

Extension
Gardener Series

Piedmont Lawns & Lawn Alternatives



Charlotte Glen,

Extension Agent – Urban & Community Horticulture

NC Cooperative Extension – Chatham County Center

Today's Class

- The Place for Lawns in Sustainable Landscapes
- Turf Options
- Lawn Alternatives
- Tips and Resources

Review these slides and find more resources:

<http://go.ncsu.edu/lawn-resources>



Sustainable Landscaping Principles

- **Increase diversity**
 - # of species
 - Vertical layers
- **Support ecosystems**
 - Include native plants
- **Reduce inputs**
 - Select plants adapted to site and climate
- **Enhance beauty and functionality**



Where do lawns fit?

- **Typically monocultures**
 - Low diversity - no weeds allowed
 - Support few species other than pests
- **High input** – water, fertilizer, pesticides



Sustainable Lawns

- Minimized to appropriate areas
- Adapted to existing site conditions (sun, drainage)
- Allowed to go dormant during drought
- Tolerate some diversity
 - Many weeds provide important resources for pollinators - especially early spring bloomers



Appropriate Areas: Site Conditions

- **Sunny** – at least 4 hrs/day
- Well drained
- **Relatively flat to gently sloped**
- Smooth, graded surface
- Relatively large block with curving edges – easy to maintain



Appropriate Areas: Usage

- Where you need a wear tolerant surface
 - Recreation/Play
- **Where you need a very low surface**
 - Safety – line of site
 - Preserve/enhance view
- **Where you need to maintain an access route**



**Lawn grasses are the only species
tolerant of daily wear!**

Sustainable Landscapes: Reducing Lawn Area

Cut out problem areas:

- Wet and/or shady
- Constant, heavy traffic areas
- Difficult to maintain areas:
 - Narrow strips
 - Tight angles
 - Under trees

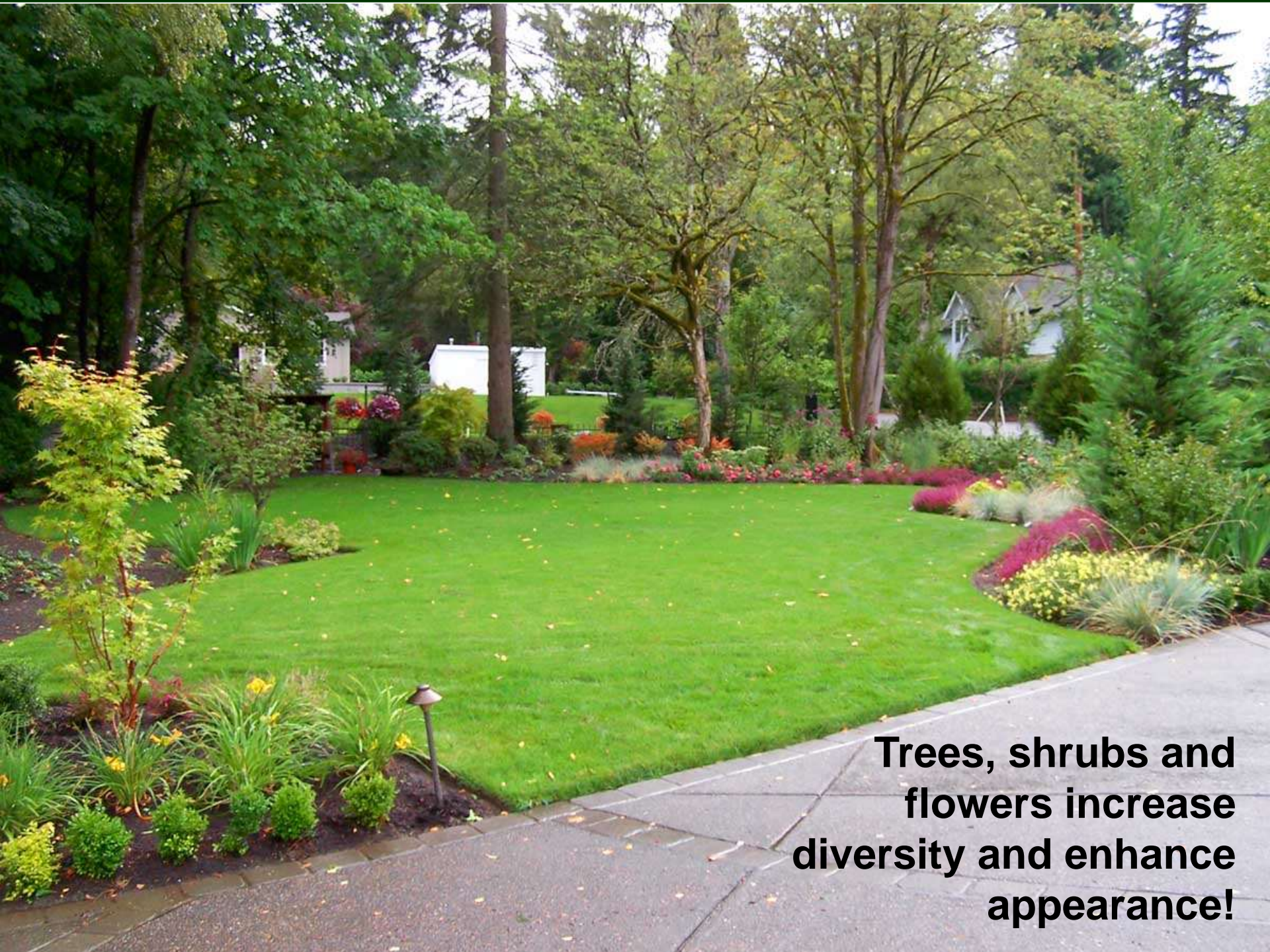


Difficult to maintain!

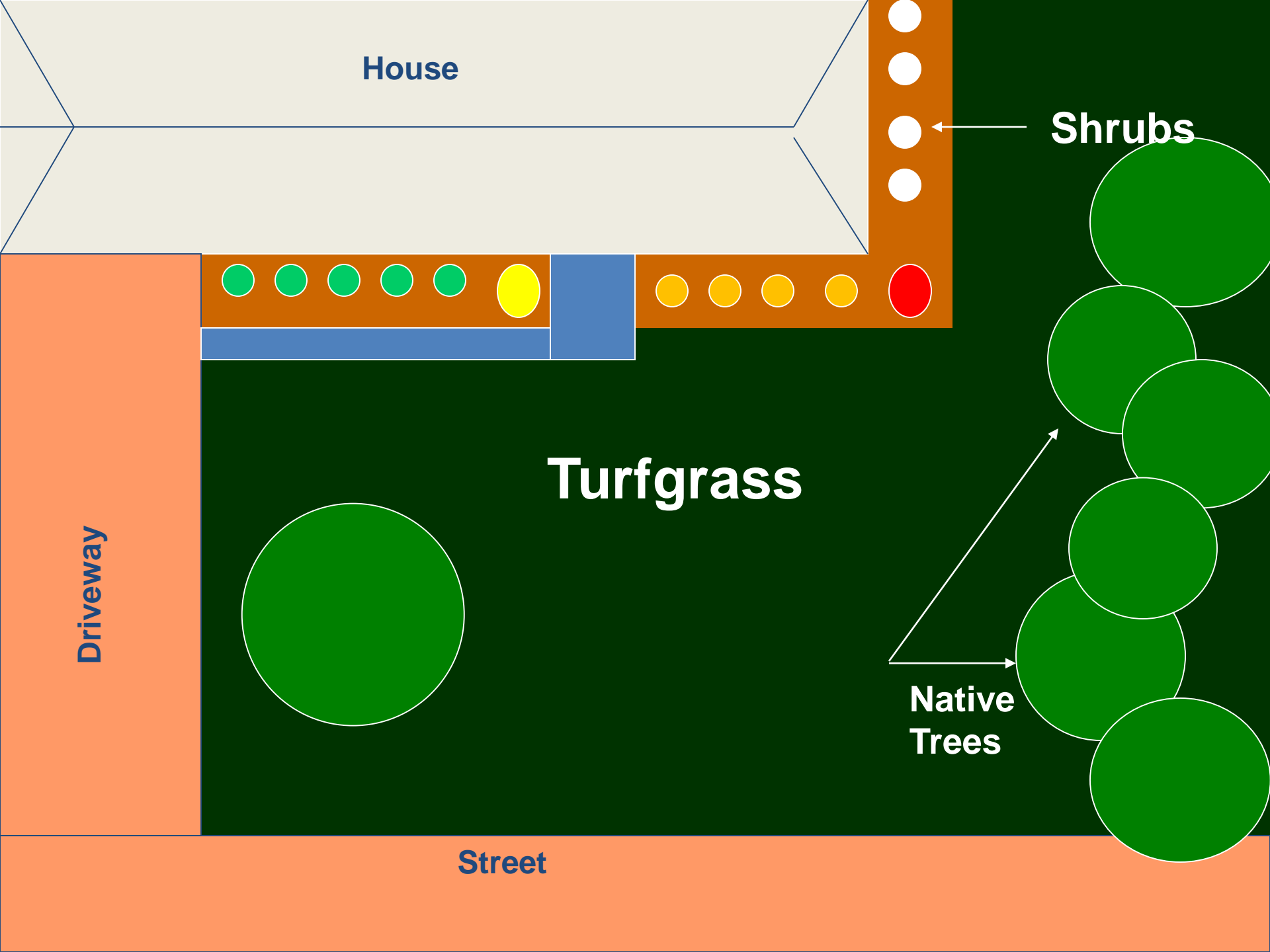
Sustainable Landscapes: Reducing Lawn Area

