

Don't plant a pest!

Give them an inch and they'll take an acre...



A dense stand of pampasgrass (*Cortaderia selloana*), a garden plant that has invaded California wildlands

Suggested alternatives for invasive garden plants of the greater San Francisco Bay Area

Gardening green

California is a gardener's dream. Our mild climate allows us to have fantastic gardens, showcasing a wide variety of ornamental plants from all around the world.

But sometimes, our garden plants "jump the fence" and invade natural areas. These invasive plants can become serious wildland weeds that threaten California's biodiversity and economy.

More than half of the plants currently damaging California's wildlands were originally introduced for landscaping purposes. Garden escapes like pampasgrass and Scotch broom may have desirable characteristics in a garden setting, but outside the garden these plants displace native species and alter natural processes.

Some of these plants show weedy tendencies in the garden as well. For example, English ivy can take over a yard and damage buildings and fences. Likewise, when birds drop seeds near a stream, English ivy can take over native vegetation and degrade wildlife habitat.

Gardeners don't plant invasive species intentionally. Like other Californians, gardeners have a deep respect for our state's rich natural heritage. The good news is that most garden plants behave perfectly well in their intended roles. By choosing suitable replacements for the few problem plants, we can save ourselves trouble and expense in our garden and help to protect the natural California landscape at the same time.



French broom invades Bay Area hillsides



Invasive ivy covers forest understory vegetation

Many of the characteristics that make a plant an attractive choice for the garden may also make it a successful invader:

Garden Plants:

Easy to propagate
Establish rapidly
Mature early
Abundant flowers
Pest/disease tolerant

Invasive Plants:

Broad germination
Colonizer
Mature early
Prolific seeds
Few natural predators

Invasive plants are by nature a regional problem. A plant that jumps out of the garden in one climate and habitat type may behave perfectly in another. The twelve problem plants listed here have escaped from gardens throughout the greater Bay Area.

How to use this brochure:

This brochure suggests safe alternatives for these plants. When you are buying new plants, consider these alternatives, or ask your local nursery for other non-invasive plants. If one of the invasive plants is already in your yard, especially if you live near wildlands, you may want to remove it and replace it with a recommended alternative.

Think about why you might plant one of the problem plants in the first place. Is it for the way it looks? If so, finding a replacement is often easy—some of the alternatives listed here are selected especially for their similar appearance. Or maybe you need a plant to fill a functional role, such as a groundcover that grows well in a shady place, or a border plant that likes full sun. Alternatives listed here thrive in the same environments as problem plants while offering added benefits such as attracting wildlife. Many of these alternatives are readily available, though others may be easiest to find in specialty or native plant nurseries.

- Full sun
- Part shade
- Full shade
- Drought tolerant
- Low water
- Moderate water
- Regular water
- High water

Both native and non-native plants have been recommended as alternatives in this brochure. Care has been taken to ensure that none of the recommended non-natives is invasive in the San Francisco Bay Area. However, plants can adapt over time, and there is no guarantee that some of these plants will not themselves become pests in the future. If you notice one of these alternatives invading natural areas, notify Cal-IPC. Pay close attention to plant names, since a few of our recommended plants may have invasive relatives—even in the same genus.

Shrubs

Don't Plant:

scarlet wisteria (*Sesbania punicea*)

Birds spread the fruits of this small tree or shrub away from urban plantings. It forms dense thickets along streams, impacting riparian habitat.



John Randall, The Nature Conservancy

Try Instead:

Brazilian flame bush (*Calliandra tweedii*)

A small tree or shrub with leaves similar to scarlet wisteria, and bright red flowers that attract hummingbirds and bloom all summer.



Ornamental Horticulture Research and Information Center, UC Davis

crape myrtle

(*Lagerstroemia species*)

This popular tree features lovely peeling bark and large clusters of showy flowers in white, pink, purple, and red. Dwarf varieties available.



