



NATIVE ALTERNATIVES TO INVASIVE PLANTS

PURPOSE

- To show why native plants are preferable to alien invasive plants.
- To provide a plant list of native plants as a good alternative to alien plants .

Alien Invasives-what are they?

- Plants introduced by humans after European settlement in Virginia.
- Mostly Eurasian
- Wild collected or purchase of wild collected plants
- Many invasives may also be introduced from a different region of the country or state

Definition of invasive by U.S. government

- Invasive plant species “that is not native to the ecosystem under consideration and whose introduction causes or is likely to cause economic or environmental harm or harm to human health.”

Characteristics of invasive plants

- 1. rapid growth and maturity
- 2. prolific seed production
- 3. highly successful seed dispersal, germination, and colonization
- 4. rampant vegetative spread
- 5. ability to outcompete native species
- 6. high cost of removal and control

Invasives are harmful

- 1.alter structure and function of the ecosystem
- 2.difficult to control and eradicate
- 3.are perceived as exotic and therefore sold in garden centers
- 4.frequently used as “problem solvers” especially along highways for erosion control in disturbed areas where they thrive
- 5.displace native-seeds distributed by birds and other wild animals.
6. natives mix with aliens. Thus affecting the gene pool of the native plant
- 7.free of natural controls (insects and diseases) that would keep them in check in their native environments.

Why we select invasives

- More exotic
- Larger fleshier leaves
- Longer growing season
- Only thing available at the garden center
- We don't know any better, but now we will.

Natives-what are they?

- Native plants are plants occurring naturally in a specific region.
- Native plants evolved large taproots for survival and often small leaves to conserve water.
- Natives can be invasive-but most are not.
- There are medicinal benefits from many.

Benefits of Native Plants

- More likely to thrive under local conditions
- Maintain or improve soil fertility
- Reduce erosion
- Require less fertilizer and pesticides than aliens
- Ruggedness and resistance to drought and insects.
- Food for livestock foraging.
- 4 Seasons of interest in the landscape.

Criteria for selecting native plants as alternatives to invasive plants

1. Is the plant locally or regionally native?
2. Are the flowers or fruit the same color?
3. Is the inflorescence the same shape and size?
4. Does the plant bloom at the same time?
5. Is the foliage similar in form, texture, and color?
6. Is the shape and size similar?
7. Does the plant have multiple seasons of interest?
8. Is the root system similar?
9. Is the plant easy to establish and maintain?
10. Will it grow in the same hardiness zone and under the same conditions?



Plants Highly Invasive in Virginia

Celastrus orbiculata-Oriental bittersweet

- Native alternatives
 - Celastrus scandens-American bittersweet
 - Climbing vine with rounded foliage
 - Large red/orange berries, yellow fall color



Celastrus orbiculata-Oriental bittersweet

Native Alternative-
Parthenocissus
quinquefolia-Virginia
creeper

- climbing vine
- blue berries on red stalks
- flaming autumn color



Hedera helix- English Ivy

- Native alternative-
Pachysandra procumbens-
Alleghany Spurge
 - Groundcover
 - dense slow spreading
evergreen leaves
 - Fuzzy spring flowers
 - Rich winter foliage color



Euonymus alata-Winged Burning Bush

**Native alternative-Aronia
melanocarpa-Black
Chokeberry**

- Rounded small to medium shrub
- Attracts birds
- Showy white spring flowers
- Glossy foliage
- Clusters of edible black berries
- Brilliant red fall color



Euonymus alata-Winged Burning Bush

- Vaccinium corymbosum-Highbush Blueberry

- Round medium shrub
- 4x10 feet wide
- White flowers
- Blue edible berries
- Red fall foliage
- Good plant for the woodland garden.



