

GARDEN ESCAPE ARTISTS

Many Frequently-Planted Garden Plants Cause Terrible Trouble in the Wild

Your Garden Matters

Which plants you grow around your home or are planted in commercial settings matters in ways most people cannot begin to imagine. Many of the worst nonnative, invasive plants plaguing our natural and agricultural areas began their careers in home gardens or landscape settings. Some were – and most still are – sold and promoted for their showy beauty, fast growth, or bird- or butterfly-attracting attributes. Easy to grow and satisfying to look at, these innocent-seeming plants aren't content to remain where planted. They escape their garden settings, multiply, and cavort where they were never meant to be. In the process, once "introduced" into the natural landscape, they displace native plants that are the basis for the food chains that sustain the natural kingdom.



The purple-leaf variety of perilla mint is favored by gardeners as a splash of colorful foliage. If you must plant it, always remove all flower spikes before they set seed.



Purple- and green-leaf forms of perilla mint grow in profusion here next to a forest path.

pretty in their gardens.

The ornamental pear, often called Callery or Bradford pear, is another disaster story that began innocently. The Bradford pear, a cultivar of *Pyrus calleryana*, was first sold and promoted to the public in the 1960's by the USDA. Its prolific white spring flowers, flaming fall foliage, and neat oval shape seemed to offer a tree well suited to home and public spaces. But the ornamental tree had several drawbacks that were not observed until it was widely planted. Thought to be sterile, the ornamental pear tree actually produces great quantities of pea-sized green "pears" when cross-pollinated. Birds such as starlings (also an introduced species) devour the fruits; the seeds in the fruits pass right through the birds. The tree thus escapes neighborhoods where it is used as a lawn or street tree and gets planted all over the built and natural landscape. It is especially prolific in disturbed areas. Today, this invasive tree lines

Perilla mint, also called beefsteak plant, (*Perilla frutescens*) is a good example of an introduced garden plant gone badly wild. Valued both as a medicinal herb, salad green, and showy foliage plant, this mint family annual probably escaped from gardens many times and in many places. Now it grows aggressively where it is not wanted in floodplains, forests, hayfields and pastures where it can form dense monotypic stands. It is toxic to livestock if they eat it fresh, less so in hay. Ingested by cattle, the herb causes severe respiratory distress called *panting disease*. This medicinal plant has spread aggressively throughout the eastern US, especially in the Mid-Atlantic and South. Naturalized stands of perilla crowd out native plants that are food for wildlife. This destruction began innocently by people planting something



Nonnative ornamental pear trees now occur as weed trees up and down the roadsides in the Mid-Atlantic States, having escaped from nearby suburban yards and shopping malls.

highways, fills vacant lots, and encroaches on fields and pastures up and down the East Coast.

Perilla mint and ornamental pear are only two examples of the many cultivated plants that are bad actors in natural sites. Of course, not all garden and landscape plants are invasive. Most stay put. The concern comes from those plants that can readily escape cultivation and run rampant. Many people prefer to plant natives in their gardens instead because native plants provide a food source for birds and wildlife and the insects they depend upon.

Invasives for Sale

Unfortunately, many of the worst invasives in this region are commonly sold in garden centers and nurseries in Virginia and other states. Virginia's Department of Conservation and Recreation (DCR) lists 90 nonnative plant species that are invasive in the commonwealth. Approximately two-thirds of these are frequently planted in gardens or landscapes, and only a few of them are banned from sale in Virginia. Many other states have much tougher regulations governing the sale and importation of invasive plants than does Virginia. And they enforce them with hefty fines.

Beware the New

Avid gardeners often seek the newest and latest plants and plant trends. Some go for anything new and unusual to enjoy and display in their gardens. Unfortunately, some new garden plants may pose an unseen danger to our native landscapes. And, as with the Bradford pear, it may be years before their threat becomes evident; by then it may be too late.

Incised fumitory (*Corydalis incisa*) is an example of a "new" garden plant that is now threatening natural areas in several states. This showy, spring-bloomer from Asia, which draws admirers with its spires of lavender-pink spring flowers, was sold in the US only by one specialty mail-order nursery about 15 years ago. No one knows from whose garden the pretty plant first escaped. The plant was first noted in the wild during a 2005 survey by citizen scientists along the Bronx River in New York. Recently, incised fumewort has been found growing in several natural sites from



New York to Virginia, where it was creating dense stands that crowded out spring wildflowers. Incised fumewort spreads by explosive seedpods. When ripe, the pods burst and shoot hundreds of tiny, black seeds as far away as nine feet. Wildlife biologists fear this invasive will form ex-

tensive populations that could carpet the forest floor throughout the East, obliterating all wildflowers in its path. Early-detection-and-rapid-response actions could stop the plant's spread if authorities act soon enough and are adequately funded.

Know What You Grow

Most garden plants stay where they are planted and don't pose a danger to natural areas. However, just because a nonnative plant is not invasive is not reason enough to grow it. If you were to substitute a native tree for a nonnative one, you would be doing a good deed for Mother Nature. For instance, Japanese zelkova, a popular street tree, supports no insects and thus does not provide any bird food – almost all bird species feed their hatchlings insects. A native oak tree supports close to 500 different caterpillar species! And those caterpillars, which are preyed upon by birds and other insects, hatch into moths and butterflies that pollinate other plants.

