Life on the Coast is Easy? How native plants are built for life near the beach



Amy Mead County Extension Director Brunswick County Center



Coastal Landscaping Challenges

- Poor, sandy soil
- Heat
- Drought conditions
- Frequent storms
- Saltwater exposure and soil salinity
- Strong coastal winds
- Salt-aerosol damage



What is "Native"?

Species that evolve naturally in an environment without human intervention

Plants are adapted to local soil and climate conditions over thousands of years

Co-evolve with other species and form interdependent and highly specialized relationships that are necessary for the other's survival



Why plant Natives?

-Uniquely adapted to local environmental conditions

-Generally require less care and less water once established

-Protect local water quality by reducing the need for fertilizer

-Provide the basis of the ecosystem and habitat for our native insects and wildlife





Live Oak *Quercus virginiana*

40-80' tall, 40-100' spread, not a "true" evergreen

Adaptable to both clay and sandy soils that are acidic and well-drained

Most wind resistant tree

'Cathedral' cultivar



Imperial Moth (Eacles imperialis)

Hosts: Pinus sp., Acer sp., Quercus sp. Liquidambar styraciflua, Sassafras albidum



Shumard Oak

Quercus shumardii

40-80' tall, 40-50' spread

Adaptable to wide variety of soils, very stress tolerant

Great tree for urban settings

Wildlife value





Eastern Red Cedar

Juniperus virginiana

Evergreen tree that can grow to 30+' tall, width 12-24'

Fast growing conifer

Extremely drought tolerant

Provides cover and food for wildlife



Sweetbay Magnolia

Magnolia virginiana

20+' tall, semi-evergreen tree or multi-stemmed shrub, deer resistant, 10-20'width

Fragrant flowers

Larval host for Spicebush Swallowtail and Eastern Tiger Swallowtail butterflies

Medium-high wind resistance



Eastern Tiger Swallowtail Butterfly





American Holly

Ilex opaca

40-60' tall, full sun to part shade

Will take a broad range or soils and is pollution tolerant

Flowers are attractive to pollinators and fruits for wildlife

Highly wind resistant



Yaupon Holly

Ilex vomitoria

Large shrub or small tree, can reach 10-20' tall, 8-12' width

Very drought tolerant

Female plants produce attractive red berries

Very attractive to pollinators



Dwarf Yaupon Holly *Ilex vomitoria 'Nana'*

Dense, compact, evergreen shrub 3-5' tall, 3-6' width

Drought and salt spray tolerant

Grows rapidly

Has a more formal appearance





Dwarf cultivar: 'Shamrock' 3-4' tall



Inkberry *Ilex glabra*

Evergreen shrub

Slow growing, 5-8' tall

Tolerates a variety of soils, moderately salt tolerant

Cover and food for birds and pollinators enjoy flowers



Dwarf Palmetto Sabal minor

2-5' tall, 4-6' width

Drought and moderately salt tolerant

Most cold hardy native palm

Fruits eaten by robins, raccoons, and other birds and mammals



Wax Myrtle *Myrica cerifera*

Evergreen tree/shrub, 15-20' at maturity

Native to NC marshes, swamps, fresh-brackish streams

Great for erosion, wind and salt spray tolerant

Wildlife value



Beautyberry *Callicarpa americana*

3-8' tall, Full sun

Deciduous Shrub

Fruits appear August-Oct Valuable food source for songbirds and small mammals



'Color Guard'

Yucca *Yucca filamentosa*

Evergreen sword-shaped leaves with curly filaments

Prefers coarse, sandy soils in full sun

Tall panicle of white flowers attracts pollinators





Muhly Grass *Muhlenbergia capillaris*

4' tall, 3' width

Long-lived, little to no insect or disease pests and highly resistant to deer grazing

Tolerates heat, humidity, drought, poor soil and is highly salt tolerant





Little Bluestem

Schizachyrium scoparium

2' tall, Vigorous, long rooted grass

Good for erosion control: Stream banks, slopes, rain gardens

Larval host plant for skippers, seeds eaten by birds Cut back in March



Cultivar 'Northwind'