- **Expand mulched area around trees and beds**
 - Pine straw
 - Shredded bark
 - Leaves
- **Add or expand beds on perimeter and side yard**





**Trees, shrubs and
flowers increase
diversity and enhance
appearance!**



House

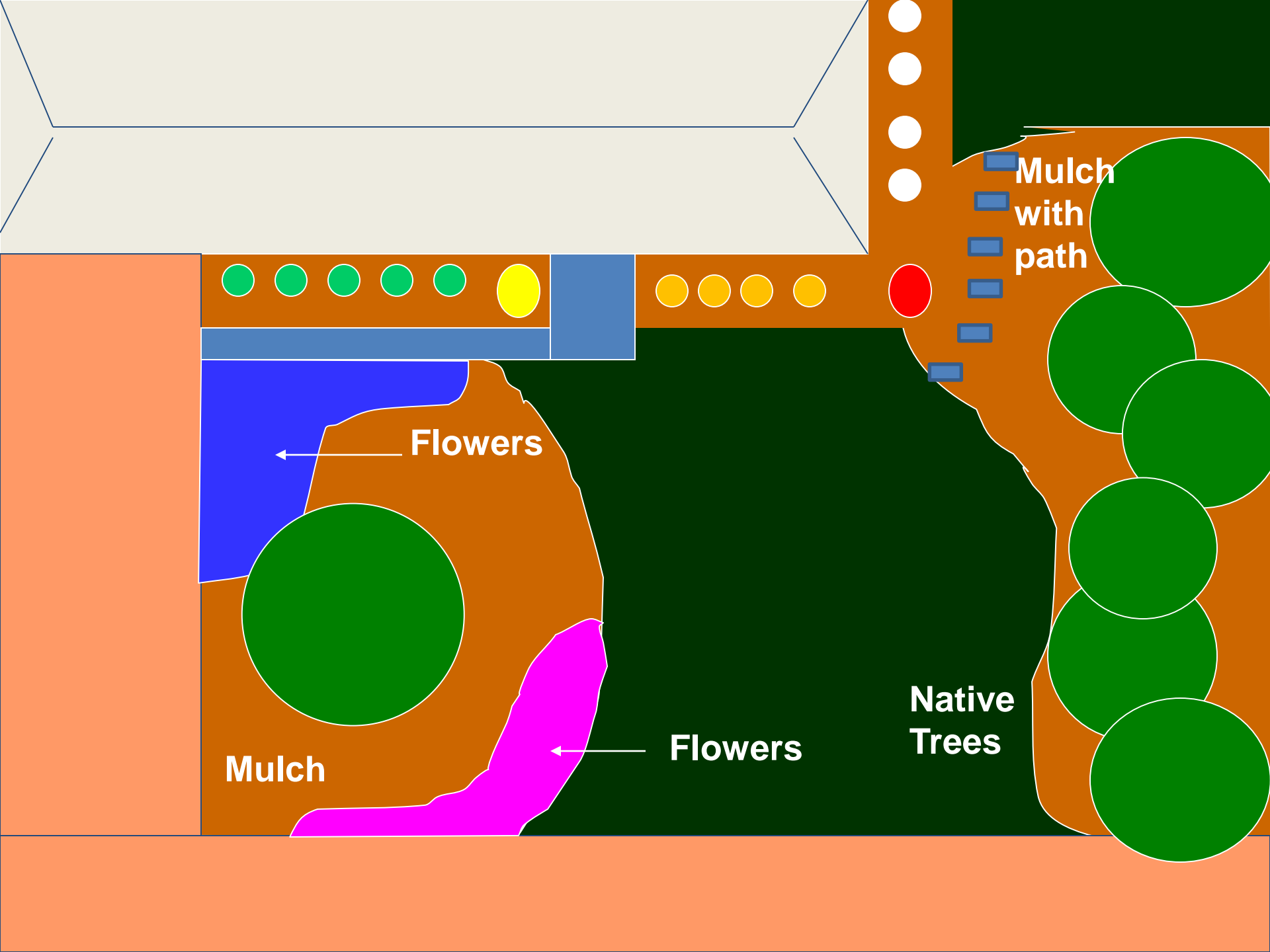
Shrubs

Turfgrass

Driveway

Native
Trees

Street



Mulch
with
path

Flowers

Mulch

Flowers

Native
Trees

Turf Options

- Of 10,000 grass species worldwide, ~ 50 adapted to use as turf
 - **Tolerate wear and frequent, low mowing**
- **7 common lawn species in NC**
- **No single species adapted to all areas of the state!**



Bermuda is used for golf and sports fields – highest wear tolerance

NC Native Grasses

- **Over 100 native species**
 - Broomsedges (Andropogon)
 - Bluestems (Schizachyrium)
 - Panic Grasses (Panicum)
 - Muhly Grass (Muhlenbergia)
- **None are adapted to use as mown turf**
- Some are grown as ornamental grasses – deer don't eat them!



Northwind Panic Grass

The Right Turf for Your Lawn

Depends on:

- Climate
- **Site conditions: SUN!**
- Need for wear tolerance
- Maintenance you can provide
- Budget
- **Aesthetic preferences**
 - Shade of green
 - Green winter or summer



'Empire' Zoysia

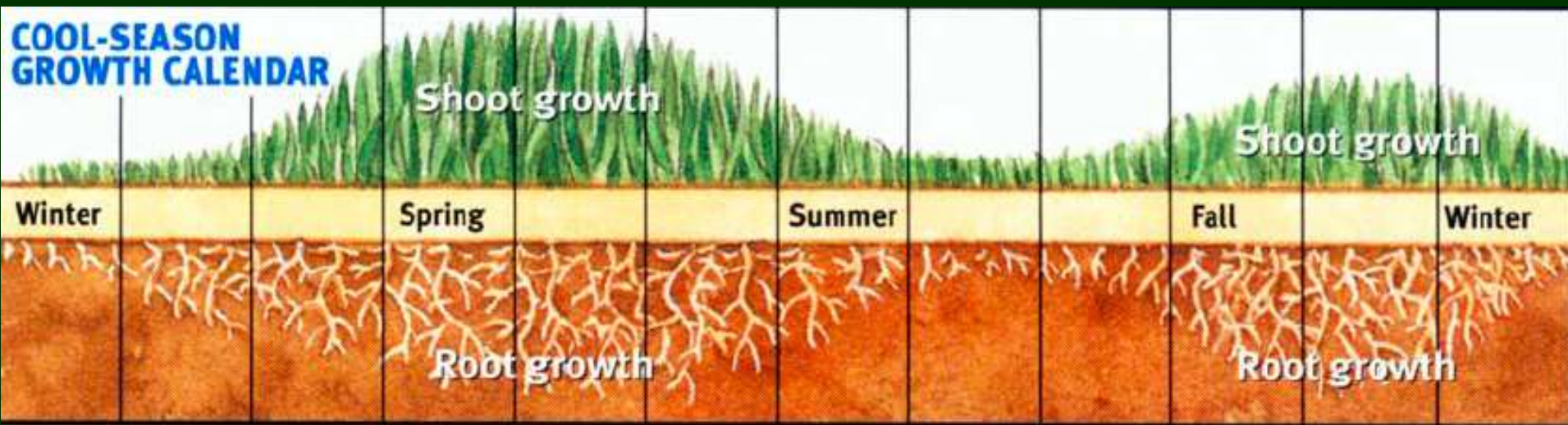
Climate

Will you grow:

