# Grasses & Sedges from the Ground Cover Up



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Marketing Director

**UGA Landscape Planning Short Course February 7, 2018** 











WE GROW GOOD GRASS!®

#### **What We Grow**



# Prime Time for Grasses & Sedges

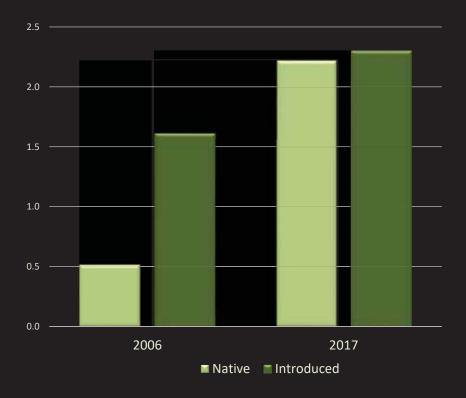
- Popularity of native plants
- Move toward green infrastructure and sustainable landscapes
- Progressive planting design



Carex eburnea and Sesleria autumnalis on the High Line, NYC

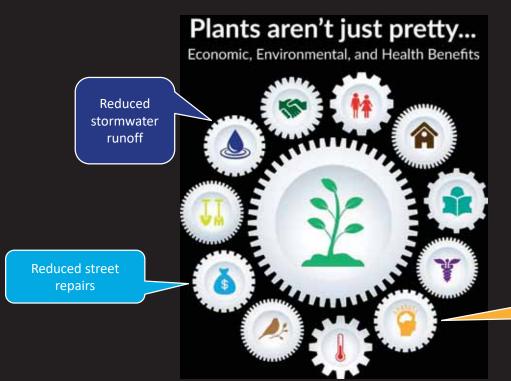
#### **Native Interest**

Total # of plants sold



## Residential Landscape Architecture Trends

0	Native/adapted drought tolerant plants	82.31%
2	Native plants	81.60%
3	Low-maintenance landscapes	79.25%
4	Food/vegetable gardens	76.52%
5	Permeable paving	76.31%
6	Reduced lawn area	72.66%
7	Fire pits/fireplaces	71.51%
8	Drip/water-efficient irrigation	71.05%
9	Wireless/internet connectivity	70.77%
10	Rainwater/graywater harvesting	70.32%



Improved memory & concentration

"Economic, Environmental, and Health/Well-Being Benefits Associated with Green Industry Products and Services: A Review" (Journal of Environmental Horticulture 29(2):96-103).

# **Doing More with Grasses & Sedges**

- Require few inputs
- Help suppress weeds
- Support wildlife, including pollinators
- Slow storm water, increase infiltration, and store carbon
- Prevent erosion



#### "Green Infrastructure

uses vegetation, soils, and natural processes to manage water and create healthier urban environments."

-US EPA

Adding ecological function to new and existing development



North Carolina State University, Raleigh, NC Photo credit: Jon Blasco



The managed urban landscape is green infrastructure.







### **North Carolina Stormwater Design Manual**

#### **Bioretention Plant List**



#### North Carolina Stormwater Design Manual

#### **Bioretention Plant List**

**2015** *Carex* spp.



2018

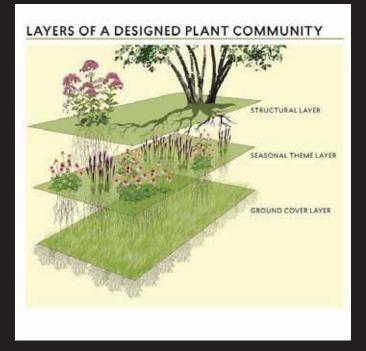
Carex amphibola
Carex cherokeensis
Carex comosa
Carex crinita
Carex grayi
Carex lupulina
Carex lurida

Carex muskingumensis
Carex radiata
Carex rosea
Carex squarrosa
Carex stricta
Carex vulpinoidea
Carex glaucescens
Carex intumescens

