

## What Not to Plant

*Laura Lovett, Fall 2017*

If you love to garden, Marin County is a great place to live. Cold freezes are rare, winters are short, low hills provide wind protection and rains fall more frequently here than inland, making hospitable growing conditions for a huge variety of plants. Those same conditions, however, make it a good host for what are known as “invasives.”

Since settlers arrived in California, we have been importing and growing plants here from all corners of the world, especially those that thrive in similar Mediterranean climate zones. The majority of these are well-behaved visitors. Invasive plant species are those with characteristics such as fast growth and multiple methods of propagation. When combined with a lack of natural predators and diseases, these plants can spread from gardens and take over major areas of land and water, forcing out native plants and creating monocultures. It is this ability to suffocate and replace native vegetation—degrading the environment—that makes a particular plant an invasive weed.

Some invasive species were introduced with good intentions and then ran wild, and there are several that we still bring home from nurseries and plant in our garden that subsequently spread rapidly beyond them. If you live along a stream or in an area that’s foggy and damp, the potential for uncontrolled spreading is increased. While you may be a careful gardener, wind, floods, birds and other animals can spread plants to where they cause havoc. Here are a few of the plants that we hope are not in your garden and some suggestions on what else to plant that will grow to a similar size and form.

**Cotoneaster** (*Cotoneaster lacteus*, *Cotoneaster pannosus*) This pretty shrub produces thousands of berries each year, and those seeds are widely dispersed by birds, small mammals, water, and humans. Cotoneaster has an aggressive root system that displaces native plants. It appears quickly in disturbed sites and becomes established before native shrubs like Coffeeberry (*Frangula californica*) and Toyon (*Heteromeles arbutifolia*), which provide far more ecological value to the habitat in sunnier locations. Good options to use in shadier spots include Pink-flowering Currant (*Ribes sanguineum* var. *glutinosum*) and Snowberry (*Symphoricarpos albus*).

**Highway Ice Plant** (*Carpobrotus edulis*). This vigorous groundcover forms impenetrable mats that compete directly with native vegetation. It regenerates through seed and from small fragments of vegetation that spread by wind and water. Introduced as an ornamental plant, Ice Plant now inhabits our coastal scrub, grasslands, and bluffs, and covers large areas of Point Reyes dunes and beaches. Instead, plant Trailing Ice Plant (*Delosperma cooperi*), a non-invasive Ice Plant with smaller succulent leaves and brilliant violet-pink flowers that’s salt

tolerant and fire resistant. Although this plant is not native, it is a good alternative to its aggressive cousin. Native options include Beach Strawberry (*Fragaria chiloensis*), Seaside Daisy (*Erigeron glaucus*), and Dwarf Coyote Bush (*Baccharis pilularis* 'Twin Peaks' or 'Pigeon Point').

**Pride of Madeira** (*Echium candicans*). Very little will grow under an established *Echium candicans*. It is especially problematic in damp areas and along watercourses, where abundant moisture enables it to spread. It should not be planted near natural open space—new seedlings can sprout as much as 30 feet from the parent plant. Cut off the flower stalks before seeds mature to avoid this. But why would you plant something from across the Atlantic when you can enjoy a lovely native *Ceanothus* 'Concha,' Cleveland Sage (*Salvia clevelandii*, try varieties 'Poza Blue' or 'Winifred Gilman'), Island Bush Poppy (*Dendromecon harfordii*) or Flannel Bush (*Fremontodendron californicum*)? All of these are gorgeous shrubs in their own right.

**Mexican feather grass** (*Stipa tenuissima*). A feathery and attractive grass that's easy to grow, this pest appears in gardens all over Marin. It is particularly problematic in gardens near waterways as the seeds are easily dispersed by water. Seeds are also carried by livestock, humans, and wind; they adhere to clothing and fur; and can lay dormant for more than four years. This plant is now found in all types of landscapes around the county. Recommended alternatives include Blue Grama Grass (*Bouteloua gracilis* 'Blonde Ambition'), Prairie Dropseed (*Sporobolus airoides*), Red Fescue (*Festuca rubra*), and Slender Hairgrass (*Deschampsia elongata*).