It is possible to both have your plants and to garden responsibly. Growing locally native plants in your home garden and landscape is the very best way to have it all – beautiful grounds around your home and thriving natural areas where Nature can flourish. Some nonnative invasive plants pose a danger only if they are planted next to or near a natural area. If you live in a city and are not near a park, what you grow may not be important because there is nowhere for potentially invasive plants to escape. And if you live near a vulnerable area, some plants with the potential to escape may be okay as long as you *never* let them set seed – ever!

Most garden escape artists offer clues to their intentions. *Be wary of any nonnative garden plant that is:*

- ❖ Weedy within your garden – it can escape to natural areas.
- ❖ Supposed to attract birds with showy berries – birds will spread it outside your property.
- ❖ Advertised as easy to “naturalize” – that word really means it can be weedy and escape.
- ❖ Included in a “meadow garden” mix – such plants may be nonnative prolific seeders and will escape.
- ❖ Contained in a “wildflower” mix – these plants are rarely *native* wildflowers and can harm the environment.
- ❖ Touted as good for erosion control – translate this to mean it spreads aggressively by its roots.

Please Do Not Grow These Plants

The following garden plants are known to become invasive and to escape from gardens and commercial plantings.

SHRUBS

Berberis thunbergii & *cultivars* (Japanese barberry, purple barberry)
Buddleia davidii (butterfly bush)
Cytisus scoparius (Scotch broom)
Eleagnus angustifolia (Russian olive) & *E. pungens* (thorny olive)
Eleagnus umbellata (autumn olive)
Euonymus alatus (burning bush, winged euonymus)
Hibiscus syriacus (rose-of-Sharon)
Ligustrum sp. (privet)

Lonicera tatarica & *L. morrowii* (bush honeysuckle)
Nandina domestica (heavenly bamboo)
Reynoutria japonica syn. *Fallopia japonica* (Japanese knotweed)
Spirea japonica & *Spirea x bumalda* (spirea, meadowsweet)
Viburnum dilatatum (linden viburnum) & *V. setigerum* (tea viburnum)

VINES & GROUNDCOVERS

Actinidia arguta (hardy kiwi)
Ajuga reptans (bugleweed)
Akebia quinata (five-leaf akebia)
Ampelopsis brevipedunculata (porcelain-berry)
Celastrus orbiculatus (Oriental bittersweet)
Clematis ternata syn. *C. maximowiziana* (sweet autumn clematis)
Euonymus fortunei & *cultivars* (wintercreeper)
Hedera helix (English ivy)
Houttuynia cordata (chameleon plant)
Ipomea coccinea (cardinal climber)
Ipomea purpurea and other species (morning glory)
Lonicera japonica (Japanese honeysuckle)
Vinca minor & *Vinca major* (periwinkle, myrtle)
Vincetoxicum rossicum (swallowwort)
Wisteria chinensis & *W. japonica* (Chinese & Japanese wisteria)

TREES

Acer platanoides & *cultivars* (Norway maple)
Albizia julibrissin (mimosa, silktree)
Koelreuteria paniculata (golden rain tree)
Paulownia tomentosa (princess tree)
Phellodendron amurense (Amur corktree)
Pyrus calleryana *cultivars* (Bradford pear, ornamental pear)
Quercus acutissima (sawtooth oak)
Sophora japonica (Japanese pagoda tree)
Styrax japonicus (Japanese snowbell)
Ulmus parvifolia (lacebark elm) & *Ulmus siberica* (Siberian elm)

ORNAMENTAL GRASSES

Arundo donax (giant reed)
Bambusa & *Phyllostachys* species & *cultivars* (bamboo)
Imperata cylindrica & *cultivars* (cogongrass, Japanese bloodgrass)
Miscanthus sinensis & *cultivars* (Chinese silver grass, miscanthus)
Pennisetum alopecuroides & *cultivars* (fountain grass)
Pennisetum setaceum & *cultivars* (crimson fountain grass)

GARDEN PERENNIALS & ANNUALS

Aegopodium podagraria (goutweed)
Arum italicum (Italian arum)
Campanula rapunculoides (creeping bellflower)
Centaurea cyanus (annual cornflower)
Corydalis lutea (yellow fumewort)
Ficaria verna (lesser celandine)
Glechoma hederacea (ground ivy)
Hesperis matronalis (dame's rocket)
Hyacinthoides hispanica (Spanish bluebells)
Iris pseudoacorus (yellow water iris)
Lamium galeobdolon (yellow archangel)
Lamium maculata (spotted deadnettle)
Lathyrus latifolius (everlasting pea)
Lunaria annua (honesty)
Lythrum salicaria & *L. virgatum* & *cultivars* (purple loosestrife)

EDIBLE & MEDICINAL HERBS

Alliaria petiolata (garlic mustard)
Foeniculum vulgare (fennel)
Hypericum perforatum (common St. John's wort)
Melissa officinalis (lemon balm)
Perilla frutescens (perilla mint, beefsteak plant)
Valeriana officinalis (common valerian)