Switchgrass

Panicum virgatum

3-5' tall, full sun

Moist clay or sandy soils

Bluish cast in the summer, pink flowers in fall

Slightly salt tolerant

Plant in masses



Black-eyed Susan *Rudbeckia hirta*

Full Sun

Blooms summer through fall

Short lived perennial, easily reseeds



Blanket Flower

Gaillardia pulchella

Naturalized in NC

Barrier island, sandy soils, full sun

Drought and salt tolerant

Blooms summer to fall

Attracts butterflies



Spotted Horsemint

Monarda punctata

2-4' tall

Herbaceous perennial

Drought tolerant

Excellent cut flower

Deer and rabbit resistant





FOUNDATION

FOR DRY AREAS WITH SUN TO PART-SHADE

SUN: *** SOIL MOISTURE: SEASONAL COLOR: AUG-FEB



DESCRIPTION

This design can be used for a foundation planting, stand-alone bed or as a border along a road, driveway, walkway or patio. The number of coastal N.C. native plants that thrive in the dry, hot conditions around a building's foundation is limited, but the species in this design should be suitable for most buildings that have rain gutters. In addition, these plants produce pollinator-friendly flowers and berries that will attract birds to your yard. The evergreen inkberry and dwarf yaupon are slow growing. As they mature, they will improve building energy efficiency. PLAN VIEW 5' x 20'



ALTERNATIVE

Dwarf palmetto (*Sabal minor*) is a great substitute for the deciduous beautyberry, if you prefer different leaves and an evergreen plant.

You also can plant lower-growing perennials, like orange coneflower (*Rudbeckia fulgida 'G*oldsturm'), at the front of the border.

MAINTENANCE

Prune shrubs in late winter as needed.

PLANT SELECTION							SEASONAL COLOR												
KEY	QTY	COMMON NAME	BOTANICAL NAME	PLANT TYPE	SPACING	J	F	M	A	M	J	I	٨	s	0	N	D		
A	1	Inkberry	llex glabra	SHRUB	4.5' O.C. TO YAUPON														
в	3	Dwarf yaupon	Ilex vomitoria 'Nana'	SHRUB	4.5' O.C.														
с	1	American beautyberry	Callicarpa americana	SHRUB	4.5' O.C. TO YAUPON														

Sea Grant North Carolina

COASTAL

INITIATIVE

LANDSCAPES



Inkberry Ilex glabra





Dwarf Yaupon Holly *Ilex vomitoria* 'Nana'

Beautyberry *Callicarpa americana*

Dwarf Palmetto Sabal minor

Use a Diversity of Plants



Coastal Landscapes Initiative template



Sweetbay Magnolia Magnolia virginiana



Inkberry *Ilex glabra*



Purple Coneflower Echinacea purpurea

Beardtongue Penstemon digitalis 'Huskers Red'

Surf City Roundabout



Eastern Red Cedar Dwarf Palmetto Dwarf Yaupon Holly Yaupon Holly Magnolia 'Little Gem' Laurel Oak or Darlington Oak

Plants to Avoid







Eco-friendly Alternatives to Harmful Ornamental Plants

















Leatherflower, Blue Jasmine Clematis crispa Climbing Aster Ampelaster caroliniana

CROSSVINE Bignonia capreolata

This semi-evergreen perennial vine climbs by tendrils and has special adaptations that enable it to cling to bark, stone, bricks, and fences. The vine has showy, orange-red, fragrant, trumpet-shaped flowers, which bloom in late winter to early spring. The Lubular flowers attract hummingbirds. Leaves are a dark glossy green and may change to a reddish-purple in winter.

TIP This is a vigorous vine and may occasionally need pruning. LIGHT: Full sun to part shade SOIL: Moist

HEIGHT: 15'-20' WIDTH: 10'-12'

CAROLINA JESSAMINE Gelsemium semperviren

In the spring, expect sweetly scented, canary-yellow flowers on this perennial evergreen vine, which grows quickly. Flowers attract bees, hummingbirds, and butterflies — and it provides winter cover for birds.

TIP Carolina jessamine can also be used as a mounding groundcover. Fullness can be increased with pruning.

LIGHT: Full sun to part shade SOIL: Dry to moist HEIGHT & WIDTH: 10'-12'

CORAL HONEYSUCKLE Lonicera sempervirens

This woody, semi-evergreen vine - our native honeysuckle blooms both in spring and autumn. Various songbirds feed on its red berries including cedar waxwings, catbirds, and cardinals. Hummingbirds seek coral honeysuckle nectar, and the plant also serves as a larval host to the Hummingbird Clearwing moth.

TIP Mix with other vines to provide a denser screen. LIGHT: Full sun SOIL: Moist

HEIGHT: 15'-20' WIDTH: 10'-12'

Wood Vamp, Climbing Hydrangea Decumana barbara Yellow Passionflower Passifiora lutea





Amy Mead afmead@ncsu.edu