© Monrovia

gold medallion tree

(*Cassia leptophylla*) Brilliant yellow flowers grace this tree throughout the summer, becoming attractive seed pods similar to those of scarlet wisteria. Larger than *Sesbania*, up to 25 feet tall.

showy island snapdragon

(*Galvezia speciosa*) A California native, this shrub has arching branches that reach up to eight feet tall. Produces copious red flowers that are irresistible to hummingbirds.

Shrubs, cont'd

Don't Plant:

broom (Scotch, French, Spanish, Portuguese)

(*Cytisus scoparius*, *Genista monspessulana*, *Spartium junceum*, *C. striatus*)

These four brooms have invaded over one million acres in California. The flowers produce thousands of seeds that build up in the soil over time, creating dense thickets that can obliterate entire plant communities. Brooms also create a serious fire hazard.



Bob Case

Note: "Sweet broom" (*Cytisus spachiamus* or *Genista racemosa*) is not known to be invasive. However, because we lack information on its potential for invading wildlands, we do not recommend it as a substitute for other brooms.

Try Instead:

forsythia

(*Forsythia x intermedia*) Often the first plant to bloom in spring, forsythia produces an astounding display of bright yellow flowers. Dozens of cultivars are available. Grows quickly.



© Monrovia

winter jasmine

(*Jasminum nudiflorum*) Arching green stems and bright yellow flowers that bloom in winter characterize this deciduous shrub.



Washington Park Arboretum

Shrubs, cont'd

cornelian-cherry dogwood

(*Cornus mas*) A small tree that produces bright yellow flowers, which become bright red, edible berries that birds enjoy. Leaves may turn red and purple in fall.



Missouri Botanical Garden

Japanese kerria

(*Kerria japonica*) Golden yellow flowers first appear in spring on this graceful shrub, and continue into summer. Stems remain bright green in winter after leaves fall.



© Monrovia

golden currant

(*Ribes aureum*) A California native, this shrub has a profusion of bright yellow flowers that turn into edible berries suitable for jams and jellies. Birds and butterflies love this plant.



Dr. Robert Thomas and Margaret Orr © 1999 California Academy of Sciences

Jerusalem safflower

(*Phlomis fruticosa*) Has bright yellow flowers and gray-green, textured leaves.



© Jay Creek Nursery

shrub hypericum

(*Hypericum 'Rowallane'*) Produces bright yellow flowers through the summer and fall. Tolerates poor soil.

Shrubs, cont'd

Don't Plant:

pampasgrass
(*Cortaderia selloana*)

Though a grass, grows to size of large shrub. Wind can carry the tiny seeds up to 20 miles. The massive size of each pampasgrass plant with its accumulated litter reduces wildlife habitat, limits recreational opportunities in conservation areas, and creates a serious fire hazard.



Brianna Richardson, 2003

Try Instead:

Cape thatching reed ☀️💧🌿
(*Chondropetalum tectorum*)



© Monrovia

This decorative, "grass-like" plant produces attractive flowers that are ideal in cut flower arrangements. Grows three to four feet tall.

Lindheimer's muhly grass ☀️💧🌿
(*Muhlenbergia lindheimeri*)

This large, dependable, and showy ornamental grass has blue-gray foliage and flowering spikes in the fall and winter. Good in poor soils, it grows up to five feet tall. Works well as a specimen plant or massed into an attractive border.



Bluestem Nursery, www.bluestem.ca

Shrubs, cont'd

San Diego sedge ☀️💧🌿

(*Carex spissa*) This large sedge has a form similar to that of an ornamental grass. Produces gray leaves to five feet tall and yellow, grass-like flowers in the spring.

Bigelow's bear grass ☀️💧🌿

(*Nolina bigelovii*) This agave can be mistaken for a large bunchgrass. Grows up to six feet tall, producing large, striking, white flowers in summer.

Don't Plant:

cotoneaster
(*Cotoneaster lacteus*,
C. pannosus)

Birds have spread the berries and seeds of these specimen shrubs to many different habitats. With their rapid growth and competitive roots, cotoneasters can displace native plants.



