

Plant right: Why smart garden choices protect the environment

May/June 2010 California Country magazine

Story by Kate Campbell

Photos by Paolo Vescia

Farmers and gardeners are eradicating invasive plants and introducing attractive alternatives.

Say “vinca” to avid gardener Suzanne Legallet and she asks, “Do you mean major or minor?” Farmer B.J. Burns rolls his eyes when questioned about pampas grass. Their responses hint at a serious problem—one that has been overlooked for years.

It turns out that some plants used to landscape home gardens and public roadsides turn from friends into foes. They have escaped and now infest thousands of acres of California agricultural land, open spaces and parks. Experts warn the problem is spreading.

For example, vinca major, commonly called periwinkle, is an aggressive plant that can damage the landscape by choking out native plants. Vinca minor, its more petite cousin, does not. Both can be transplanted from other locations or purchased at retail nurseries. Home gardeners often aren’t aware of the difference between the two plant types.

“Long ago this property was part of a larger estate,” said Legallet, who has been tending her acre-plus Atherton garden in San Mateo County for more than 25 years. “Over time the estate was divided into smaller parcels. But sometime, way back when, somebody planted vinca major. I’ve kept after it, but it still comes up. Even after all these years, I’m still pulling it out.”

Vinca major isn’t the only plant bully in the backyard. There are dozens of invasive plants that can veer out of control and degrade the environment, including arundo, blue gum eucalyptus, iceplants, saltcedar and pampas grass. In parks, along hiking trails and beside highways, these invaders are often deceptively attractive and natural looking, but they can spread faster than ants at a picnic.



Beautiful gardens, like Suzanne Legallet’s in Atherton, take constant care and lots of thought. Among the many things she considers when selecting plants is whether they’re likely to escape her yard and damage natural landscapes.

When these plants invade agricultural lands, the damage becomes especially worrisome. Although farmers continually deal with problems caused by invasive plants, environmental experts say the public generally isn't aware of the threat.

"Pampas grass is a big problem here," said Burns, a Pescadero farmer whose family has grown food crops along the coast for generations. These days he grows pumpkins, oats and yarrow for cut-flower arrangements and keeps a close eye out for pampas grass, continually digging it out before it has a chance to multiply.

"If you're not using a field for crops, pampas can take over very quickly and it continues moving east, away from the coast," Burns said.

He added that the white plumes go to seed in the fall and the winds carry them eastward, and, "if one person tries to control the spread, but a neighbor doesn't, it just keeps spreading. I'm several miles inland from where it was first planted and we're seeing it now on the hillsides and along the creeks.

"Even with cattle grazing on pastures, it continues to grow and increase. There are places around here so choked with pampas grass you can't use the land to grow anything anymore."

Legallet said that when she learned that invasive plants can be purchased at local nurseries, put into gardens and then under the right conditions escape to cost California taxpayers \$85 million a year to control or remove, she wanted to address the problem.

"Invasive plants are degrading our environment, threatening wildlife and water supplies, along with increasing wildfire hazards," Legallet said. "We're all responsible for looking after California and the land. Making sure we have the right plants in our own gardens is a good place to start."

Legallet takes this message to garden clubs when she makes presentations and offers "safe" plant selection advice as part of the consulting work she does on local garden projects.

She recommends tapping into online information sources, as well as asking plant nursery staff about plant characteristics. Another good source, she said, is PlantRight, a public outreach project of the California Horticultural Invasives Prevention partnership, known as Cal-HIP. PlantRight offers an online guide, with photos, of known invasive plants and safe alternatives that are hardy, attractive and readily available at garden centers.



"There are places around here so choked with pampas grass you can't use the land to grow anything anymore," says Pescadero farmer B.J. Burns.

For the last half-dozen years, a broad-based coalition, including the California Farm Bureau Federation, has been working with nursery plant businesses, environmental groups, public gardens, scientists and government agencies to help reduce the environmental threat posed by invasive ornamental plants.

Noting that more than half of California's invasive plants got their start in home gardens and commercial landscaping, Andrea Fox, who represents Farm Bureau in the Cal-HIP partnership, said people need to pay attention to what they plant, now more than ever.

“While the problem of invasive plants has been increasing, government dollars to eradicate these plant pests have been declining,” she said. “But that’s just one of the reasons we all need to know more about preventing invasive plants from taking over our landscapes, including our farm and ranch land.”