+ Stormwater wetlands, infiltration basins

# Progressive Planting Design

- Focus on plant community
- Dense, layered
- Stable plantings that use fewer resources and add function
- Biodiversity and resilience



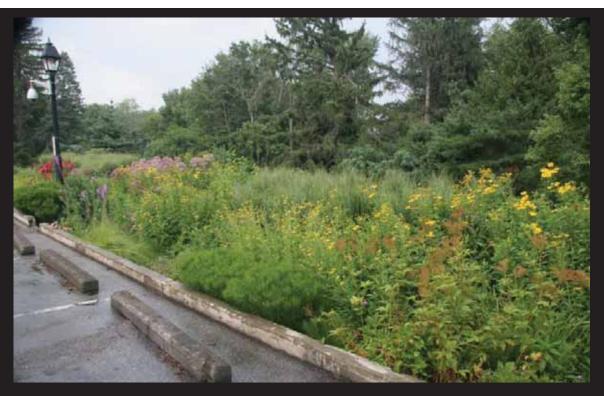
Source: Planting in a Post-Wild World, Rainer & West, 2015, Timber Press Courtesy of Thomas Rainer



The High Line, New York City



Rose Kennedy Greenway, Boston



Indianapolis Museum of Art



**Private Estate, Orange Co., NC** 

Photo: Meadowsweet Gardens



Midtown Sky Garden, New York City
Design by HMWhite Site Architects; photo by Aaron Booher, courtesy of Thomas Rainer



Bioretention Planter in Lancaster, PA
Design and photo by Claudia West, photo courtesy of Thomas Rainer



St. Louis, MO

Versatile and adaptable

#### **WORKING WITH GRASSES & SEDGES**



#### **True Grasses**

- Poaceae
- Widest distribution of all flowering plant families
- Adapted to survive in extreme conditions
- Highly efficient, fibrous root systems
- Many maintain their habit when dormant



#### **Sedges**

- Mostly in the genus Carex
- Distributed throughout the world
- Groups from North America, Asia, and New Zealand
- Fibrous roots systems
- Range from shade loving to sun tolerant



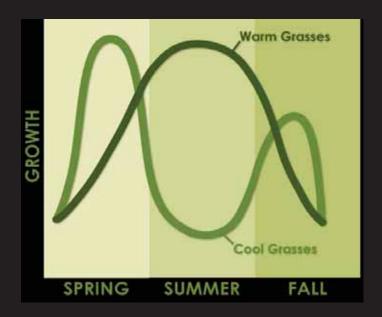
#### **How They Grow**

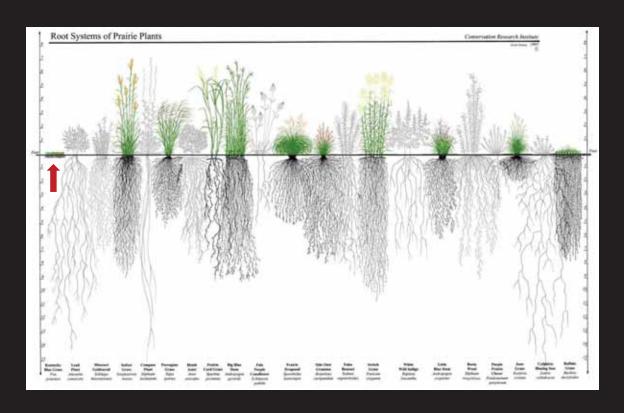
#### **Cool Season**

- Moderate to high water & nutrient needs
- Utilize 15-30% of sunlight
- Establish rapidly

#### **Warm Season**

- Use water and nutrients more efficiently
- Utilize 80% of sunlight
- Initial energy in root growth





### **Grasses Improve Soil**

- Improve drainage
- Thick crowns and/or rhizomatous growth
- Prevent erosion
- Continue to function during dormancy
- Store carbon





### **Working with the Soil**

- Tolerant of low fertility
- Adaptable to wide pH range
- Often don't need amendments
- Many grasses need good drainage, especially in winter



### **Planting**

- Soil prep depends on species
- Plant at soil level
- Irrigation to establish
- Avoid late season planting with selected warm season grasses...