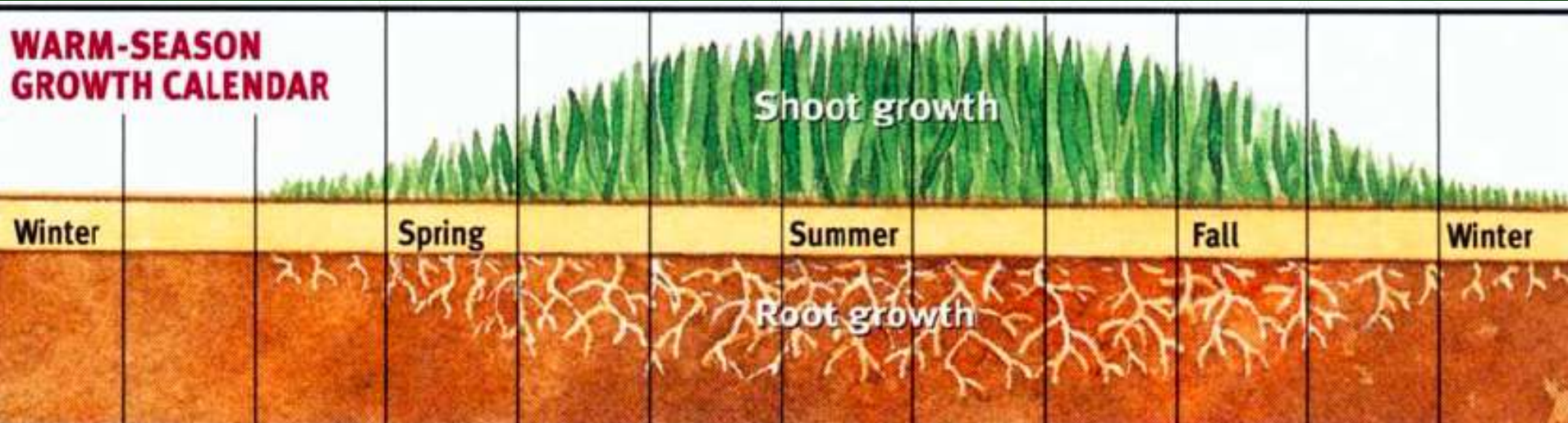
- **Cool season grass**
 - Green in winter, not so happy in summer
- **Warm season grass**
 - Brown in winter, happy in summer



Cool Season Turf Growth



Warm Season Turf Growth



You Can't Have Both!

- Warm and cool season lawns don't mix
- If have mix, **select preferred species and manage for that species**
- **Healthy, sustainable lawn begins with knowing your turf type**



Turf Species for North Carolina

Cool Season

- Tall fescue
- Fine fescues*
- Kentucky bluegrass*

Warm Season

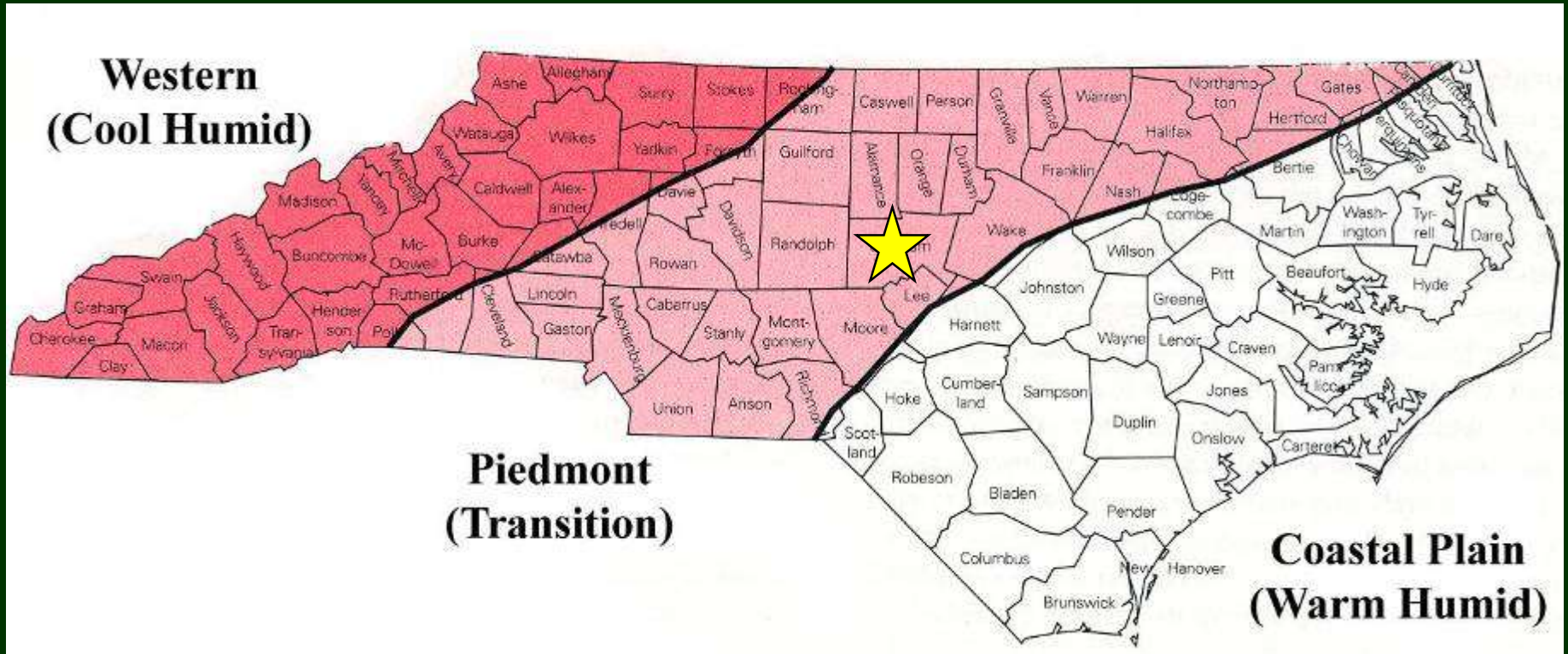
- Zoysia
- Bermuda
- Centipede⁺
- St. Augustine⁺

* Not well adapted to the piedmont

⁺ More prone to winter damage

Piedmont = Transition Zone

Not ideal for either!



West:
Cool Season
Only

Piedmont:
Warm & Cool
Season

Coastal Plain:
Warm Season Only

Choosing the Right Turf:

Carolina Lawns,

Page 8

	Can Be Seeded?	Tolerance Ratings				
		Shade	Heat	Cold	Drought	Wear
Bermudagrass (common)	Yes	1	5	1	6	6
Bermudagrass (hybrid)	No	1	5	2	6	6
Bahiagrass	Yes	4	4	2	6	4
Centipedegrass	Yes	4	4	2	4	1
Kentucky bluegrass/tall fescue mix	Yes	4	4	5	5	5
Kentucky bluegrass/tall fescue/ fine fescue mix	Yes	5	4	5	5	5
St. Augustinegrass	No	5	5	2	4	1
Tall fescue	Yes	4	4	5	5	5
Zoysiagrass	Yes	4	5	4	6	4

Site Conditions

How much sun?

