The Native Plant Center at Westchester Community College Brooke Beebe and Carolyn Summers April 2006

12 Common Invasive Species and Native Substitutes

The following list includes invasive species still sold by nurseries and specified by landscape designers. Underneath each invasive species is a group of native species that would make appropriate substitutes, both from an aesthetic and functional point of view. This list is only a starting point; there are many more possibilities.

Most of the substitutes listed are native to New York State; exceptions were made where southeastern natives made the best substitutes.

TREES

Norway maple

Native maple substitutes include *Acer rubrum*, *A. saccharum*, *A. saccharinum* and *A. x freemanii*. All maples, including Norway maple, share the shallow-rooted characteristic that causes problems with sidewalks, but all native maples are excellent shade trees in the garden landscape. Native oaks (several *Quercus* species) are the best street trees because most are tap-rooted, drought- and salt-resistant. Ashes (*Fraxinus spp.*) and new disease-resistant native elms (*Ulmus americana* 'Princeton' or 'Valley Forge') also make excellent substitutes for Norway maple. For those who must have purple foliage, there is a male white ash cultivar, 'Autumn Purple'.

Callery pear

Native ornamental trees that bloom in early spring include the fragrant American plum, *Prunus americana*; redbud, *Cercis canadensis*; *Amelanchiers* (including *A. arborea*, *A. laevis* and *A. x lamarkii*), Shadbush; *Crateagus spp*. (hawthorns); and the native dogwood, *Cornus florida*. American plum blooms before it leafs out and is probably closest to Callery pear in respect of bloom; shadbush and hawthorns are probably closer in terms of growth form. All but redbud have white flowers; white forms of redbud (as well as purple-leaf forms) can be found in nurseries.

SHRUBS

Barberries

Barberries are commonly planted as traffic control; people and dogs avoid the thorns, and, unfortunately, deer will not eat them. Native brambles (*Rubus spp.*) and roses (*Rosa virginana*, *R. caroliniana*, *R.setigera*, etc.) are the best

substitute for this purpose. Barberries also have red berries in fall; good substitutes for this characteristic are winterberry, *Ilex verticillata* and American cranberry, *Viburnum americanum*. A good substitute for the purple-leaf barberries is *Physocarpus opulifolius* (Common ninebark) 'Diabolo,' with white flowers in late spring and deep wine-colored, maple-shaped leaves. All of the preceding native substitutes can be clipped to conform to the typical rounded barberry shape, if necessary.

Forsythia

In our region, Spicebush, *Lindera benzoin*, blooms just a few days after forsythia begins. The female plants have delicate, lightly fragrant yellow blossoms that produce an ethereal effect, as compared with the blazing forsythias. Pussywillows, *Salix discolor*, produce a similar effect at a similar time. Wayfaring tree is our earliest blooming native viburnum (*Viburnum lantanoides*) with showy white blossoms. The native hypericum shrubs (*Hypericum kalmianum*, *H. frondosum*, *H. prolificum* and *H. densiflorum*), produce showy yellow balls of flowers in midsummer.

Burning bush

The fall color of highbush blueberry (*Vaccinium corymbosum*) foliage equals that of burning bush. Other good substitutes include wild raisin, *Viburnum cassinoides*, and sumacs, especially winged sumac, *Rhus coppalina*. As evergreen hedging material, inkberry (*Ilex glabra*) has no equal and it is DEER RESISTANT.

VINES

Bittersweet and Porcelain berry

Our most pernicious invaders, Porcelain berry, *Ampelopsis brevipedunculata*, and Oriental bittersweet, *Celastrus orbiculata*, all have close native relatives that make wonderful substitutes. The most obvious example is native bittersweet, *Celastrus scandens*, as a substitute for the oriental species. Our wild native grapes, *Vitis spp.*, and their domesticated forms, such as 'Concord,' are good substitutes for highly invasive porcelain berry in a garden situation.

Wisteria

Our native southeastern wisterias, *Wisteria macrostachya* and *W. frutescens*, are practically indistinguishable from the oriental wisterias. Fortunately, they are not nearly as rampant and make excellent substitutes. They can be found in both white and lavender-blue flowering forms.

English Ivy

There is no native vine that remains evergreen through winter in our zone. However, there are many fine native vines that will tolerate some shade, although productivity may be somewhat less. These include our native trumpet honeysuckle, *Lonicera sempervirens*; Virginia creeper, *Parthenocissus quinquefolia*; and pipevine, *Aristolochia tomentosa*. Ivy is also used as a groundcover on slopes; in sunny situations, a good evergreen substitute is creeping or blue rug juniper (*Juniperus communis*, many cultivars available).

PERENNIALS/GRASSES

Purple loosestrife

Many tall purple flowered perennials such as vervain, *Verbena hastata*; tall willow herb, *Epilobium angustifolius*; eastern lupine, *Lupinus perennis*; and all of the *Liatris* species (blazing stars) make excellent substitutes for purple loosestrife.

Miscanthus, Pampas grass (and other non-native grasses)

Not all of the non-native grasses have proven to be invasive, but the potential is certainly there. Native grasses come in many heights and forms and should replace non-natives in the increasingly common "naturalistic" or "New American" landscapes, as a precaution. *Panicum virgatum, Sorghastrum nutans*, Indian grass, and *Andropogon gerardii*, big bluestem, are good replacements for taller, upright grasses such as Miscanthus. *Sporobolus heterolepis*, prairie dropseed; *Schizachyrium scoparium*, little bluestem; purple lovegrass, *Eragrostis spectabilis*; and *Muhlenbergia capillaris*, pink muhly grass are all good substitutes for fountain grass and other shorter grasses.

GROUNDCOVERS

Vinca

Evergreen moss phlox, *Phlox subulata*, and bearberry, *Arctostaphylos uva-ursi*, make good substitutes for Vinca in sunny situations, while violets, *Viola spp.*, are excellent in shade. Wintergreen, *Gaultheria procumbens*, is an excellent evergreen substitute but requires good drainage and even moisture during establishment.

Goutweed (Aegopodium)

Plant anything but goutweed; it spreads everywhere by both seeds and runners and is impossible to remove. Canada anemone, *Anemone canadensis*; Canada ginger, *Asarum canadense*; white woodland aster, *Aster divaricatus*, and all ferns are excellent choices.