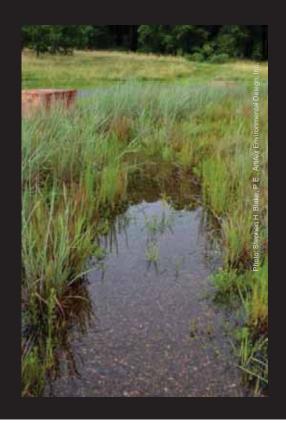
Muhlenbergia capillaris



Sporobolus heterolepis

#### **Water Use**

- Many warm season grasses use water very efficiently
- Minimize use, but readily take up water when present
- Sedge species have a wide range
- Excellent plants for storm water management





Bioretention Pond at North Carolina Museum of Art, Raleigh, NC Photo credit: Stephen H. Blake, P.E., Artifex Environmental Design, Inc.

#### **Building a Community**

- Nectar and pollen source, larval host for some pollinators
- Cover that allows for movement and foraging
- Nesting material, nesting sites, and food for birds and small mammals
- Deer tend to avoid them!



Photo courtesy of Rocky Cooper

#### **Short To-do List**

- For many, no need for fertilization
- Mostly pest- and disease-free
- Cut back grasses once yearly in late winter
- With sedges cut back only if necessary for looks



Building a foundation

#### **COVERING THE GROUND**



### **Ground covers &**Lawn Alternatives

- Larger sweeps of same plant
- Ground cover more variable in visual texture
- Lawn alternative more uniform
  - Tolerate mowing 2-3 times per year
  - Some handle light foot traffic



#### **Planting Matrix**

- Base layer of a more complex planting
- May include other ground-level species
- Plant taller species into base layer
- Building plant community













## **Carex divulsa Grassland Sedge**

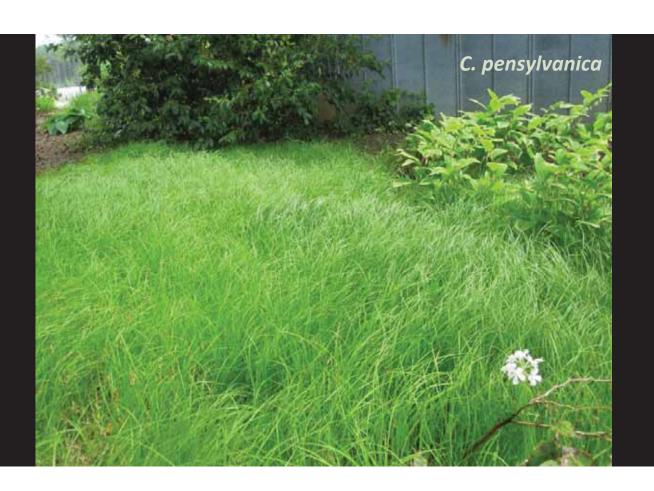
- ✓ Thrives under established trees
- ✓ Tolerates range of soil conditions
- ✓ Handles heat and humidity well
- ✓ One of the best for dry shade



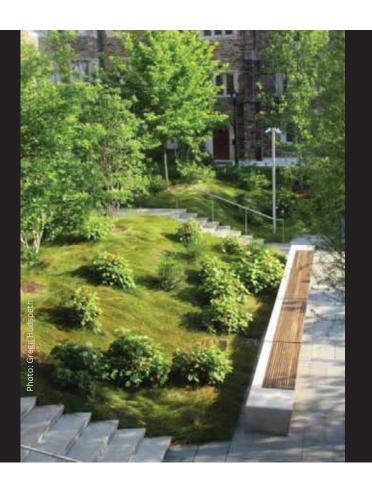


## Carex pensylvanica Pennsylvania Sedge

- ✓ Well-behaved spreader
- ✓ Creates fine-textured, lush ground cover
- ✓ No foot traffic
- ✓ Semi-evergreen in mild climates