She points to iceplant, a species native to South Africa. It has invaded California's coastal bluffs and plateaus from San Francisco to Baja Mexico. It sucks moisture from the soil, out-competes native plants and builds a high level of nitrates, which kills native grasses and seeds.

How did it get there? Why was it planted? Just like pampas grass, which waves its fluffy plumes all along Highway 1, iceplant was intentionally planted by government agencies and property owners in the 1950s and '60s to reduce erosion and enhance scenic beauty. The invasive qualities of these plants weren't fully understood at the time.

Now both species, along with many others statewide, have invaded fragile ecosystems, damaging lands, including those used for crops and livestock grazing along the San Mateo County coast.

Burns has done pampas grass eradication work for the Peninsula Open Space Trust. Since its founding in 1977, the group has helped protect more than 60,000 acres as permanent open space and parkland in San Mateo, Santa Clara and Santa Cruz counties.

“They had quite an infestation of pampas grass throughout their lands in our area and decided to try and control it,” Burns said. “It had gotten so thick you could barely walk in some fields. The seeds were spreading like wildfire and infesting the surrounding area, too. Eventually the whole area could have become impassable for hiking or farming.

“I helped with the eradication work and it has been successful. You can really see the difference now,” he said, leaning into his shovel and tearing at a clump of knotted pampas grass roots.

“But when we started, there were 50-acre to 60-acre fields that were solid pampas grass. When we drove in, the tractor couldn't even touch the ground, it was so thick.”

PlantRight is helping farmers like Burns and devoted gardeners like Legallet to get the word out, said the Farm Bureau's Fox.

“It's important that those in the landscaping and nursery trades also understand the importance of not introducing invasive plants,” she added.



Intentionally planted in the 1950s and '60s along California's coast to control erosion and add beauty, pampas grass now has spread throughout the state's coastal areas, producing deceptively graceful white plumes, along with deep, matted roots. Pacific winds scatter the seeds everywhere.

Legallet followed a meandering path through the many “rooms” she has created in her award-winning garden. She settled on a handcrafted stone bench and explained how grasses of various heights mirror the garden’s shapely path and tie the rooms together, how the architecture of plants and the judicious use of color create a different feel in each part of the garden. She has carefully selected each plant and grouping for color, texture and shape.

“I’ve occasionally seen contractors at nurseries select plants for customers they can’t even name,” she said, shaking her head. “They’ll say, ‘Looks good, put it in the truck!’”

So if some professionals don’t know about invasive ornamentals, how can home gardeners tell at first glance if a plant they want to buy might create problems?

Legallet said, “Do your homework. It’s best to check before buying. We all need to understand that what we plant in our gardens and in our public landscapes can unintentionally damage our environment.

“The problem is real and the public can help protect California by making informed decisions about what they plant in their own backyards.”

Kate Campbell is a reporter for California Country. She can be reached at 800-698-FARM or kcampbell@californiacountry.org.

The good, the bad and how to know the difference

At first glance, many invasive plants look pretty in the garden or along public trails, but they can quickly take over an area and choke native plants essential to a healthy environment. Homeowners can help prevent this damage by checking plants before they’re purchased and planted.

“We’ve stopped carrying plants that are known to be invasive,” said Carolyn Villa Scott, garden consultant at Yamagami’s Nursery in Cupertino. “If we don’t buy the plants from wholesalers and then sell them to customers, the invasives don’t get out there.”

Confusion comes up, she said, when “sterile cultivars” of invasive plants are offered. These plants are bred not to seed or reproduce and tend to be dwarf varieties, like vinca minor and some dwarf hybrids of pampas grass.

“We try to avoid confusion and stay away from sterile cultivars. Instead we offer attractive alternatives,” Villa Scott said. “Customers accept them fairly well and understand the threat when it’s explained. We feel a social obligation to prevent problems in home gardens and the environment, and our customers usually share that view.”

For more information online, visit PlantRight at www.plantright.org or the California Invasive Plant Council at www.cal-ipc.org.

In the meantime, PlantRight offers these photos of four commonly planted invasive species with attractive alternatives.

Invasive Species

Attractive Alternatives



Periwinkle (Vinca Major)



**Alternative: Geranium
Rozanne**



Broom



**Alternative: Magical Gold
Forsythia**



Arundo



Alternative: Bambusa Alphonse



Pampas Grass



**Alternative: Leymus
Condensatus**