaflets rather than 3. Like French Broom, they have 'peapod' seed structures that can look very similar.

<u>Deerweed</u> (*Acmispon glaber*): Although this California native also bears leaves of three, they are much smaller and thinner than French broom. The plant is also shorter and more compact with smaller flowers that eventually fade to red as they mature.



Mature 'Bush Lupine' L. arboreus



Mature 'Deerweed' A. glaber



'Bush Lupine' L. arboreus flower



'Deerweed' A. glaber flower

2. Poison Hemlock (*Conium maculatum*) is an herbaceous biennial plant from Eurasia. It is very opportunistic and rapidly invades disturbed sites. Poison hemlock tends to thrive in wet, open areas. The leaves have a lacey, fern-like appearance. Purple spots and streaks occur along the hollow stalk, which ranges in height from 2 to 10 feet. In the winter, early growth of hemlock is easily noticeable from the bright green color. In the spring, the feathery foliage begins to bolt, or grow upward, producing white compound flowers which form seeds in early to mid-summer. Plants dry into tall stiff dead stalks in late summer and fall, increasing fire risk. The vegetation is toxic to people and animals if consumed.





'Poison hemlock' Conium maculatum



Treatment: Poison hemlock plants do not regenerate if hand-pulled: their shallow roots can be easily pulled as young plants in the spring or once the ground softens in the fall. **Wearing gloves and washing up after handling these toxic plants is encouraged**. Remove plants before they produce seed every year to reduce the seedbank. There are several plants with a similar appearance, so it is helpful to look for purple streaks on the stems or contact the Conservancy if you are unsure. If the impacted area is too large to manage by hand, hemlock stands can be mowed in their second year during the late spring to early summer when the flowers are in bloom. Mowed plants may resprout, especially if fog and late rain occurs following the mow, so a second mow should be conducted several weeks after the first to remove resprouted vegetation.

Herbicide treatment for poison hemlock can be effective when applied early to seedlings or small rosettes, but not mature plants. Always read herbicide labels before use and contact Conservancy staff with any questions. Treat with Triclopyr (Garlon 4 Ultra) in the spring when the plant is actively growing before it bolts (DiTomaso 2013, p. 126). Spot spray the plants until foliage is wet, but not dripping. Effective eradication requires follow-up monitoring and management of poison hemlock for several years until the seedbank is depleted. Reseeding the treated area with native species following herbicide application may improve long term control of this invasive. *Please consult the Conservancy about appropriate native seeds to use on your property*.

Native Look-a-Likes:









'Cow Parsnip' Heracleum maximum plant and flower

'Yampah' Perideridia sp. leaves and plant

<u>Cow Parsnip</u> (*Heracleum maximum*): This large native is closely related to the invasive non-native Hemlock. It is also an annual plant but it has both bigger thicker leaves and larger umbrella blooms. It thrives in shaded wet areas and is rarely found in dry areas with full sun.

<u>Yampah</u> (*Perideridia spp.*): These natives are in the carrot family, with one local species—Gairdner's Yampah—designated as a rare plant. Yampahs are perennial and grow up to 5 feet tall on slender stalks. Though a yampah flower may resemble that of poison hemlock, yampah leaves occur only at the base of the plant whereas hemlock leaves occur up the entire stalk.

3. Invasive Thistles: There are several species of non-native thistles that are of concern in this area. Thistles thrive in disturbed areas that have been disturbed or exposed to fire. In areas where native vegetation is healthy, thistles are less inclined to invade. On The Preserve, Italian thistle tends to sprout along roads, trails, and in construction areas. Generally, the first to bloom and the most prolific of the Preserve's invasive thistles, its control is challenging. Milk thistle generally follows in mid-spring and then bull thistle and yellow starthistle towards the end of spring into early summer.

Seeds are wind dispersed and can travel great distances, making control especially challenging. Preventing seed dispersal is the most effective means of control, so proper timing is essential.

Italian Thistle (Carduus spp.): Italian thistle often forms large dense stands. Mature Italian thistle plants have branching stems near the top, supporting clusters of 2-5 small pink to purple flower heads.



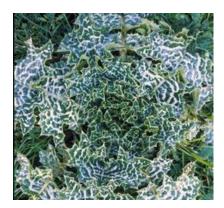




'Italian Thistle' Carduus spp.