- Even “shade tolerant” grasses need 4 hrs/day
- **Shade Tolerance**
 - Tall Fescue (good)
 - Zoysia (good)
 - Bermuda (poor)

Drainage

- No turf grasses tolerate poor drainage



Site Conditions:

Soil pH and Nutrients

- All turf grasses except centipede grow best if **pH above 6.0**
 - Piedmont soils typically more acidic
 - **Add lime to raise pH**
- **Soil Testing:**
 - To determine how much lime needed, as well as other nutrients
 - Boxes and forms available from NCCE
 - Send samples to NCDA Lab, Raleigh
 - No charge for samples submitted April – November

[Learn more about soil testing](#)



Wear Tolerance

- All grasses have their limit!
 - **Piedmont turf options in order of wear tolerance:**
 - Bermuda (high)
 - Tall Fescue (high)
 - Zoysia (medium)
- Large dog, small yard
= poor turf**



Soil Compaction

- **No turf (or other plant) is adapted to highly compacted soil**
- Construction equipment, lawn mowers, even foot traffic compact clay soils
- **Screwdriver test** – if difficult to push screwdriver into moderately moist soil, compaction needs to be alleviated



Core Aeration

Alleviates
compaction in
established lawns

Timing:

- Cool season grasses:
Sept/Oct or
Feb/March
- Warm season grasses:
May/June/July



Maintenance

- How much time and money do you want to spend maintaining your lawn?
 - Mowing, edging, fertilizing, spraying
- Maintenance, high-low:
 - Bermuda
 - Tall fescue
 - Zoysia



Budget

How much can you spend to establish your lawn?

- **By seed – cheapest**
 - **Tall fescue**: quick, high quality
 - **Bermuda**: quick, lower quality
 - **Zoysia**: slow, lower quality
- **By sod – expensive**
 - Better quality varieties of all except tall fescue



Aesthetic Preferences

- How important is green grass in winter?
- Do you like taller turf or shorter turf?
- Shade of green
- Wide blade (coarse texture) or narrow blade (fine texture)



Brown-beige winter color of warm season lawns can be offset by planting evergreens

Aesthetic Preferences

Cool Season:

Tall Fescue

- Mow high, 3-4"
- Wide blade
- Green most winters
- Dark green color

Warm Season:

Zoysia and Bermuda

- Mow lower, 1-2"
- Narrower blade
- Brown/beige in winter
- Zoysia – medium dark green
- Bermuda – gray-green



WHEN TO MOW YOUR LAWN?



GRASS TYPE	SUGGESTED MOWING HEIGHT	MOW WHEN GRASS REACHES THIS HEIGHT
BERMUDA GRASS	1"-1½"	1½"-2"
CENTIPEDE	1½"-2"	2"-3"
ST. AUGUSTINE	2½"-3"	3¾"-4½"
TALL FESCUE	2"-3"	3"-4¾"
ZOYSIA	1"-1½"	1½"-2"

Grasscycle!

- Leave clippings on the lawn to decompose
- **Reduces Nitrogen needs by 25%**
- Does not contribute to thatch when mown at correct height and frequency
- Only remove clippings when mowing delayed or weed seed abundant



Traditional Piedmont Lawn:

Tall Fescue

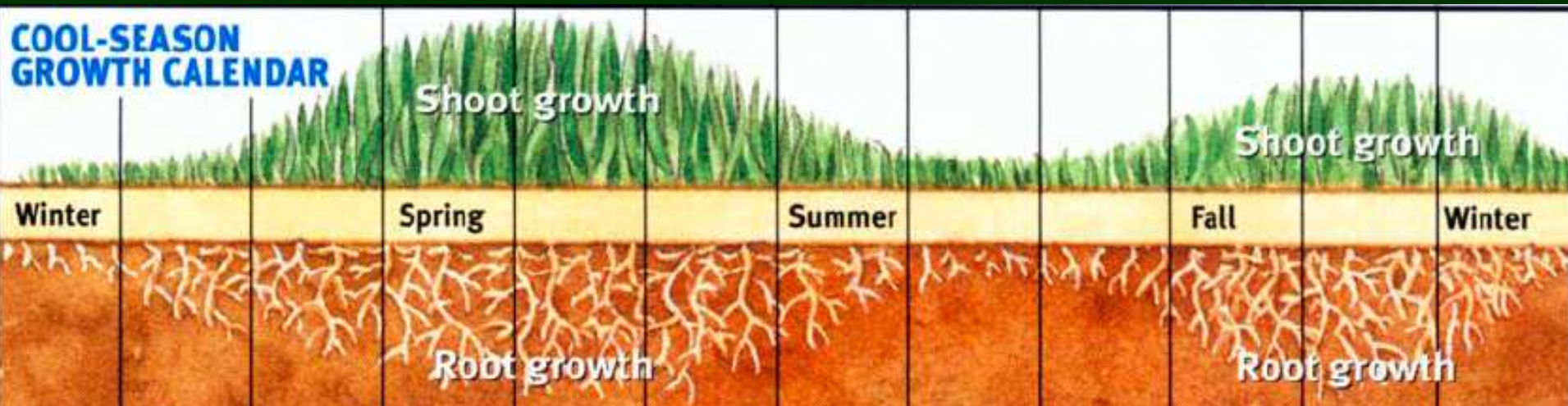
- Most heat tolerant cool season grass
- Sun-part shade
- Mow at 3"+, never shorter than 2.5"
- Wide blade = coarse texture
- Seed in Sept/Oct

Pastures and hayfields in our area are predominantly tall fescue



Cool Season Grasses

- From Europe/Northern Asia
- Best in western half of NC
- Shoots and roots grow during cool times of year: Spring & Fall
- Green in winter, struggle during heat of summer



Tall Fescue

Benefits/Advantages:

- Easiest turf to establish by seed
- Clumping/bunch grass – does not run into beds and gardens
- Dark green color
- Green year-round
- Relatively shade tolerant



Bunch Grass



Traditional Piedmont Lawn:

Tall Fescue

Disadvantages:

- May go dormant during summer drought if not irrigated
- Becomes spotty/patchy over time
- Has to be overseeded every 2-3 years to maintain thickness/coverage
- Not well adapted to sandy or drought prone soils – best on well drained clay



Tall Fescue Varieties Recommended for the Piedmont

- Many named varieties (cultivars) available
- **Plant a blend of varieties**
- Trials at NCSU have identified best for NC, including:
 - Wolfpack II
 - Rebel IV
 - 3rd Millennium
- **NOT Kentucky 31** – old pasture variety



Varieties Should Be Listed on Label

PURE SEED	VARIETY/KIND	GERMINATION
17.06%	TAR HEEL II TALL FESCUE*	85%
17.06%	WOLFPACK II TALL FESCUE*	85%
14.62%	ENDEAVOR II TALL FESCUE*	85%

OTHER INGREDIENTS

50.00% WATER SMART® PLUS FERTILIZER COATING

1.00% INERT FROM SEED

0.25% OTHER CROP SEED

0.01% WEED SEED

NOXIOUS WEED SEEDS: NONE FOUND

LOT NO. 16020003

TESTED: OCT. 2015 SELL BY: JUL. 31, 2016

Always buy seed dated for current year, preferably stored in climate controlled environment (indoors)

If It Soud Good To

- Many includ
variet
non a
specie
- AVOID

grassology™ Grass Seed Mixture

PURITY	VARIETY/KIND	GERM	ORIGIN
27.13%	CREeping RED FESCUE*	80.00%	OR/CN
20.05%	TALL FESCUE*	85.00%	OR
16.81%	PERENNIAL RYEGRASS*	85.00%	OR/DK
9.91%	KENTUCKY BLUEGRASS*	85.00%	OR/WA
9.70%	SHEEPS FESCUE*	80.00%	OR
8.95%	HARD FESCUE*	80.00%	OR
5.38%	CHEWINGS FESCUE*	80.00%	OR
0.08%	OTHER CROP	80.00%	OR
1.85%	INERT MATTER		
0.06%	WEED SEED		

NOXIOUS WEED SEEDS: NONE FOUND

Date Tested 02/2014, Sell By 11/2014

In FL Sell By 09/2014

In MT, SD, and WY Sell By 02/2015

In AK, AZ, CA, CO, CT, DE, ID, IL, IN, MD, MA, NC, NE, ND, NH, NJ, NV, NY, OH, OR, PA, SC, UT, VA, VT, WA, WI, and DC Sell By 05/2015

LOT NO. L68-14-0127

NET WEIGHT 3 LBS (1.35 kg.)