© Monrovia

Try Instead:

toyon ☀️💧🌿
(*Heteromeles arbutifolia* and cultivars)

This California native is an evergreen shrub that produces delicate white flowers and large clusters of brilliant red berries that birds love.



J. E. (Jed) and Bonnie McClellan
© 1999 California Academy of Sciences

Shrubs, cont'd

pineapple guava ☀️💧

(*Feijoa sellowiana*) This evergreen shrub has scarlet and white flowers, as delicious as they are beautiful, and waxy blue-green fruits with a minty-pineapple flavor. It is easily shaped into a small tree.



© Monrovia

strawberry tree ☀️💧🌿
(*Arbutus unedo*)

A gorgeous evergreen tree available in compact, shrub-like varieties that are easy to grow. It produces masses of beautiful white flowers, and textured, strawberry-like fruits.



© Monrovia

sandankwa viburnum ☀️💧🌿
(*Viburnum suspensum*)

This evergreen shrub produces tight clusters of small, waxy, pinkish-white flowers that give way to bright red berries. Several compact varieties are available.



© Courtesy Mark Shelby, University of Florida-IFAS Extension

calamondin orange ☀️💧
(*Citrus mitis* or *x Citrofortunella microcarpa*)

A natural hybrid between the tangerine and kumquat. Evergreen with shiny green leaves, and small, fragrant, waxy white flowers followed by long-lasting, bright orange fruits that make great marmalade.

Groundcovers & Perennials

Don't plant:

iceplant or Hottentot fig (*Carpobrotus edulis*)

Small mammals can carry seeds of iceplant from landscape settings to nearby coastal dunes and other sensitive areas. The vigorous groundcover forms impenetrable mats that compete directly with native vegetation, including several rare and threatened plants along the coast.



Charles Webber © 1998 California Academy of Sciences

Try Instead:



David Fenwick © 2003 The African Garden

hardy iceplant 🌞🌧️🌧️🌧️

(*Delosperma cooperi*)
A non-invasive iceplant with smaller, succulent leaves and brilliant violet-pink flowers May through October. Salt tolerant.

freeway daisy 🌞🌧️🌧️🌧️

(*Osteospermum fruticosum* and hybrids) Produces copious cheerful flowers, even under the harshest conditions. Grows well along the coast.



Brianna Richardson

wall germander 🌞🌧️🌧️

(*Teucrium chamaedrys*, or *T. x lucidrys*)
Can be sheared into a neat groundcover or allowed to grow to full height (~1 foot), and produces lavender flowers in the spring. Compact cultivars are available.

showy dewflower 🌞🌧️🌧️

(*Drosanthemum floribundum*)
A succulent with silver-gray leaves and an abundance of pink flowers. Tolerates some salt spray.

Groundcovers & Perennials, cont'd

Don't plant:

periwinkle (*Vinca major*)

This aggressive grower has trailing stems that root wherever they touch the soil. This ability to resprout from stem fragments enables periwinkle to spread rapidly in shady creeks and drainages, smothering the native plant community. (To date, *V. minor* has not been found to be invasive in California.)



Bob Case

English ivy, Algerian ivy (*Hedera helix*, *H. canariensis*)

When birds carry the seeds of these popular plants into wildlands, ivies can smother trees and understory plants by completely shading them, which also prevents regeneration of new tree and shrub seedlings. Ivy can harbor pests, such as rats and snails. Researchers hope to determine which ivies can be used safely.



Missouri Botanical Garden

Try Instead:



Missouri Botanical Garden

pachysandra 🌞🌧️🌧️🌧️

(*Pachysandra terminalis*)
Grows more slowly than *Vinca* and *Hedera*, but has a crisp, neat growth form. Variegated cultivars are available.

Serbian bellflower 🌞🌧️🌧️🌧️

(*Campanula poscharskyana*)
Produces a profusion of lilac-blue, star-shaped flowers spring to fall. Grows quickly and easily, but could overwhelm a carefully manicured garden.



