Return of the Natives!
Incorporating NC native plants into your landscapes

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Looking Back . . . .

- Early settlers worked hard to clear native vegetation and drain low areas to make room for crops, homes, and towns.
Growing Forward . . . .

- As awareness of our impact on the environment increases, so does interest in landscaping with native plants.

Rain gardens are often planted with native plants.
Growing Forward: Why plant natives?

- For beauty and appreciation of the plants that define our region

Bradford Pear, Anywhere, USA

Fringetree, *Chionanthus virginicus*, native SE USA
Why plant natives?

- Because they grow well!
- Many are tough and durable
  - Locally adapted to climate, insects
- Must still choose right plant for site conditions

Yucca tolerates drought, salt spray, poor soils and is deer resistant!
In this photo, Yucca ‘Color Guard’
Why plant natives?

- For diversity
  - Landscapes with many different species are healthier and more resilient

- For conservation
  - As wild areas disappear, so do native species

Many woodland edges, once home to many species, are now maintained with herbicides.
Why plant natives?

- **For Wildlife**
  - Native plants provide food and shelter for many native insects, reptiles, amphibians, birds, and mammals

- In our quest for “pest free” landscapes we often overlook the value of insects
Why Natives?

- The food chain for native wildlife begins with native plants
- **Native insects** survive and reproduce better on **native plants**
  - Native plants coevolved with native insects – can tolerate feeding damage
- For more on this topic read *Bringing Nature Home* by D. Tallamy
Using Natives in the Landscape

- Natives can fit into any landscape!
- How you use natives and which species you choose to plant depends on your philosophy and what you want from your landscape:
  - Aesthetics – what’s your definition
  - Intentional appearance vs. natural
  - Wildlife – birds, pollinators, etc
  - Do you want to restore natural plant communities
Traditional Landscapes

- Natives can fit in!
- Typically highly managed, weeds not allowed!
- Stick with native plants that stay in place
Natural Style Landscapes

- Informal style
- Minimal turf
- Many different plants
- Maintain by ‘editing’
- Many natives fit this type of landscape
Going Wild

- Preserve or restore the natural landscape
- Plant species native to your site, or allow plants to regenerate on their own
  - Remove only non-natives
- Explore the landscape instead of manage it
Your landscape may contain elements of all three
Choosing Native Plants

- #1, Right Plant, Right Place
  - Soil Type and Drainage
    - Sand, clay, pH
  - Sun – Shade

- Choose plants that fit your landscape style
  - Must know plant characteristics

Swamp Mallow is a tall, bushy perennial that prefers wet sites
Right Plant, Right Place!

- Natives are not a magic bullet!
- Must choose plants adapted to your conditions
- Pay close attention to drainage
- Some man-made conditions do not exist in nature – must correct
  - Compacted soils
Choosing Native Plants

- How strict you define native will depend on your reason for planting them
- If choosing for adaptability, stay within your ecoregion
- If restoring habitat, stay with local area, try to get plants grown from local area

Bee balm, *Mondarda didyma*, only occurs in NC mountain counties – should it be included in a coastal plains native garden?
Ecoregions

- Based on similarities in plant and animal species, climate, soils, and the general topography of the landscape.

Choosing Native Plants: Species versus Cultivars

- Again, depends on your reason for planting

- **Cultivars:** Named Varieties, genetically identical = less diversity but more predictable appearance
  - Better fit for traditional landscapes

- **Species:** more diverse, if seed grown each plant unique!

Which is right for you: Wild Redbud or ‘Forest Pansy’ Redbud
Planting Natives for Wildlife

- Diversity!!!
  - Many different species
    - Bloom/fruit different seasons
    - Berries, Seed, Nuts
    - Evergreen and deciduous

- Plant in layers
  - Canopy, understory/shrub layer, groundcover/herbaceous

- Plant in groups

Eupatorium dubium, Joe Pye Weed
Planting Natives for Wildlife

- Include larval host plants for butterflies
- Minimize pesticides!
- Tolerate some damage - Insects are a major food source for birds!
- Going Native website (NCSU): http://www.ncsu.edu/goingnative

Spicebush swallowtail caterpillars feed on spicebush and sassafrass
Choosing Native Plants

“Mainstream Natives”

- Readily available from garden centers and nurseries
  - Easy to propagate and produce in containers
- Adaptable to wide variety of conditions
- Showy flowers, fruits, or foliage