Milk thistle (Silybum marianum): These may be the easist to identify of the invasive thistles from the white veins on the thick spined fleshy, ruffled leaves. The size of milk thistle plants can vary greatly depending on soil moisture. Milk thistle starts blooming in mid spring and produces large stalks and bright pink flowers with large spines.







'Milk Thistle' Silybum marianum

Bull Thistle (*Cirsium vulgare*): This is the largest of our invasive thistles growing up to 6 ½ feet tall. It has deep green foliage with large blossoms and spines. It is important to properly identify because it shares the most similar features to our native thistles. Distinguish bull thistle from natives by identifying the stiff, bristle-like hairs on their foliage giving a sandpaper-like feel. The deep shade of green is also a distinguishing feature compared to the more silver look of natives.





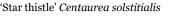


'Bull thistle' Cirsium vulgare

Yellow Starthistle (*Centaurea solstitialis*): Through vigorous monitoring and rapid response, yellow starthistle is largely controlled on The Preserve. However, new seeds can come in on construction equipment and other sources, so vigilance is required. This thistle is considered a 'zero tolerance' weed by the Conservancy; if you detect yellow starthistle anywhere on The Preserve, contact us immediately with specific information on its location. Yellow starthistle is poisonous for horses and can be fatal. Yellow starthistle has grey-green to blue-green foliage covered in fine cottony hairs, forms dense patches which create continuous fuels that increase fire risk, and has a deep taproot. The flower is bright yellow with sharp spines around the base.









Treatment: Thistle begins growth with low clusters of leaves that can be effectively dug or pulled in early spring. Be sure to remove the entire root or cut 4" below the surface. Healthy native vegetation competes well, so consider seeding with native grasses if hand-pulling thistle. The Conservancy can assist with identifying appropriate seeds and sources.

Herbicide treatment for thistles is effective at the rosette stage from February to April. Always read herbicide labels before use and contact Conservancy staff with any questions. Recommended chemicals are Aminopyralid (Milestone) and Clopyralid (Transline) which are effective on all targeted thistles for weed management (DiTomaso 2013, pp. 80, 103, 123, 372). Milestone can be applied up to the edge of water bodies, Transline requires a buffer zone of at least 25 feet from water bodies. Spray the rosettes until wet but not over saturated so that the chemical runs off the plant. Herbicide treatment of thistles should continue for at least three years.

Once plants produce stalks with flowers, they should be mowed immediately to prevent flowers from maturing and forming seeds. Thistle stands may require multiple mows in a single season. Even mowed plants can quickly re-sprout if followed by rain or fog and must be promptly re-treated. Milk thistle and Bull thistle can be more effectively eradicated through a single mowing prior to setting seed. Italian thistle that has flowered prior to mowing or hand removal is capable of producing seed so cut or pulled plants should be bagged and disposed of offsite.

<u>Native Thistles</u>: The Preserve is also home to a native thistle species. It typically grows as a solitary plant or in small stands. These thistles can be safely retained, as they support native pollinators and do not become invasive.

<u>Cobweb Thistle</u> (*Cirsium occidental spp.*): Native cobweb thistles are most easily identified by the spindles of webbing found on the flower head beneath the bloom. They generally have a silver tinge and rarely grow in large stands.





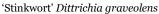




4. Stinkwort (*Dittrichia graveolens*) Stinkwort is a relatively new California invader causing great concern in the region. An annual weed on our 'zero tolerance' list, it has a conical shape about 3 feet tall when mature. Proliferating in sunny disturbed areas, stinkwort is often first noted in construction sites, and thrives along roads and trails. Leaves are long and slender, up to 1 inch long and ¼ inch wide. Small yellow flowers usually show in fall and winter, and become more red in color as the plant matures. The seeds are small and distributed by wind, water, or sticking to equipment, clothing and fur. This highly aromatic plant has sticky, hairy, oily foliage which makes control with herbicide difficult. Use caution when managing this weed as it can cause skin rashes in humans. The Conservancy will assist with removal – please notify us immediately if you see it.