## Carex texensis Texas Sedge

- ✓ Long, fine-textured foliage
- ✓ Tolerates some foot traffic
- ✓ Drought tolerant



### Carex cherokeensis Cherokee Sedge

- ✓ Medium-textured foliage
- ✓ Evergreen in mild climates
- ✓ Highly deer resistant
- ✓ Pendulous seed spikes on tall scapes
- ✓ Reseeds heavily



C. cherokeensis





## **Eragrostis spectabilis**Purple Love Grass

- ✓ Airy, pinkish seed heads float above foliage
- ✓ Does best in dry, open areas in full sun
- ✓ Handles dry conditions





## **Bouteloua gracilis**Blue Grama

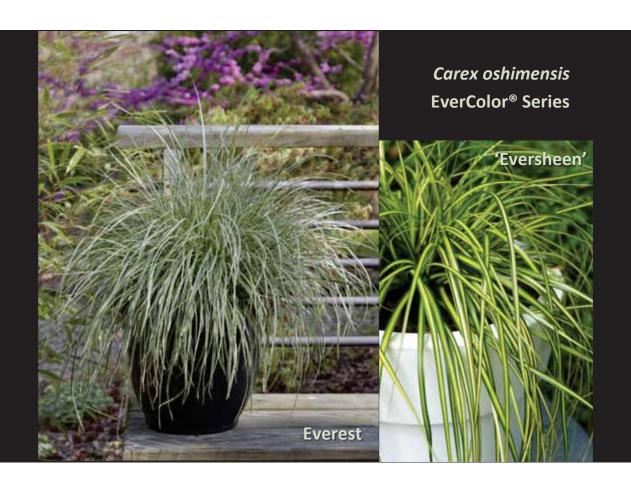
- ✓ Appealing seed heads
- ✓ Low-resource lawn alternative; can tolerate light foot traffic
- ✓ Tolerates poor soil, full sun, dry conditions
- ✓ Underused native grass





## Carex oshimensis EverColor® Series

- ✓ Lush, arching habit
- ✓ Strong growers
- ✓ Perform well in shade conditions
- ✓ Evergreen where hardy













Carex flacca and C. flacca 'Blue Zinger'
Blue Sedge

- ✓ Widely adaptable
- ✓ Drought tolerant once established
- ✓ Well-behaved spreader





Building patterns and seasonality

#### THE MIDDLE





## Sporobolus heterolepis Prairie Dropseed

- ✓ Drought-tolerant
- ✓ Beautiful fall color
- ✓ Fall aroma resembling cilantro or popcorn
- ✓ With fall planting, give time to establish





# **Bouteloua gracilis**'Blonde Ambition' PP22048 Blue Grama

- ✓ Tough, adaptable
- ✓ Tolerates poor soil and drought
- ✓ Abundant seed heads
- ✓ Long-lasting attractiveness





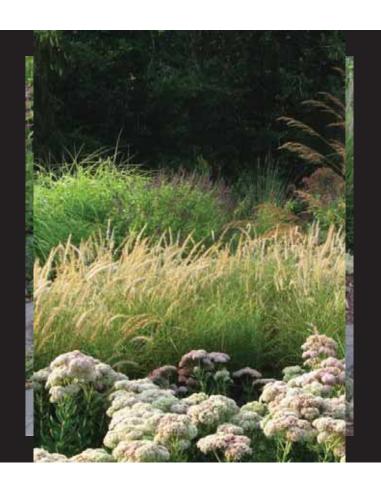




## Eragrostis elliottii'Wind Dancer'Wind Dancer Love Grass

- ✓ Blue green foliage and airy seed heads
- ✓ Excellent for erosion control
- ✓ Tolerates dry conditions once established
- ✓ Does well in sandy soil