Dwarf Yaupon is readily available and widely used in landscapes
Choosing Native Plants

“Specialty Natives”

- Usually slower growing or more difficult to propagate
- May need specific conditions to grow well
- May have a ‘wilder’ look or more subtle beauty
- Available mainly from specialty native plant nurseries

Pinxterflower, *R. periclymenoides*, a native deciduous azalea, is generally only available from native plant nurseries.
Great Natives for Eastern NC Landscapes

Trees, Shrubs, Vines, Grasses and Perennials
Native Trees

- Many species are readily available from nurseries and garden centers
- Both large canopy trees (over 30’) and smaller understory trees (under 30’)
- Essential for wildlife habitat

Redbud is an adaptable small flowering tree native throughout NC
River Birch
_Betula nigra_

- Native throughout NC, streams and riverbanks
- "Mainstream"
- Can grow 50’ tall
- Papery bark
- Cultivars: ‘Heritage’, ‘Duraheat’
- Grows fast, tolerate very wet to average conditions

Spiny witch-hazel gall aphid – attract ladybug larvae
Bald Cypress

*Taxodium distichum*

- Native to Coastal Plains and eastern Piedmont, along rivers
- "Mainstream"
- Very adaptable – will grow in wet or dry soils
- 60’-80’ at maturity
- Very wind resistant
- Deciduous foliage, feathery texture
Red Maple
*Acer rubrum*

- Native throughout NC
- “Mainstream”
- Grows 40’-60’ x 40’-60’
- Best in moist soils
- Flowers and seed are attractive in spring
- Excellent fall color
- Cultivars:
  - ‘October Glory’
  - ‘Red Sunset’
Southern Sugar Maple
*Acer barbatum*

- Native to Piedmont and Coastal Plains
- “Specialty”
- 20’ – 25’ tall
- Prefers moist soil
- Yellow fall color
- *Acer leucoderme*, Chalkbark Maple is similar, more drought tolerant, occurs in Piedmont
Redbud
*Cercis canadensis*

- Native throughout NC
- “Mainstream”
- Blooms early spring, deciduous
- Lives ~ 20 yrs.
- Sun – pt. shade, well drained soil
- Fuller in sun
Redbud Cultivars

'Forest Pansy'

'Hearts of Gold'

'Royal White'
Fringe Tree

*Chionanthus virginicus*

- Native throughout NC in moist woodlands
- “Mainstream”
- Deciduous shrub or small tree to 10’-20’
- Sun to part shade, moist to well drained soil
- Showy white lacy flowers in the spring – males are heavier bloomers
- Female plants have dark blue berries in late summer
- Late season leaf spot common, not harmful
Native to Coastal Plains and eastern Piedmont

“Mainstream”

Grows 20’-30’ tall

Often grows with multiple trunks

Attractive red seeds in fall are eaten by birds

Sun to part shade, moist soil – tolerates flooding

Mostly deciduous – southern variety, var. australis, more evergreen
Red Buckeye
*Aesculus pavia*

- Native to lower Coastal Plains and Cape Fear River Basin
- “Specialty”
- Small deciduous tree – grows 10’-15’ high and 10’ wide
- Beautiful spring flowers
- Best in moist soil and afternoon shade
- Foliage is deer resistant
- Attracts hummingbirds!
- Often defoliates early (Sept)
Blackhaw Viburnum

*Viburnum prunifolium*

- Native throughout NC
- “Specialty”
- Grows 15’ to 20’ tall, often multi-stemmed
- Clusters of white flowers in spring
- Berries provide food for birds in the fall
- Great fall color!
- Sun to part shade
- Moist, well drained soil
- *Viburnum rufidulum*, Rusty Haw, is similar
Other Native Trees for NC Landscapes

Large Trees
- Oaks
  - Live Oak
  - Laurel Oak
  - Willow Oak
  - Shumard Oak
- American Beech
- Longleaf Pine
- Southern Magnolia

Small Trees
- Yaupon
- Flowering Dogwood
- American Holly
- Serviceberry
- Pawpaw
- Sassafrass
- Parsley Leaf Hawthorn
Native Shrubs

- Many are readily available – especially cultivars
- Most are deciduous
- Most are native to wet areas
- Many coastal evergreen shrubs are difficult to grow in cultivation