Treatment: Managing stinkwort requires agressively preventing seed production for 1-2 years to reduce the seedbank and inhibit population growth. This may require monitoring the plants and treating them multiple times in the first season. Hand removal of stinkwort is the most common and effective method for eradication. Using gloves, pull stinkwort as soon as it emerges in the spring through early fall (April – September). Stinkwort has a shallow root system and can be easily pulled from the ground. It is best to remove stinkwort before it flowers and produces seed. Thoroughly bag and remove all cut vegetation, as seeds can mature even on dead plants. Wear protective clothing such as gloves and long sleeves to reduce exposure to the irritating oils of stinkwort folliage. Mowing stinkwort may help with controling proliferation late in the season, but low branches will evade mowers and may continue to grow. A second mowing of stinkwort is recommended in mid- to late summer when the soil has dried out. Mowing activities must be scheduled carefuly since mowing may lead to sparks between mower blades and rocks on the ground igniting wildfires during dry periods. Clean all equipment.

For herbicide treatment use a foliar spray with Triclopyr (Garlon) (DiTomaso 2013, p. 158). Always read herbicide labels before use and contact Conservancy staff with any questions. Treatment is most effective early in season when plants are small and before they begin to flower. The plant must be saturated for herbicdes to be effective. May and June are the best months for applying herbicide treatments to eradicate stinkwort; herbicide is ineffective once stinkwort has developed flowers and causes seeding as a stress response.

Native Look-Alikes:

<u>Tarweeds</u>: California native tarweeds have a similar lifecycle to stinkwort, flowering late in the season. Mature tarweeds range from $1 - 1\frac{1}{2}$ feet tall. The lower leaves are long and slender like the stinkwort, but the upper leaves are flat against the stem and hairy. Tarweed flowers may be yellow or white.

Additional "Zero Tolerance" invasive plants you can help us control:

Please notify Conservancy staff immediately if you find any of these species in <u>any location</u> on the Preserve. Early detection can save valuable resources by eliminating these highly aggressive species before they have a chance to establish and spread.



Pampas and Jubata Grass Cortaderia spp.



Fountain Grass Pennisetum setaceum



Cape Ivy Delairea odorata



Mexican Feather Grass Nassella tenuissima



Fuller's Teasel Dipsacus fullonum



Panic Veldt Grass Ehrharta erecta



Sweet Fennel Foeniculum vulgare



Greater Periwinkle Vinca major

For more information on managing invasive plants in Homelands or Openlands please contact the Conservancy at (831) 626-8595 or visit https://slconservancy.org/slc-staff/ to contact our Ecological Management department directly.

Sources:

DiTomaso, J.m., G.b. Kyser et al. 2013. *Weed Control in Natural Areas in the Western United States*. Weed Research and Information Center, University of California. 544 pp.

Marriott, M., Tertes, R. and C. Strong. 2013. South San Francisco Bay Weed Management Plan. 1 st Edition. Unpublished report of the U.S. Fish and Wildlife Service, Fremont, CA. 82pp.

The University of California Agriculture and Natural Resources Statewide Integrated Pest Management Program (UC IPM): www.ipm.ucanr.edu

California Invasive Plant Control (CAL IPC): www.cal-ipc.org

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Santa Lucia Preserve Prohibited Plant List January 1, 2021

The Santa Lucia Preserve Design Guidelines require landowners to refrain from planting or retaining a number of plants that represent a risk to the natural beauty and healthy ecology of The Preserve. This prohibited plant list is intended to prevent the destruction of our natural areas by invasive ornamental plants and noxious weeds. Potentially invasive ornamental plants are designated by the California Invasive Plant Council (http://www.cal-ipc.org/ip/inventory/weedlist.php), the California Department of Food and Agriculture (http://www.cdfa.ca.gov/PHPPS/), and other reputable sources.

This list reflects the current state of information and is regularly updated to reflect current information. Please request a current version from the Santa Lucia Conservancy or the Design Review Board. If you have questions regarding the species on this list, please contact Jenna Allred, Natural Lands Manager, Santa Lucia Conservancy: jallred@slconservancy.org or (831) 626-8595x104.

This Prohibited Plant List includes plants that are widespread and formally designated as invasive, as well as newer plants that are showing clear signs of becoming invasive in our region. Prohibited plant species cannot be planted in pots or in the ground in Homelands and should be reported to the Conservancy and removed promptly if found in Openlands or Wildland areas.