Variety Not Stated*

Telebrands

One Telebrands Plaza

Fairfield, NJ 07004

AMS 6B

NOTICE ARBITRATION/CONCILIATION/MEDIATION REQUIRED BY SEVERAL STATES
Under the seed laws of several states, arbitration, mediation or conciliation is required as a prerequisite to maintaining a legal action based upon the failure of seed to which this notice is attached to produce as represented. The consumer shall file a complaint (sworn for AK, FL, IN, MS, MT, SC, TX, WA; signed only CA, A, ID, ND, SD) along with the required fee (where applicable) with the Commissioner/Director/Secretary of Agriculture, Seed Commissioner (IN), or Chief Agricultural Officer within such time as to permit inspection of the crops, plants or trees by the designated agency and the seedman from whom the seed was purchased. A copy of the complaint shall be sent to the seller by certified or registered mail or as otherwise provided by state statute."

Alternative:

Tall Fescue-Clover Blend

- **Clover = legume = fixes nitrogen**
 - Reduce N fertilizer needs by 1/2
- **Dutch white clover**
 - Perennial
 - Creeping habit
- **Disadvantages:**
 - Attracts bees (stings)
 - Slick/clumpy when mown



Tall Fescue – Clover Blend

Mini- or Micro-clovers preferred

- “Turf Type” white clover
- Lower growing
- Less vigorous
- Smaller leaves
- Less flowers



Bloom Season: Spring-Early Summer



Image source: [University of Maryland](#)

Tall Fescue – Clover Blend

Seeding rate:

- 3 – 5% by volume
- Tall Fescue seeding rate:
6 lbs/1000 sq. ft.
- Add 0.2 – 0.3 lbs clover
per/1000 sq. ft.
- More clover seed =
clover dominated lawn

Ideal time: mid-Sept



Other Cool Season Grasses

Annual & Perennial Ryegrass

- Quick fix - Not permanent
- Often included in “contractor’s blend”
- **Sometimes used to overseed warm season lawns in winter**
 - This is very damaging!
 - **NOT Recommended**



Other Cool Season Grasses

Sometimes included in mixes for shade:

- **Kentucky bluegrass**
- **Fine fescues**
 - Chewings, Creeping Red = preferable
 - Hard, Sheep = poor heat tolerance

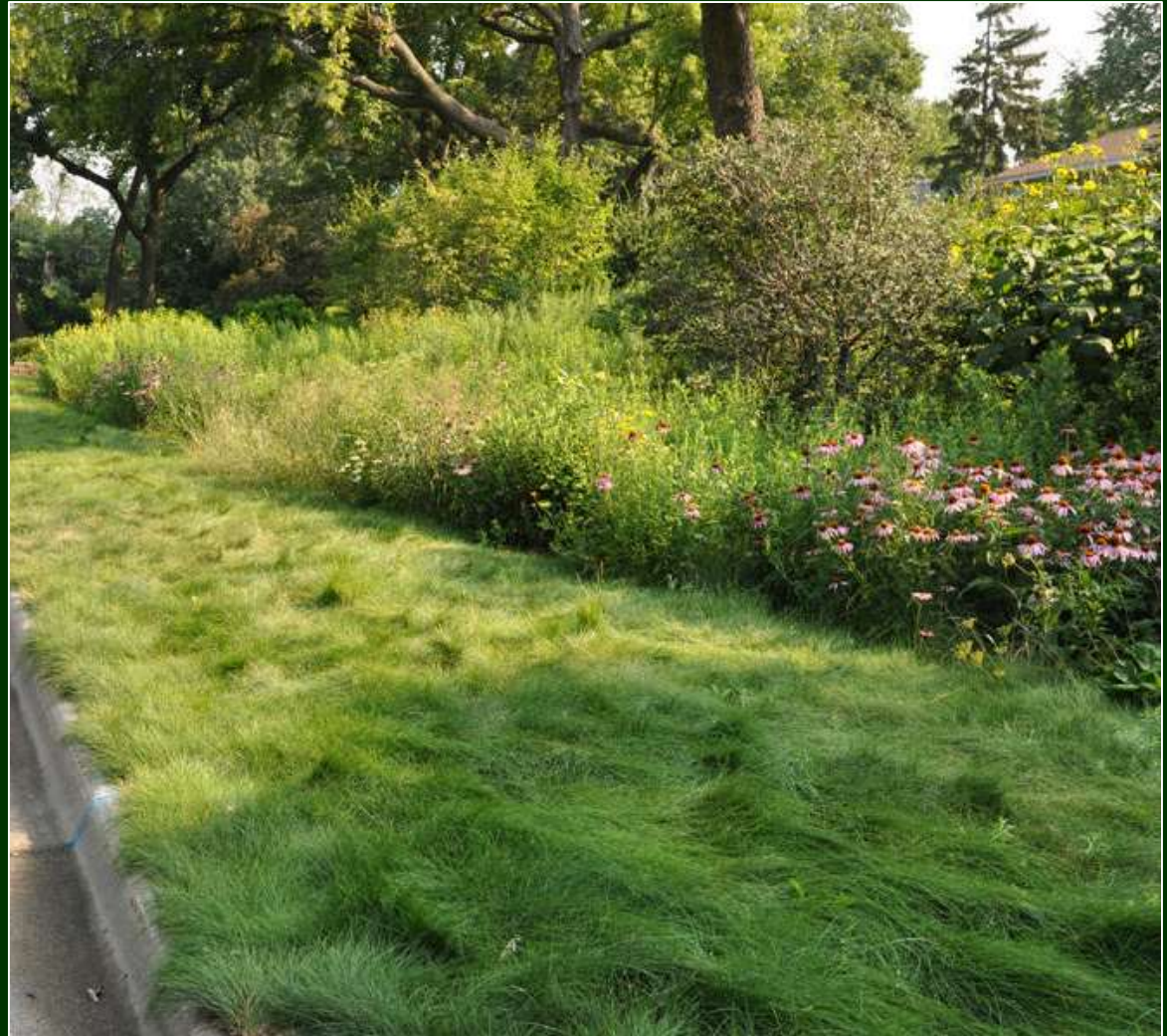
Tall fescue should make up majority of blend

- Looks for 5:1:1 blend
- Tall fescue: KY bluegrass: fine fescue



“No Mow” Lawns

- Typically mix of fine fescues
- Suited to northern states, Pacific NW
- Too hot here?
- May work for shady areas?



Newer Turf Options:

Warm Season Grasses

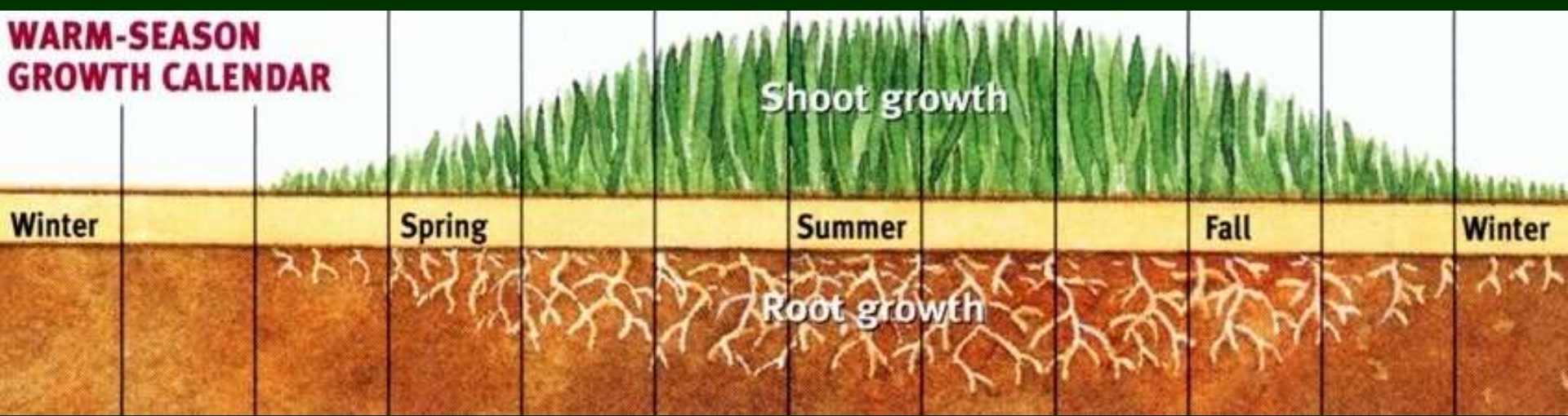
- Actively grow spring-fall
- Dormant in winter
- Compared to tall fescue:
 - More heat tolerant
 - More drought tolerant
 - More wear tolerant
 - “Self-healing”
- Many varieties must be sodded