#### Pennisetum orientale 'Karley Rose' PP12909 Oriental Fountain Grass

- ✓ Drought tolerant
- ✓ Long-lasting, soft pink plumes (from June to Fall)
- ✓ Easy maintenance



## Little Bluestem: Schizachyrium scoparium cvs.

- Native bunchgrass of prairies and open woods in North America
- Tolerates a wide range of soil conditions (but not wet)
- Supports birds, small mammals, and pollinators





## Schizachyrium scoparium 'The Blues'

- ✓ Bright blue foliage with pink highlights
- ✓ Outstanding fall color
- ✓ Stunning in broad sweeps or masses





## **Schizachyrium scoparium 'Standing Ovation'** PP25202

- ✓ Green-blue-purple foliage
- ✓ Stands upright; no flopping
- ✓ Thick blades
- ✓ Brilliant oranges and reds in fall



### Schizachyrium scoparium 'Twilight Zone' PP27432

- ✓ Full, upright columnar shape
- ✓ Pastel tones that develop bright purple highlights in fall
- ✓ Unique, iridescent foliage

Building structure with height and form

**GOING BIGGER** 





#### Muhlenbergia capillaris Pink Muhly Grass

- ✓ Vibrant, pink plumes
- ✓ Heat and drought tolerant
- ✓ Plant no later than early fall for best overwintering
- ✓ Attracts beneficial insects, and clumping habit good wildlife cover



# Muhlenbergia capillaris 'White Cloud' White Cloud Muhly Grass

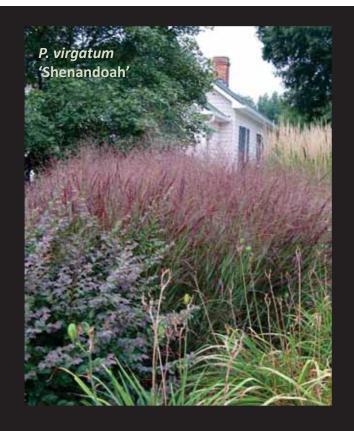
- ✓ Dense, white plumes
- ✓ Heat and drought tolerant
- ✓ Plant no later than early fall for best overwintering
- ✓ More upright, blooms later than Pink Muhly Grass



## Switchgrass: Panicum virgatum & cvs.

- North American native
- Heat and drought tolerant
- Adapt to a wide variety of conditions
- Provide nesting, cover, and food for birds and small mammals









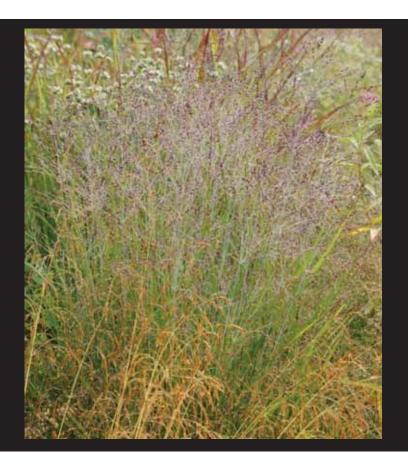
### *Panicum virgatum*'Thundercloud' PP20665

- ✓ Upright, arching habit
- ✓ Maintains shape
- ✓ Brings height and statuesque look



### **Panicum virgatum**'Cape Breeze' PP24895

- ✓ Compact cultivar
- ✓ Stays green longer into fall
- ✓ Salt tolerant
- ✓ Heavy bloom set



#### *Panicum virgatum*'Purple Tears' PP28518

- ✓ New introduction from Piet Oudolf
- ✓ Flowering spikes with soft gray color at the top
- ✓ Splendid, purple seed heads
- √ 4' height and narrow, upright habit

New!





#### Panicum virgatum 'Summer Sunrise'

- ✓ Upright, compact habit (4.5')
- ✓ Cloud of soft-pink seed heads
- ✓ Arching foliage and slightly wider blade

New!