How to use this List: because common names can occasionally refer to multiple species or varieties of plant, we also include the scientific name and why it is included on the list. The "Reasoning" box has a list of letters that matches the following common reasons:

- A) Potential for severe/irreparable harm to sensitive wildlife or habitat.
- B) Increases fire risk/fuel loads
- C) Disrupts natural processes (e.g. pollinators, native genetics, or watershed function)
 - D) Displaces native habitat
 - E) High cost for removal once established
 - F) Impacts to recreational uses
- * Present on Preserve ++ Once present but now considered eradicated from Preserve

	ZERO Tolerance S	Species .	
SCIENTIFIC NAME	COMMON NAME	LISTING SOURCE	REASONING
Centaurea solstitialis *	yellow star thistle *	Cal-IPC Invasive/CA Noxious	A, C, D
Delairea odorata	Cape ivy	Cal-IPC Invasive/CA Noxious	A, C, D, E
Dipsacus spp. *	teasel *	Cal-IPC Invasive	A, D, F
Dittrichia graveolens *	stinkwort *	Cal-IPC Invasive/CA Noxious	A, C, D, F
Ehrharta spp. *	veldt grass *	Cal-IPC Invasive	A, D
Foeniculum vulgare *	sweet fennel *	Cal-IPC Invasive	A, D
-	Prohibited Grasses	Species	
SCIENTIFIC NAME	COMMON NAME	LISTING SOURCE	REASONING
Agrostis stolonifera	creeping bent	Cal-IPC Invasive	A, D

Arundo donax	giant reed	Cal-IPC Invasive/CA Noxious	A , B , C , D , E
Briza maxima	big quackinggrass	Cal-IPC Invasive	B, D
Carex divulsa	Berkeley sedge	Preserve experience	D
Carex pendula	hanging sedge	Cal-IPC Watch List	A, D
Cortaderia spp. *	pampas grass *	Cal-IPC Invasive	A , B , C , D , E
Dactylis glomerata *	orchardgrass *	Cal-IPC Invasive	A, C, D
Elymus hispidus	intermediate wheat grass	Preserve experience	D
Elymus ponticus *	tall wheat grass *	Preserve experience	D
Festuca arundinacea *	tall fescue *	Cal-IPC Invasive	A, D
Festuca ovina	sheep fescue	Preserve experience	D
Holcus lanatus *	vernal sweet grass *	Cal-IPC Invasive	A, C, D
Pennisetum spp.	fountain grass,	Cal-IPC	D, E
1 enniseium spp.	kikuyugrass	Invasive/CA Noxious	D, E
Phalaris spp. *	harding grass, canary grass *	Cal-IPC Invasive	A, B, C, D, E
Poa pratensis *	Kentucky bluegrass *	Cal-IPC Invasive	C, D
Saccharum ravennae	ravenna grass	Cal-IPC Invasive/CA Noxious	A , B , C , D
Schismus spp.	schismus, Mediterranean grass	Cal-IPC Invasive	B, D
Stipa brachychaeta	puna grass	Cal-IPC Watch list/CA Noxious	С
Stipa capensis	Cape ricegrass	Cal-IPC Invasive	B, D
Stipa miliacea	smilo grass	Cal-IPC Invasive	A, C, D
Stipa tenuissima	Mexican feather grass	Cal-IPC Watch List	A , B , C , D
	Prohibited Flowers and H	erbs Species	
SCIENTIFIC NAME	COMMON NAME	LISTING SOURCE	REASONING
Acaena novae-zelandiae	bidi-bidi	Cal-IPC Watch List	D, E
Acaena pallida	pale bidi-bidi	CA Noxious	C, D
Acanthus mollis	bear's breech	Preserve experience	D
Agapanthus africanus	lily of the Nile	Preserve experience	D
Anigozanthos flavidus	kangaroo paw	Preserve experience	D
Aptenia cordifolia	red apple	Preserve experience	A, C, D, F
Araujia sericifera	bladderflower	CA noxious weed	A, D
Arctotheca calendula	fertile cape weed	Cal-IPC Invasive/CA Noxious	A, D, F
Arctotheca prostrata	capeweed	Cal-IPC Invasive	A, D