Fetterbush, *Lyonia lucida*

Coastal Leucothoe, *Leucothoe axillaris*

Both are common in low woodlands, but rarely do well in home landscapes.
Possumhaw Viburnum
Viburnum nudum

- Native throughout NC
- "Mainstream"
- Deciduous shrub – looks evergreen
- Grows 6-10 feet tall
- For moist to wet soils, sun to light shade
- Excellent fall color
- Fruit changes color as it ripens, from green to red, pink, and finally blue
- Cultivars: ‘Winterthur’ and ‘Brandywine’
American Beautyberry
*Callicarpa americana*

- Native throughout NC
- "Mainstream"
- Tough native shrub for sun to part shade
- Brilliant magenta berries in late summer and fall
- Berries attract songbirds, including goldfinches
- Grows 3’-10’ tall and wide, depending on soil moisture
- Can be cut back to 1’ in early spring to produce denser shrub
- Tolerates moist or dry soil, once established
Buttonbush
*Cephalanthus occidentalis*

- Native throughout NC
- “Specialty”
- Deciduous shrub, grows 6’-10’ – cut back to ~2’ in early spring to keep tighter
- For sun to part shade, Moist to wet soil
- Can grow in up to 3’ of standing water
- Unusual white globe like flowers in summer
- Excellent nectar source for butterflies
- DEER RESISTANT!
Sweet Pepperbush
_Clethra alnifolia_

- Native Coastal Plains, eastern Piedmont, Sandhills
- “Mainstream”
- Deciduous - yellow fall color
- Sun – part shade, well drained or moist soil
- Cultivars:
  - ‘Hummingbird’, ‘Sixteen Candles’, dwarf white, 3’ x 6’
  - ‘Ruby Spice’, upright pink, 8’ x 5’
- Blooms in June-July, exceptional fragrance, attract butterflies and pollinators
Sweet Pepperbush

‘Ruby Spice’

‘Sixteen Candles’
Virginia Sweetspire
Itea virginica

- Native throughout NC, wetlands
- "Mainstream"
- Deciduous shrub – great fall color
- Sun to part shade, wet or well drained soil, suckers
- Cultivars:
  - ‘Henry’s Garnet’, 4’-6’ x 4’-6’
  - ‘Little Henry’, dwarf - 3’ x 3’
- Flowers in May-June
- Deer Love It!
Virginia Sweetspire
Hearts-a-Burstin’
*Euonymus americanus*

- Native throughout NC
- “Specialty”
- Deciduous shrub 6’ to 8’ tall and 3’ to 4’ wide
- Sun to shade, moist or well drained soil – grows more open in shade
- Covered each fall in red seed capsules that burst open to reveal orange seeds
- Deer love it!
Fothergilla

- *F. major*, Piedmont
  - 6’-8’ x 6’-8’
- *F. gardenii*, Coastal Plains and sandhills
  - 3’-4’ x 3’-4’, suckers
- Deciduous shrubs, great fall color
- Early spring flowers, fragrant
- Sun – pt. shade, moist or well drained soil
- Cultivars: ‘Mt. Airy’
Inkberry
*Ilex glabra*

- Native Coastal Plains and e. Piedmont
- "Mainstream"
- Evergreen!
- Sun, moist soil
- Black berries on female bushes
- To 8' x 6'
- Loved by bees
- Cultivars: ‘Shamrock’
More Native Shrubs for NC Landscapes

Deciduous
- Winterberry, *Ilex verticillata*
- Sweet Shrub, *Calycanthus floridus*
- Wild Blueberries, *Vaccinium* species
- New Jersey Tea, *Ceanothus americanus*
- Spicebush, *Lindera benzoin*

Evergreen
- Wax Myrtle, *Myrica cerifera*
- Dwarf Palmetto, *Sabal minor*
- Yaupon, *Ilex vomitoria*
- Rhododendron and Mountain Laurel in Piedmont and Mountains
Native Vines

- Several are readily available
- Vigorous climbers – need large support (in wild climb up trees)

Japanese honeysuckle and Asian wisteria are not native! Both have escaped cultivation and become invasive!
Cross Vine
*Bignonia capreolata*

- Native throughout NC
- “Mainstream”
- Moist or well drained soil, sun
- Blooms mid spring
- Vigorous climber – 20’+
- Good for hummingbirds
- Can sucker from root pieces, but not as bad as its cousin, *Campsis* (Trumpet Vine)
Cross Vine Cultivars:
‘Miss Jekyll’
‘Tangerine Beauty’
Carolina Jessamine
*Gelsemium sempervirens*