**Pampas Grass** (*Cortaderia selloana*). This plant was introduced to California for ornamental use; then it took over many areas of the state. The fluffy plumes produce 100,000 seeds (or more) that blow away in the wind, making it nearly impossible to control. It tolerates winter frost, warmer summer temperatures, moderate drought, and produces significant amounts of extremely flammable biomass, increasing both the frequency and intensity of fire. For a substitute with the same striking stature, try Giant Sacaton (*Sporobolus wrightii*), which grows up to 10 feet tall and has showy, feathery seed heads in late summer. Also try Lindheimer's Muhly Grass (*Muhlenbergia lindheimeri*) or Giant Wild Rye (*Elymus condensatus*).

**Giant Reed Grass** (*Arundo donax*). This bamboo-like grass is a serious problem in damp areas and along streams. Its dense growth crowds out native plants, damages habitat, and creates a fire and flood hazard while providing little shade for fish populations in the stream. Giant Reed threatens riparian ecosystems by modifying the hydrology of the river, retaining sediment, and constricting flow. Alternatives include Lindheimer's Muhly Grass (*Muhlenbergia lindheimeri*), Deer Grass (*Muhlenbergia rigens*), Arroyo Willow (*Salix lasiolepis*), and Giant Wild Rye (*Elymus condensatus*).

**Running Bamboo** (usually *Phyllostachys* species but also *Pseudosasa*, *Chimonobambusa*, *Arundinaria*, *Semiarundinaria*, etc.). Technically a giant grass, Running Bamboo is one of the world's most invasive plants. Once established, it is next to impossible to control. Many homeowners plant bamboo to create a fast-growing privacy screen. Before you do, however, keep in mind it will not stay on your property but will invade much of your neighbor's as well. Bamboo grows particularly vigorously when near irrigated lawns and gardens. Bamboo barriers eventually break. Trust me, mine did! It took 30 hours of work sifting the soil to remove every shred of root that could sprout a new plant. If you already have it on your property, use a backhoe to remove as much root and soil as possible, then comb through the remainder for root fragments.

Better options include Island Mountain Mahogany (*Cercocarpus alnifolius*) which makes an evergreen shrub 4 to 6 feet wide and 12 feet tall; Holly-leaf Cherry (*Prunus ilicifolia*), also evergreen with white flowers and red fruit in fall that birds love; or California Cypress (*Cupressus goveniana*), very drought tolerant, to 15 feet tall and evergreen.

**Woodland Forget-me-not** (*Myosotis sylvatica*). A native of North Africa, this charming little plant grows like wildfire in shady, moist areas and in fields, meadows, woodlands and coastal forests. Be sure to pull or hoe the plants before they go to seed as they spread by seeds and by roots at the leaf nodes. Plants will soon re-sprout if you don't remove all of the roots. Good replacement choices include the very similar native Woodland Phacelia (*Phacelia bolanderi*), as well as Western Columbine (*Aquilegia formosa*), Creeping Snowberry (*Symphoricarpos mollis*), and Miner's Lettuce (*Claytonia perfoliata*).

**English Ivy** (*Hedera helix*). This European import shows up along roadways, on the coast, and outcompetes almost everything in California's forests as well. Ivy can smother understory vegetation, kill trees, and inhibit regeneration of understory plants, including new trees and shrubs. Replace it with any native groundcover and you'll immediately increase the biodiversity of your garden. Excellent choices include groundcover varieties of *Ceanothus* like 'Centennial,' 'Anchor Bay' or 'Carmel Creeper,' Bearberry (*Arctostaphylos uva-ursi*), Beach Strawberry (*Fragaria chiloensis*), and Yerba Buena (*Satureja douglasii*).

**Periwinkle** (*Vinca major*). Periwinkle has trailing stems that root wherever they touch the soil. Riparian zones are particularly sensitive. Fragments of periwinkle vines can break and wash downstream, spreading it rapidly in shady creeks and drainages where it smothers the native plant community. Any of the alternatives suggested for English ivy will grow where periwinkle has been removed. If you have a sunny site, try Bee's Bliss Sage (*Salvia* 'Bee's Bliss') or Seaside Daisy (*Erigeron glaucus*).

Native plants may not seem as showy as your favorite roses or hydrangeas, but they are essential to our natural world. These plants have had millennia to adapt

to our region's local climate and soils, co-evolving with insects, fungi, and microbes to form complex relationships that create the foundation of our ecosystem. Imported invasives that push these plants out create "green deserts" that do not provide any resources for pollinators or food for birds or wildlife. State agencies, parks and regional groups spend more than \$82 million a year to control them. We encourage you to help this effort to conserve our natural biodiversity by making thoughtful choices for your home garden. See [calscape.org](http://calscape.org) for a handy tool to help you pick the right plants.