Asclepias curassavica	tropical milkweed	Impacts Monarch butterflies	A, C
Asphodelus fistulosus	onion weed	Cal-IPC Invasive/CA Noxious	A, D
Bacopa monnieri	water-hyssop	Preserve experience	A, D
Buddleja davidii	butterflybush	Cal-IPC Watch List	A, D, E
Camellia spp.	camellia	Preserve experience	D
Carpobrotus spp.	iceplant, sea fig	Cal-IPC Watch List	D
Centranthus ruber	valerian, Jupiter's beard	Preserve experience	D
Cerastium tomentosum	snow-in-summer	Preserve experience	D
Chasmanthe floribunda	African cornflag	Cal-IPC Watch List	A, C, D
Cistus ladanifer	crimson spot rock rose	Preserve experience	D
Cotula coronopifolia *	common brassbuttons *	Cal-IPC Invasive	A, C, D
Crocosima x crocosmiiflora	crocosima, montbretia	Cal-IPC Invasive	A, D
Crupina vulgaris	bearded creeper	Cal-IPC Invasive/CA Noxious	A, D
Cynara cardunculus	artichoke thistle	Cal-IPC Invasive/CA Noxious	A , C , D
Datura inoxia	pricklyburr	Cal-IPC Invasive	D
Delosperma spp.	ice plant	Preserve experience	D
Digitalis spp. *	foxglove *	Cal-IPC Invasive	A , D , F
Dimorphotheca sinuata	African daisy	Preserve experience	D
Drosanthemum spp.	ice plant	Preserve experience	D
Egeria densa	Brazilian waterweed	Cal-IPC Invasive	A , C , D
Eichhornia crassipes	water hyacinth	Cal-IPC Invasive	A , C , D
Erechtites spp.	fireweed	Preserve experience	C, D
Erigeron karvinskianus	Santa Barbara daisy	Preserve experience	D
Euphorbia lathyris	caper spurge	Cal-IPC Watch list	C, D
Euphorbia oblongata	oblong spurge	Cal-IPC Invasive/CA Noxious	C, D
Fallopia xbohemica	Bohemian knotweed	Cal-IPC Watch List/CA Noxious	D
Gazania linearis	gazania	Cal-IPC Invasive	A, D
Geranium lucidum	shining geranium	Cal-IPC Watch List	A, D

Gunnera tinctoria	Chilean gunnera	Cal-IPC Watch List	A, D
Gypsophila paniculata	baby's breath	Cal-IPC Watch List	A, D
Helianthus tuberosus	Jerusalem artichoke	Cal-IPC Watch List	D
Helichrysum petiolare	licorice plant	Cal-IPC Invasive	A, D
Ipomoea indica	blue morningglory	Cal-IPC Watch List	D
Iris pseudacorus	yellow flag iris	Cal-IPC Invasive	A, D
Isatis tinctoria	dyer's woad	Cal-IPC Invasive/CA Noxious	A, C, D
Kickxia elatine	sharp-point cancerwort	Preserve experience	D
Lamium amplexicaule *	henbit deadneedle *	Preserve experience	D
Lampranthus spp.	ice plant	Preserve experience	D
Lantana camara	lantana	Cal-IPC Watch List	B, C, D
Leucanthemum vulgare *	ox-eye daisy *	Cal-IPC Invasive	A, C, D
Linaria vulgaris	butter-and-eggs, yellow toadflax	Cal-IPC Invasive	D
Lobularia maritima	sweet alyssum	Cal-IPC Invasive	D
Ludwigia hexapetala	water primrose	Cal-IPC Invasive/CA Noxious	A, C, D
Ludwigia peploides	floating water primrose	Cal-IPC Invasive	A, C, D
Lythrum salicaria	purple loosestrife	Cal-IPC Invasive/CA Noxious	A , C , D
Malephora spp.	ice plant	Cal-IPC Invasive	A, D
Marrubium vulgare *	horehound *	Cal-IPC Invasive	D
Mentha pulegium *	pennyroyal *	Cal-IPC Invasive	A, C, D
Mesembryanthemum spp.	iceplant	Cal-IPC Invasive	D
Myriophyllum spp.	water milfoil, parrot's feather	Cal-IPC Invasive	A, C, D, F
Nymphaea odorata	fragrant water lily	Preserve experience	D
Nymphoides peltata	yellow floating heart	Preserve experience	D
Onopordum spp.	Scotch Thistle, Illyrian thistle	Cal-IPC Invasive/CA Noxious	A, C, D
Osteospermum ecklonis	African daisy	Preserve experience	D
Persicaria wallichii	Himalayan knotweed	CA Noxious	D
Phytolacca americana	common pokeweed	Cal-IPC Invasive	A, D, F
Pistia stratiotes	water lettuce	Preserve experience	A, C, D
Plecostachys serpyllifolia	petite-licorice	Cal-IPC Watch List	D