Winter Color

Warm Season Grasses

- From Africa, SE Asia
- Best adapted to eastern half of NC
- **Bermuda**, **Zoysia**, Centipede, Carpetgrass, St. Augustine, Bahiagrass



How Warm Season Grasses Grow

Spread by:

- **Stolons** - above ground stems
- **Rhizomes** -below ground stems

“Self Healing”

- Fill in damaged areas
- More difficult to keep out of beds

Seed/plug or sod April-July

- Keep moist during establishment!



Rhizome



Stolons

Bermudagrass

- Fine to medium texture, narrow blade
 - Mow at 1"-2" with rotary mower, lower with reel mower
- Gray-green to blue-green color

Advantages:

- **Excellent wear tolerance**
 - High traffic areas
 - Often used on golf courses, sports fields
- **High drought tolerance**



Bermudagrass: Disadvantages

- Full sun, not shade tolerant
- Spreads rapidly: stolons and rhizomes
 - Quickly spreads into gardens and landscape beds
- Mow frequently = 2/week
- High fertilizer requirements
 - 4 applications nitrogen per year
- **HIGH MAINTENANCE** –
Developed for golf courses and sport fields



Bermudagrass

Varieties

- **Common Bermuda**
 - Coarser texture
 - Seeded – established fast
 - Often considered a weed!
 - Spreads rapidly
- **Hybrid Bermuda**
 - Finer texture
 - Some varieties can be seeded
 - Others must be established from plugs or sod
- See varieties listed in Carolina Lawns publication



Princess is an improved seed strain

Zoysiagrass

- Fine to medium texture, medium- dark green
- Spreads by stolons and rhizomes
 - Not as vigorously as Bermuda
- **Good wear resistance**
- **Very drought tolerant**
- **Tolerant of moderate shade**
- 2 – 3 applications of N/year
- Developed for residential lawns



'Empire' Zoysia

Zoysiagrass

- Average mowing 1/week
- **Moderate Maintenance**
- Several varieties, most are sodded
- **Zenith and Compadre can be seeded**
- Emerald, Meyer – early cultivars, much better varieties available now



Zoysiagrass - Newer Cultivars

All have Fast Lateral Growth



Wider Leaf Blade

- Crowne
- Empire
- El Toro
- Zenith
- Compadre

Mow 2-3"

Finer Texture Leaf Blade

- Zorro
- Zeon
- Cavalier
- Diamond
- GN-Z

Mow lower

Turf Alternatives

- **There are no living lawn alternatives that tolerate regular wear**
 - Will need paths if want to walk through
- **The right choice for your yard will depend on:**
 - Site conditions (sun/shade, drainage)
 - Personal preference (appearance)
 - Landscape goals

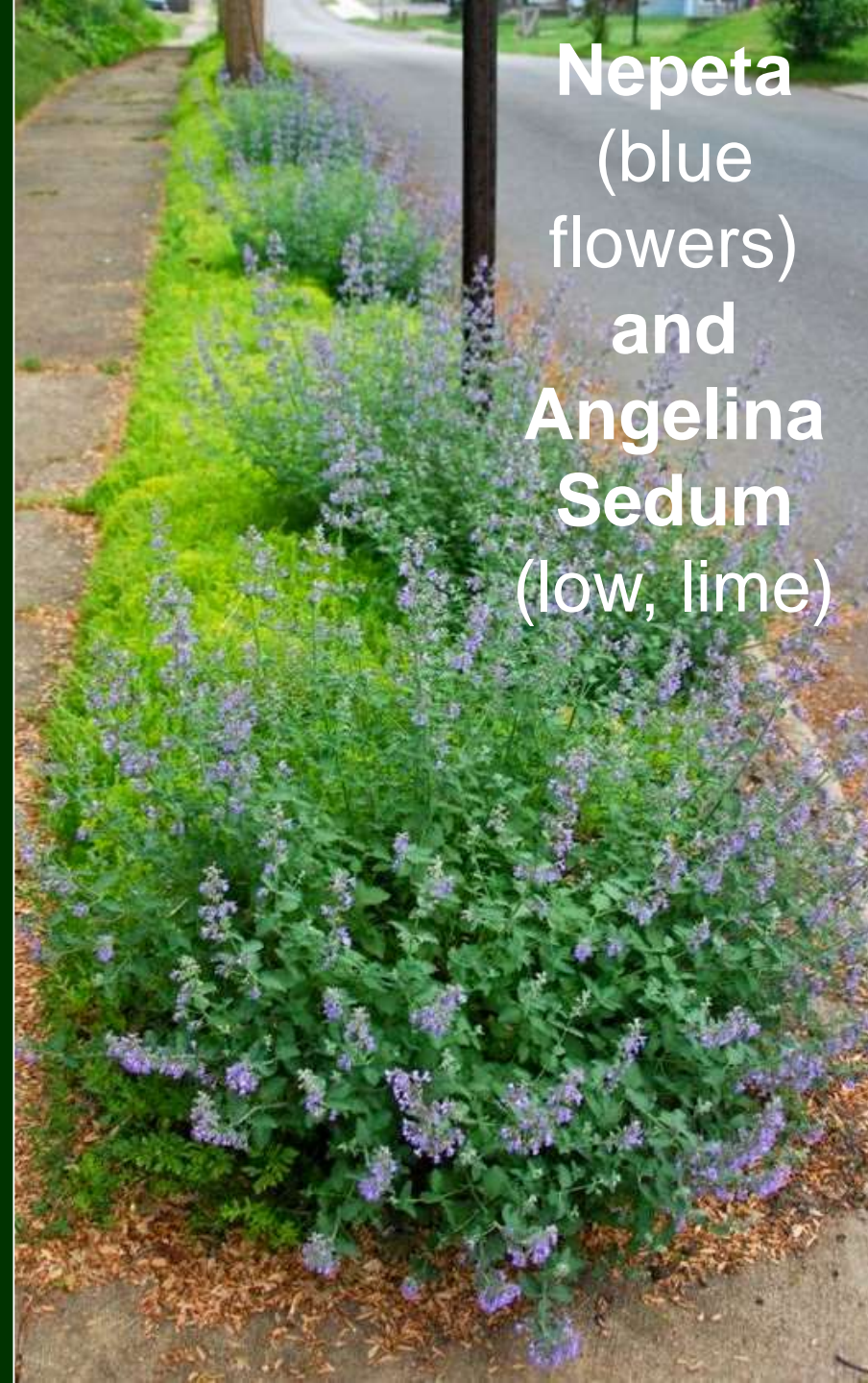


Creeping Jenny

The Wrong Place for Lawns

- **Narrow strips**
- Narrow areas with concentrated traffic
- **On steep slopes**
- Poorly drained, wet areas
- **Shade**
- **Covering acres**

Plant narrow strips with groundcovers and perennials



Nepeta
(blue flowers)
and
Angelina Sedum
(low, lime)

Narrow Strips

Plant perennials for
pollinators!