Missouri Botanical Garden

ivory star jasmine or asian jasmine 🌞🌧️🌧️

(*Trachelospermum asiaticum*)
Has glossy, dark green leaves and pale yellow, pinwheel-shaped flowers with a jasmine scent.

Groundcovers & Perennials, cont'd

Taiwan raspberry 🌞🌧️🌧️🌧️

(*Rubus pentalobus*)
Forms a highly textured, evergreen groundcover that suppresses weeds. Foliage can turn a beautiful scarlet color in fall. Yellow, raspberry-like fruit is edible fresh or in preserves.



Incredible Edibles



El Natio Growers, Inc.

giant alumroot 🌞🌧️🌧️🌧️

(*Heuchera maxima* and hybrids)
This evergreen groundcover has heart-shaped leaves and tiny, bell-shaped, pink and white flowers that hang gracefully from thin stalks.



wild ginger 🌞🌧️🌧️

(*Asarum caudatum*)
A California native, this evergreen groundcover has heart-shaped leaves and unusual maroon flowers.



© 1999 Beatrice F. Howitt, California Academy of Sciences



Missouri Botanical Garden

bear's foot hellebore 🌞🌧️🌧️🌧️

(*Helleborus foetidus*)
Unusual foliage and delicate, complex flowers. The intriguing pale green and purple flowers often have a pleasant fragrance.

winter saxifrage 🌞🌧️🌧️

(*Bergenia cordifolia* and hybrids)
An evergreen groundcover, with large, dark green leaves, and clusters of bright, deep pink flowers.

Groundcovers & Perennials, cont'd

Don't plant:

licorice plant

(*Helichrysum petiolare*)

Seeds are wind dispersed, and the spreading branches will root at any point of contact with the ground. Licorice plant has been found displacing native plants in Golden Gate National Recreation Area and other sensitive coastal areas.



Missouri Botanical Garden

Try Instead:

coast purple sage

(*Salvia leucophylla*)

A California native with graceful silvery-green leaves, arching branches, and whorls of purple flowers in spring and summer.



© 2002 Lynn Watson

bush germander

(*Teucrium fruticans* and cultivars)

This plant has loosely-branching, silvery stems, gray-green leaves, and lavender flowers for most of the year.



© Monrovia

Jerusalem sage

(*Phlomis fruticosa*)

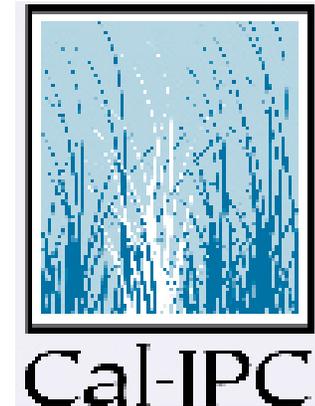
A dependable, silvery-leafed shrub with whorls of yellow flowers that will thrive in any well-drained soil.

'Powis Castle' Artemisia

This handsome plant has finely divided, gray foliage that grows to three feet tall. Lush and quick-growing, it is best for an informal garden.

St. Catherine's lace

(*Eriogonum giganteum*) A California native, this freely branching, grayish-white shrub has white flowers that attract butterflies. Could overwhelm a carefully manicured garden.



For additional information on invasive plant biology, management, impacts and research, please see

www.cal-ipc.org

California Invasive Plant Council
1442-A Walnut St., #462
Berkeley, CA 94709
(510) 843-3902
info@cal-ipc.org

This brochure designed in partnership with:

BMP Ecosciences; California Department of Food and Agriculture; California Native Plant Society; Contra Costa County Department of Agriculture; Daar/IPM Consulting Group; East Bay Municipal Utility District; Faultline Magazine; Golden Gate National Recreation Area; Marin County Department of Agriculture; Monrovia Nursery; The Nature Conservancy; Point Reyes National Seashore; Return of the Natives Restoration Education Project, CSUMB; Santa Clara County Weed Management Area; Sloat Garden Centers; Strybing Arboretum; Suncrest Nursery; UC Davis Arboretum; and UC Cooperative Extension.

Special thanks to:

University of California Botanical Garden, Berkeley