Ranunculus repens *	creeping buttercup *	Cal-IPC Invasive	C, D
Salvia aethiopis	Mediterranean sage	Cal-IPC Invasive	A, C, D, F
Saponaria officinalis	bouncing bet	Cal-IPC Invasive	C, D
Scabiosa atropurpurea	pincushion flower	Cal-IPC Watch List	D
Senecio elegans	purple ragwort	Preserve experience	D, F
Verbascum thapsus	wolly mullein	Cal-IPC Invasive	A, D
Verbena bonariensis	purpletop vervain	Cal-IPC Watch	D
Watsonia spp.	watsonia	Cal-IPC Invasive	D
Zantedeschia aethiopica	calla lily	Cal-IPC Invasive	C, D
•	Prohibited Shrub S		,
		LISTING	
SCIENTIFIC NAME	COMMON NAME	SOURCE	REASONING
Atriplex semibaccata	Australian saltbush	Cal-IPC Invasive	D
Berberis darwinii	Darnwin barberry	Cal-IPC Watch List	D
Cotoneaster franchetii	orange cotoneaster	Cal-IPC Invasive	C, D
Cotoneaster lacteus	milkflower cotoneaster	Cal-IPC Invasive	C, D
Cotoneaster pannosus *	silverleaf cotoneaster *	Cal-IPC Invasive	C, D
Crataegus monogyna	single-seed hawthorn	Cal-IPC Invasive	A, C, D
Cytisus spp.	scotch broom, Portuguese broom	Cal-IPC Invasive/CA Noxious	A , B , C , D
Echium fastuosum	pride of Madera	Cal-IPC Invasive	D
Elaeagnus pungens	silverberry	Preserve experience	A, D
Erica lusitanica	Spanish heather	Cal-IPC Invasive	A, C, D
Genista spp. *	broom *	Cal-IPC Invasive/CA Noxious	A, B, C, D
Hypericum spp.	St. John's wort	Cal-IPC Invasive/CA Noxious	A, B, D
Ilex aquifolium	English holly	Cal-IPC Invasive	A, D, F
Lavandula stoechas	Spanish lavender	Preserve experience	D
Nandina spp.	bamboo	Preserve experience	C, D
Pieris spp.	pieris	Preserve experience	F
Pyracantha spp.	pyracantha, firethorn	Cal-IPC Invasive	D
Rhamnus alaternus	Italian buckthorn	Cal-IPC Watch List	D, F
Ricinus communis	castor bean	Cal-IPC Invasive	A, C, D, F
Rubus armeniacus	Himalayan blackberry	Cal-IPC Invasive	A, B, C, D, F
Spartium junceum	Spanish broom	Cal-IPC Invasive/CA Noxious	A, C, D
	Prohibited Tree Sp	<u>ecies</u>	
SCIENTIFIC NAME	COMMON NAME	LISTING SOURCE	REASONING
Acacia spp.	acacia, wattle	Cal-IPC Invasive	A, B, D

Acer palmatum	Japanese maple	Preserve experience	D
Ailanthus altissima	tree-of-heaven	Cal-IPC Invasive/CA Noxious	A, B, D, E, F
Cestrum parqui	willow jessamine	Cal-IPC Watch List	A, C, D
Cordyline australis	New Zealand cabbage tree	Cal-IPC Invasive	D
Elaeagnus angustifolia	Russian olive	Cal-IPC Invasive	A, B, C, D
Eucalyptus spp. ++	eucalyptus, red gum, blue gum, sugargum ++	Cal-IPC Invasive	A, B, C, D
Ficus carica	edible fig	Cal-IPC Invasive	A, C, D
Grevillea robusta	silkoat	Cal-IPC Watch List	D
Juniperus spp.	juniper	Preserve experience	D
Leptospermum laevigatum	Australian tea tree	Cal-IPC Watch List	B, D
Maytenus boaria	mayten	Cal-IPC Watch List	D, F
Myoporum laetum	myoporum	Cal-IPC Invasive	A, D
Nicotiana glauca *	tree tabacco *	Cal-IPC Invasive	C, D
Olea europaea	olive	Cal-IPC Invasive	D, E
Pistacia chinensis	Chinese pistache	Preserve experience	D
Pittosporum spp.	mock orange, Victorian box	Cal-IPC Invasive	C, D
Platanus x hispanica	London plane tree	Preserve experience	C, D
Prunus cerasifera	cherry plum	Cal-IPC Invasive	D, F
Pyrus calleryana	callery pear	Cal-IPC Watch List	D, F
Rhododendron spp.	rhododendron	Sudden oak death vector	A
Robinia pseudoacacia *	black locust *	Cal-IPC Invasive	C, D
Schinus spp.	pepper tree	Cal-IPC Invasive	D
Sesbania punicea	scarlet wisteria tree	Cal-IPC Invasive/CA Noxious	A, C, D
Tamarix spp.	saltcedar	Cal-IPC Invasive/CA Noxious	A, B, C, D, F
Triadica sebifera	Chinese tallow tree	Cal-IPC Invasive	C, D
Ulmus parvifolia	Chinese elm	Preserve experience	D
Vitex agnus-castus	chaste tree	Preserve experience	D
Vitex trifolia	chaste tree	Preserve experience	D
Washingtonia robusta	Mexican fan palm	Cal-IPC Invasive	A, B, C, D, F
, and the second	Prohibited Vine Sp	ecies	
SCIENTIFIC NAME	COMMON NAME	LISTING SOURCE	REASONING