For ideas:

- www.carolinapollinatorgarden.com
- Visit the Pollinator Paradise Garden at Chatham Mills, Pittsboro – [Top 25 Plant List](#)
- Attend upcoming [pollinator conservation workshop](#)



Wrong Place: Frequent, Concentrated Traffic

- Add a path! Gravel, mulch, stepping stones



Wrong Place: Steep Slopes

- **Native trees** are the best option on slopes too steep to mow
- **Shrubs and ornamental grasses** also work – not as long lived



Wrong Place: Wet

- Poor drainage = disease problems!
- Plant moisture tolerant trees, perennials and sedges & rushes
 - River birch
 - Willow oak
 - Bald cypress



Common Rush, *Juncus effusus*

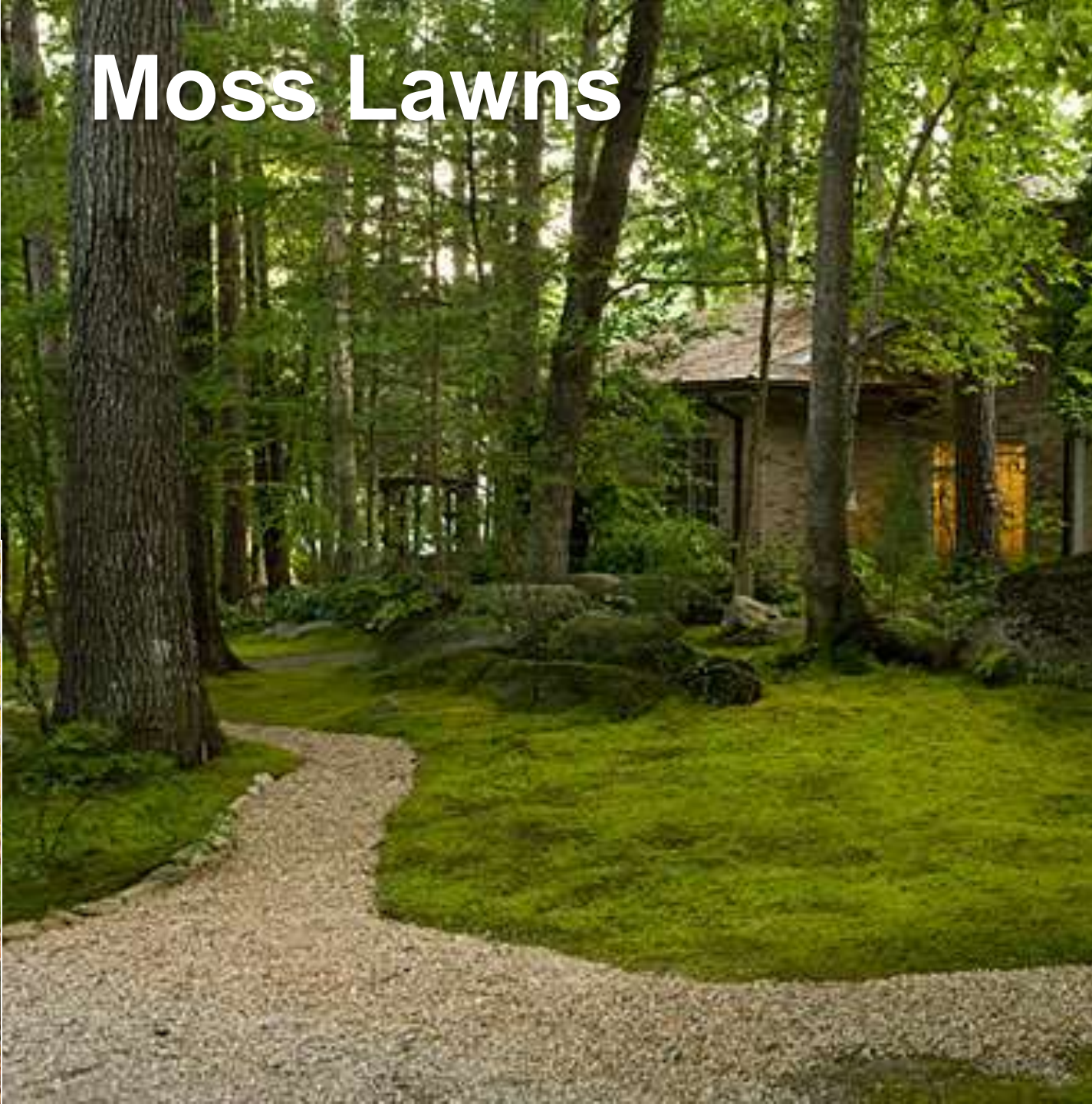


Wrong Place: Shady

- Over 50% shade, no turf will grow well
- Alternative: groundcover with path OR let moss grow!



Moss Lawns



Cultivating Moss

- For shady, moist areas
- Moss is not tolerant of heavy foot traffic – add a path
- **Transplant patches spring**
 - Press into loosened soil
 - Keep moist for 3-4 weeks
- **Make a moss slurry:**
 - Mix 2 parts moss, 2 parts water, and 1 part buttermilk in a blender
 - Spread over soil surface and keep moist until established



Groundcovers for Shade

- None tolerate foot traffic
 - Add a path
- **Perennials**
 - Low-growing, evergreen
 - Spreaders or clumpers
- **Sedges**
 - Grass like plants
 - Deer resistant

Viola walteri
'Silver Gem'





Pennsylvania Sedge
Carex pensylvanica

Rosy Sedge

- *Carex rosea*
- Piedmont native
- 12"
- Slowly spreading
- Dry or moist sites
- Part - full shade



More Low Growing, Shade Tolerant Sedges

- **Appalachian Sedge,**
Carex appalachica
 - 12", dense mounds
 - drought tolerant
- **Cherokee Sedge,**
Carex cherokeensis
 - 12 – 18"
 - Prefers moist sites