### Andropogon gerardii Big Bluestem

- ✓ Drought tolerant
- ✓ Does well in low fertility soils
- ✓ Interesting "turkey foot" seed heads
- ✓ Shelter for nesting birds and food for songbirds





# Sorghastrum nutans 'Indian Steel' Blue Indian Grass

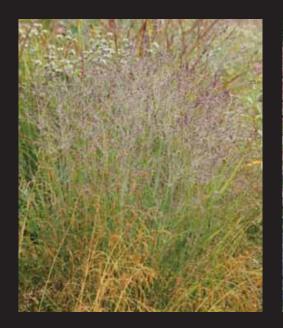
- ✓ Blue-green foliage
- ✓ Drought tolerant prairie grass
- ✓ Intricate flower structures
- ✓ Bunch grass with tall blooms



And a little something extra...

**WHAT'S NEW?** 





*Panicum virgatum* 'Purple Tears' PP28518



**Panicum virgatum** 'Summer Sunrise'



#### Carex scaposa Cherry Blossom Sedge

- ✓ Bright pink flowers
- ✓ Repeat bloomer—spring and fall
- ✓ Wide, deep green foliage
- ✓ Collected in China by USNA



#### Pennisetum alopecuroides Lumen Gold ('JS Jommenik') PP27435 Lumen Gold Fountain Grass

- ✓ Fountain grass look with bright gold foliage
- ✓ Similar to 'Hameln'
- ✓ Pop of color in spring
- ✓ Transitions to lime green by early summer

#### Others in the Pipeline

- Smaller, more compact Andropogon ternarius
- Hardier Muhly Grass— Muhlenbergia reverchonii
- Andropogon gerardii 'Blackhawks'
- Little Bluestems from UGA
- More native sedges

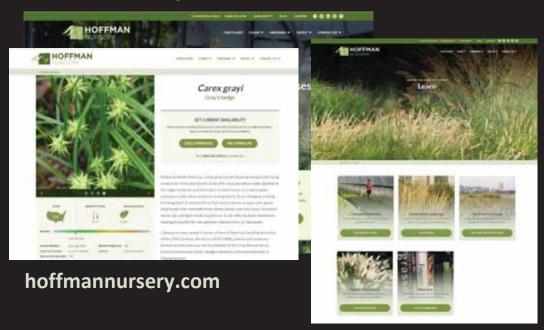


Learn and do more

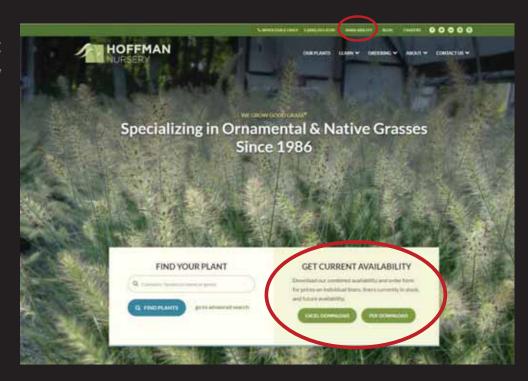
#### **RESOURCES**



#### **Hoffman Nursery Website**



#### **Current Availability**



### Hoffman Nursery Catalog of Grasses



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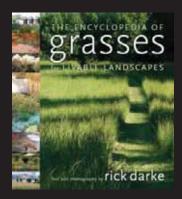
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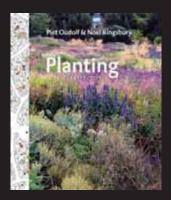
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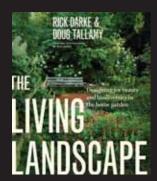
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Continued Lancouries















#### MARK YOUR CALENDAR NOW!

Three Core Days with tours, presentations, and round table discussions.

Two additional days of tours. CEUs will be available.



## Thank you!

shannoncurrey@hoffmannursery.com



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