- Native to eastern Piedmont and Coastal Plains
- “Mainstream”
- Climbs 10’ +
- Early spring flowers, very fragrant
- Twining vine, mostly evergreen
- Adaptable – sun, most soil types
Coral Honeysuckle

- *Lonicera sempervirens*
- Native Piedmont, Coastal Plains
- “Mainstream”
- Spring blooming
- Adaptable – sun, most soils
- Flowers followed by red berries
- Climbs 10’+
Swamp Clematis
* Clematis crispa *

- Native Coastal Plains, low areas
- "Specialty"
- Dainty vine, climbs to 6'
- Summer flowers, bell shaped, very fragrant
- Sun, moist soil
American Wisteria
*Wisteria frutescens*

- Native Coastal Plains and Sandhills
- “Mainstream”
- Vigorous twining vine – grows 15’+
- Spring flowers, not fragrant
- Sun, moist or well drained soil
- Cultivars: ‘Amethyst Falls’
Native Perennials

- Many great native perennials grow in NC!
- Woodland flowers = spring blooming, most others bloom summer and fall
- Some are vigorous spreaders (by seed or roots)

Many native perennials are excellent nectar sources for butterflies
Eastern Columbine
Aquilegia canadensis

- Native throughout NC, sporadic in Coastal Plains
- “Mainstream”
- Blooms Lt. March - May
- Sun or shade, well drained soil
- 12” – 24” tall in bloom
- Attracts butterflies and hummingbirds
- Will naturalize in the garden by self seeding
Green and Gold
*Chrysogonum virginianum*

- Native to Piedmont, some Coastal Plains counties
- "Mainstream"
- Light to part shade, moist or well drained soil
- 1’ x 2’
- Evergreen foliage
- Early spring flowers
- Var. *australe* is stoloniferous = good groundcover
American Alumroot

*Heuchera americana*

- Native Mountains and Piedmont
- “Specialty”
- Attractive marbled evergreen foliage
- Small cream flowers in spring
- Light to full shade
- Well drained soil
- Parent of hybrid *Heuchera’s*
Bluestar

*Amsonia tabernaemontana*

- Native throughout NC
- “Mainstream”
- Tough, long lived clumping perennial
- Attractive clusters of pale blue flowers in spring
- Grows 1 to 2’ tall and wide
- Glossy green foliage, turns clear yellow in the fall
- Sun to part shade, wet to well drained soil
White False Indigo
*Baptisia alba*

- Native Piedmont, Neuse River Basin
- “Mainstream”
- Long lived, clump forming perennial
- 3’-4’ tall, leggy
- Blooms May
- Other species and cultivars available: ‘Carolina Moonlight’
Plantain Leaved Pussytoes

*Antennaria plantaginifolia*

- Native throughout NC
- “Specialty”
- Groundcover for sun to part shade
- Well drained soil
- Silky white spring flowers
- Evergreen, grey foliage
- Larval host for the American Painted Lady butterfly!
Partridge Berry

*Mitchella repens*

- Native throughout NC
- "Specialty"
- Evergreen creeping perennial
- Small white flowers in spring, with red berries ripening in the fall and often persisting over the winter
- Shade and well drained soil, drought tolerant once established
Savanna Mountain Mint
*Pycnanthemum flexuosum*

- Native eastern Piedmont and Coastal Plains
- “Specialty”
- Summer blooming perennial with cool white flowers over a very long period
- Easy to grow in sun to light shade
- Moist to wet soil
- 2’ – 3’ tall x 2’ – 3’ wide
- Attracts many pollinators and beneficial insects!!
Butterfly Weed

Asclepias tuberosa

- Native throughout NC
- "Mainstream"
- Tough clump forming perennial
- Vibrant orange flowers in spring and early summer
- Sun to part shade
- Well drained soil
- Very drought tolerant
- Larval host plant for the Monarch butterfly
- Great for beneficials
Monarchs
Swamp milkweed
_Asclepias incarnata_

- Native Mountains, Piedmont, northern Coastal counties
- “Mainstream”
- 3’ tall and wide
- Spring/early summer flowers, pink or white
- Sun to part shade
- Moisture tolerant
- Monarchs! Attracts many pollinators
Adam’s Needle
Yucca filamentosa