Asparagus asparagoides	bridal creeper	Cal-IPC Invasive	A, D
Hedera canariensis	Algerian ivy	Cal-IPC Invasive	A, C, D
Hedera helix	English ivy	Cal-IPC Invasive	A, C, D
Macfadyena unguis-cati	cat's claw vine	Preserve experience	D
Phyllostachys aurea	bamboo	Preserve experience	A, B, C, D, E,
Vinca spp. *	periwinkle *	Cal-IPC Invasive	A, C, D

	Prohibited Common	Weeds		
Prohibited Fern Species				
SCIENTIFIC NAME	COMMON NAME	LISTING SOURCE	REASONING	
Ceratopteris thalictroides	watersprite	CA Noxious	D	
	Prohibited Grasses S	Species		
SCIENTIFIC NAME	COMMON NAME	LISTING SOURCE	REASONING	
Aegilops spp.	goat grass	Cal-IPC Invasive/CA Noxious	B, D	
Agrostis avenacea	Pacific bentgrass	Cal-IPC Invasive	A, D	
Avena barbata *	slender oat *	Cal-IPC Invasive	D	
Avena fatua *	wild oat *	Cal-IPC Invasive	D	
Brachypodium distachyon	purple false brome	Cal-IPC Invasive	A , B , D	
Brachypodium sylvaticum	slender false-brome	Cal-IPC Invasive/CA Noxious	A, B, D	
Bromus diandrus *	ripgut brome *	Cal-IPC Invasive	A , B , D	
Bromus hordeaceus *	soft brome *	Cal-IPC Invasive	B, D	
Bromus japonicus	Japanese brome	Cal-IPC Invasive	B, D	
Bromus madritensis ssp. Rubens	red brome	Cal-IPC Invasive	B, D	
Bromus tectorum	cheatgrass	Cal-IPC Invasive	A, B. D	
Elymus caput-medusae	medusahead	Cal-IPC Invasive/CA Noxious	A , B , C , D	
Elymus repens	quack grass	CA Noxious	C, D	
Festuca perennis *	Italian ryegrass *	Cal-IPC Invasive	B, D	
Heteropogon contortus	tanglehead	CA Noxious	D	
<u> </u>	Prohibited Flowers and Herbs Species			
SCIENTIFIC NAME	COMMON NAME	LISTING SOURCE	REASONING	
Ageratina adenophora	sticky snakeroot, Crofton weed	Cal-IPC Invasive	A, D, F	
Alhagi pseudalhagi	camelthorn	Cal-IPC Invasive/CA Noxious	D, E	
Allium paniculatum	panicled onion	CA Noxious	D	