Imperata cylindrical-Cogon Grass

Native alternative-
Andropogon
glomeratus-Bushy
Beardgrass

- Clumping perennial grass
- Large leafy seed heads
- Tawny autumn color



Lespedeza cuneata-Chinese Lespedeza

Native alternative-
Lespedeza capita-
Roundheaded Bush
Clover

- Nitrogen fixing legume
- Dense flower heads on leafy stalks
- Yellow to rust fall color
- Winter seed heads



Lonicera japonica

Native alternative-
Lonicera sempervirens-
Scarlet Honeysuckle

- Deciduous vine
- Scarlet flowers
- Small red berries
- Gray/green leaves
- Exfoliating winter bark



Lonicera morrowii-Morrow's Honeysuckle

Native alternative

- Ilex verticillata-Winterberry
 - Medium to large shrub
 - 6-12 feet tall and wide
 - Quilted foliage
 - Brilliant red berries
 - Twiggy winter silhouette



Acer platanoides- Norway Maple

Native alternative

- Acer rubrum –Red Maple

- Fast growing
- Drought tolerant
- 50-80 feet tall
- Red autumn color
- 3-5 lobed leaves



Acer platanoides- Norway Maple

Native alternative-Nyssa
sylvatica-Black Gum

- Oval to pyramidal glassy leaves
- Brilliant red color
- Small black fruit
- Full sun
- Tolerates soggy soil and drought



Albizia julibrissin-Mimosa Silk Tree

Native alternative-Cercis canadensis - Redbud

- Short lived 30-50 years
- Rose-purple, pink and white flowers
- 20-35 feet tall and wide
- Heart foliage
- Yellow fall color



Lythrum salicaria-Purple Loosestrife

Native alternative

- *Liatris spicata*-Blazing Star
 - Erect 2-4 foot spikes of purple flowers
 - Blooms midsummer
 - Bottlebrush stems



Copyright © Jari Särkkä

Lythrum salicaria-Purple Loosestrife

Native alternative-
Chamerion
angustifolium-Fireweed

- Perennial with elongated spires
- Bright rose/pink flowers
- Narrow foliage on tall stems
- Yellow fall color



Berberis thunbergii- Japanese Barberry

Native alternative-Fothergilla
gardenii-Witch Alder

- Small rounded shrub
- 3-5 feet tall and wide
- Fuzzy white flowers early spring
- Orange to burgundy fall color



Berberis thunbergii- Japanese Barberry

Native Alternative- *Itea virginica* – Sweetspire

- Arching round form
- Fragrant white flower clusters
- Flaming autumn color



Buddleia davidii – Butterfly bush

Native alternative-
Cephalanthus
occidentalis-Buttonbush

- Rounded irregular form
- Fuzzy white summer flowers
- Deep glossy green foliage
- Yellow autumn color



Polygonum cuspidatum (Fallopia japonica)-Japanese Knotweed

Native alternative-
Aruncus dioicus-
Goatsbeard

- Plumes of creamy flower
- Lush divided foliage with quilted leaves
- Yellow fall color
- Dried seed heads



Ranunculus ficaria-Lesser Celandine

Native alternative-
Chrysogonum
virginianum-Green-and-
Gold

- Yellow flowers spring and summer
- Velvet deep green foliage



Euonymus fortunei-Wintercreeper

Native alternative-
Arctostaphylos uva-ursi
– Bearberry

- Groundcover shrub
- 2-6 inches tall X 1-6 inches wide
- Small waxy evergreen foliage
- Large red berries



Rosa multiflora – Multiflora Rose

**Native alternative-Clethra
alnifolia – Summersweet,
Sweet Pepperbush**

- White spikes of fragrant summer flowers
- Attracts butterflies
- 4-8 feet tall
- Yellow autumn color
- Charcoal gray seedheads



Goals of the Virginia Invasive Alien Plant Project

- Identify alien plant species that have potential to become invasive in Virginia.
- Document the threat of these plants
- Educate the public about this issue.
- Develop solutions to problem of invasive alien plants.
- Develop and use sound practices for control of invasive species in natural areas.

What can we do as individuals?

- Replace and /or add native plants to your landscapes.
- Purchase seeds and plants for natives that have been produced by local growers.
- After a native plant is purchased by sure to plant it in the best place for its particular growth requirements.
- Limit alien plantings within your own landscape.