- Native throughout NC
- “Mainstream”
- 2’ x 2’, flower spikes to 5’
- Variegated Selections
  - ‘Bright Edge’
  - ‘Color Guard’
- Sun, good drainage
- Evergreen
- Exceptionally drought tolerant, salt and pH tolerant, deer resistant
Rose Mallow  
*Hibiscus moscheutos*

- Native throughout NC
- “Mainstream”
- Extremely sturdy, clumping perennial
- 4’-6’ tall and wide
- Wet to moist soil, sun
- Pink or white flowers in summer
- Dies back completely in winter
- Many cultivars and hybrids, ‘Disco Bell’ - seed strain
Orange Coneflower
*Rudbeckia fulgida*

- Native Piedmont
- “Mainstream”
- Yellow flowers all summer, 3’ tall
- Sun, moist to average soil
- Low mat of semi-evergreen foliage in winter
- Leave seed heads in winter for birds
- Cultivar: ‘Goldstrum’ most common
Cardinal Flower
*Lobelia cardinalis*

- Native throughout NC
- "Mainstream"
- Sun or shade, wet to moist soil
- Gorgeous red flowers late summer to fall
- 3’-4’ tall in flower
- Attracts hummingbirds and butterflies
Coastal Joe Pye Weed

*Eupatoriodelphus dubium*

- Native Piedmont, Coastal Plains
- “Mainstream”, cultivar ‘Little Joe’
- 4’-5’ tall x 3’-4’ wide
- Great butterfly nectar source!
- Sun to light shade, wet to moist soil
- *E. fistulosum* much taller
- *E. purpureum* and *E. maculatum* in Mountains
Rough Stemmed Goldenrod
Solidago rugosa

- Native throughout NC
- "Mainstream”, cultivar ‘Fireworks’
- Grows 3’-4’ high and wide
- Sun to part shade, well drained to wet soils
- Tolerates drought once established
- Yellow flowers in late summer provide nectar for butterflies and many other pollinators
- Makes a spreading mat
Ironweed

**Vernonia noveboracensis**

- Native throughout NC
- “Specialty”
- Royal purple flowers in late summer and fall
- 5’ – 8’ in flower
- Beautiful with Joe Pye Weed and Goldenrod
- Sun to light shade, wet to moist well drained soil
- Attracts butterflies
- Great for natural areas and pond’s edge – spreads!
Narrow Leaf Ironweed
*Vernonia angustifolia*

- Native lower Coastal Plains and Sandhills
- “Specialty”
- Summer blooming
- Very attractive narrow leaves
- Grows 3’ to 4’ tall
- Sun, well drained soil
- Drought tolerant!!
- Butterfly favorite!
Narrow Leaf Sunflower
*Helianthus angustifolius*

- Native Piedmont, Coastal Plains
- “Mainstream”
- Grows well in sun, wet to well drained soils
- Clump forming perennial 5’-8’ tall, and 5’ wide
- Mountains of yellow flowers in fall
- Excellent nectar source for butterflies
- *H. floridanus* = Swamp Sunflower, rhizomatous
River Oats
*Chasmanthium latifolium*

- Native throughout NC
- “Specialty”
- Will grow in shade
- Attractive in winter
- Wet to average soil
- Self seed prolifically
Muhly Grass
*Muhlenbergia capillaris*

- Native Piedmont, Coastal Plains
- “Mainstream”
- 4’ tall in bloom, 3’ x 3’ mound
- Blooms late fall
- Well drained soil
- Sun!
- Semievergreen

‘White Cloud’
Switch Grass
*Panicum virgatum*

- Native throughout NC
- “Mainstream”, several cultivars
  - ‘Cloud Nine’, 8’
  - ‘Northwind’, 5’
  - ‘Shenandoah’, 3’
- Moist or dry soils
- Sun to light shade
- Stands up well through winter, cut back Feb.
Ferns!

- Many great ferns!
- Ferns are deer resistant
- Most need moist soil
- Large, clumping ferns
  - Cinnamon Fern
  - Royal Fern
- Evergreen fern
  - Christmas Fern
- Spreading ferns
  - Sensitive Fern
  - Netted Chain Fern

Cinnamon Fern grows 3’ tall in sun or part shade and moist soil
More Native Plant Suggestions

- *Gardening with Native Plants of the South*, S. Wasowski
- NC Botanical Gardens, Chapel Hill
- Cullowhee Native Plant Conference at Western Carolina, held annually in July