Allium triquetrum	three-corner leek	Preserve experience	D
Allium vineale	wild garlic	CA Noxious	D
Ambrosia trifida	giant ragweed	CA Noxious	C, D
Azolla spp. *	water fern *	Federal noxious weed	A, D
Bassia hyssopifolia	thorn orache, five-hook bassia	Cal-IPC Invasive	D
Bellardia trixago	Mediterranean linseed	Cal-IPC Invasive	A, D
Berteroa incana	hoary alyssum	IPC Watch list	D, F
Bidens spp.	beggarticks, bur-marigold	Cal-IPC Invasive/CA Noxious	D
Brassica spp. *	mustard *	Cal-IPC Invasive	A , B , D
Cabomba caroliniana	fanwort	CA Noxious Weed	A, D
Carduus acanthoides	plumeless thistle	Cal-IPC Invasive/CA Noxious	A , D , F
Carduus nutans	musk thistle	Cal-IPC Invasive/CA Noxious	A, D
Carduus pycnocephalus *	Italian thistle *	Cal-IPC Invasive/CA Noxious	A, B, D, E, F
Carduus tenuiflorus	slenderflower thistle	Cal-IPC Invasive/CA Noxious	D, F
Carthamus lanatus	woolly distaff thistle	Cal-IPC Watch List	A , C , D
Centaurea calcitrapa	purple startistle	Cal-IPC Invasive/CA Noxious	C, D
Centaurea diffusa	diffuse knapweed	Cal-IPC Invasive/CA Noxious	C, D
Centaurea diluta	spotted knapweed	Cal-IPC Watch list/CA Noxious	D
Centaurea jacea ssp. pratensis	meadow knapweed	Cal-IPC Invasive/CA Noxious	D
Centaurea melitensis *	tocalote *	Cal-IPC Invasive/CA Noxious	A, D
Centaurea virgate var. squarrosa	squarerose knapweed	Cal-IPC Invasive/CA Noxious	A, C, D
Chondrilla juncea	rush skeletonweed	Cal-IPC Invasive/CA Noxious	C, D
Chorispora tenella	blue mustard	CA Noxious	D
Cirsium arvense	Canada thistle	Cal-IPC Invasive/CA Noxious	D
Cirsium vulgare *	bull thistle *	Cal-IPC Invasive/CA Noxious	A, D
Conium maculatum *	poison hemlock *	Cal-IPC Invasive	A, C, D
Convolvulus arvensis *	field bindweed *	CA Noxious	D
Echium plantagineum	Patterson's curse, vipers bugloss	Cal-IPC Watch List	A, D
Euphorbia terracina	carnation spurge	Cal-IPC Invasive/CA Noxious	C, D
Euphorbia virgata	leafy spurge	Cal-IPC Invasive/CA Noxious	A, C, D, F

Foeniculum vulgare *	sweet fennel *	Cal-IPC Invasive	A, D
Geranium purpureum	little robin	Cal-IPC Invasive	A, D
Geranium robertianum *	herb-robert *	Preserve experience	D
Glebionis coronaria	crown daisy	Cal-IPC Invasive	A, C, D
Halogeton glomeratus	halogeton	Cal-IPC Invasive/CA Noxious	C, D
Helianthus ciliaris	Texas blueweed	CA Noxious	D
Helminthotheca echioides *	bristle ox-tongue *	Cal-IPC Invasive	D
Hydrilla verticillata	hydrilla, Florida elodea	Cal-IPC Invasive/CA Noxious	A, C, D
Lepidium chalepense	lens-podded hoary cress	Cal-IPC Invasive/CA Noxious	A, D
Lepidium coronopus	swinecress	CA Noxious	D
Lepidium latifolium	perennial pepperweed	Cal-IPC Invasive/CA Noxious	A, C, D, E, F
Romulea rosea var. australis	sandcrocus	Cal-IPC Watch List	C, D
	Prohibited Shrubs S		
SCIENTIFIC NAME	COMMON NAME	LISTING SOURCE	REASONING
Genista spp. *	broom *	Cal-IPC Invasive/CA Noxious	A, B, C, D
Prosopis strombulifera	creeping mesquite	CA Noxious	D
	Prohibited Tree S ₁	<u>pecies</u>	
SCIENTIFIC NAME	COMMON NAME	LISTING SOURCE	REASONING
Albizia julibrissin	mimosa, silk tree	Cal-IPC Invasive	B , D , E
Cordyline australis	New Zealand cabbage tree	Cal-IPC Invasive	D
Halimodendron halodendron	Russian salt tree	CA Noxious	D
Ligustrum lucidum	glossy provet	Cal-IPC Invasive	C, D
	Prohibited Vine S	<u>pecies</u>	
SCIENTIFIC NAME	COMMON NAME	LISTING SOURCE	REASONING
Clematis vitalba	old man's beard	Cal-IPC Invasive	A, C, D
Passiflora tarminiana	banana passionfruit	Cal-IPC Watch List	A, C, D, F