Dwarf Mondo Grass



Woodland Stonecrop, *Sedum ternatum*



Green and Gold
Chrysogonum
virginianum



Foamflower
Tiarella cordifolia

Native Ferns

Most are deciduous, Christmas Fern is evergreen



Groundcovers for Dry Sunny Sites

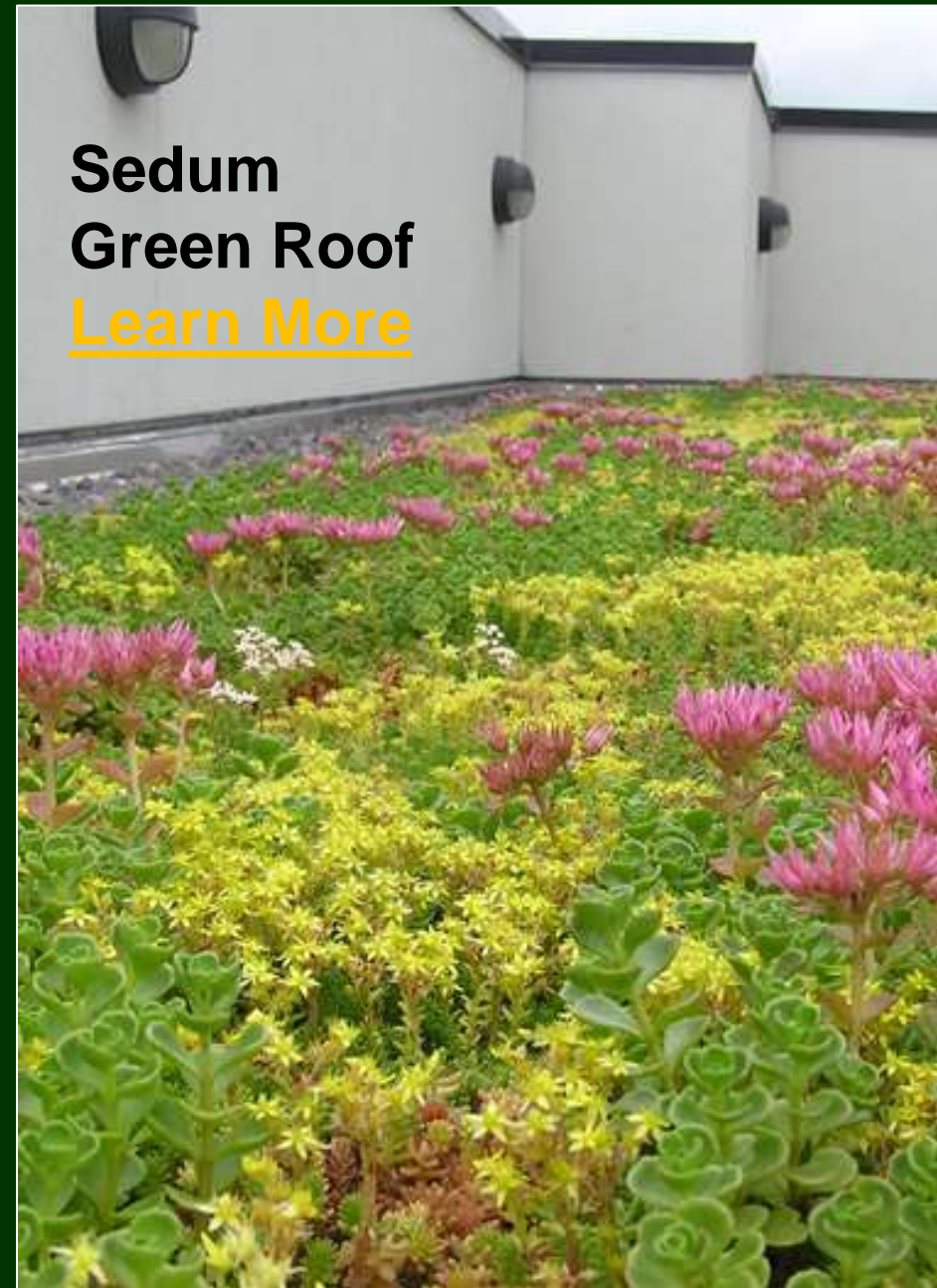


Moss Pink,
Phlox subulata

Cheddar Pinks,
Dianthus
gratianopolitanus

Low Growing Sedums

- Drought tolerant – require good drainage
- **Varieties include:**
 - Angelina
 - Blue Spruce
 - Weihenstephaner Gold
 - Sedum spurium
 - Dragon's Blood
 - Red Carpet
 - Sedum album



Sedum
Green Roof
[Learn More](#)

Junipers

- **Creeping Juniper**
 - *Juniperus horizontalis*
 - Lowest growing, 1' x 6'
 - Many named varieties
- **Shore Juniper**
 - *Juniperus conferta*
 - Grows 18" x 4'
 - 'Blue Pacific' is popular

Both are very drought tolerant



For Wet or Poorly Drained Sites



Rain Lily,
Zephyranthes candida



Sweet Flag,
Acorus species

Wrong Place: Turf Should Not Be a Default!

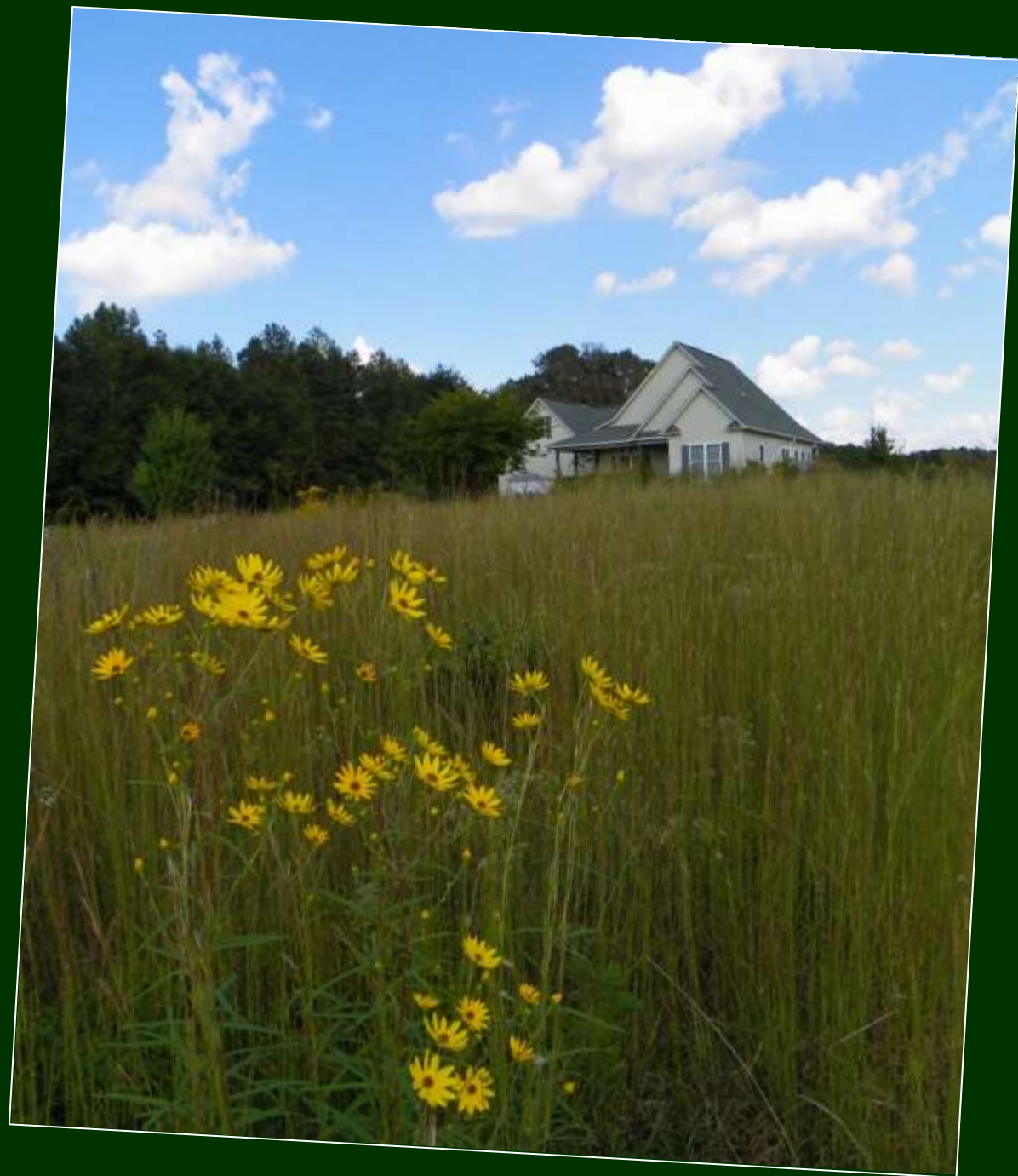


Alternative: Meadow

**Dominated by
native grasses:**

- Little Bluestem
- Big Bluestem
- Indian Grass
- Broomsedges
- Panic Grass

**Native perennials
mixed in**



Longwood Gardens, Kennett Square, PA



Meadows

- Paths and mowed edges serve as “cues to care”
- Add birdhouse habitat signs
- Mow once a year to prevent woody plants invading



Meadows

- Select seed mix for local region
- Sow Nov-Feb
- **Eliminate weeds and cultivate first!**
- Smaller areas can be established with transplants



Site Preparation: Meadows, Lawns, Groundcovers

- **SOIL TEST!!!**
 - Lime and phosphorous should be tilled in
- **Alleviate compaction**
- **Incorporate organic matter – compost**
- **Eliminate weeds BEFORE planting**



Hard work but worth it!

Avoid many problems with a good start!

Amend Before Planting!



Compacted Clay Soil

Amended
Soil

Sustainable Lawns

- Begin by choosing **right location for turf**, then choose **best adapted species** for location
- Soil preparation is essential!
- **Fertilize and lime based on soil test results**
- **Add trees, shrubs, perennials to increase diversity and beauty!**



Resources You Should Know About!

Chatham Gardener email list

- Sustainable gardening information
- Timely tips, pest alerts, new resources
- Upcoming classes and events
- **To subscribe:**
 - <http://go.ncsu.edu/subscribecg>



Chatham County Website

<http://chatham.ces.ncsu.edu>

- News
- Upcoming events
- Staff directory
- Contact information
- More!

The screenshot shows the homepage of the Chatham County Extension website. At the top left, there is a red box with "NC STATE" and the logo for "NC COOPERATIVE EXTENSION" with the tagline "Empowering People - Providing Solutions". To the right is a search bar with the text "Search below or ask an expert" and "Enter Your Keywords Here". Below the logo is a navigation menu with links: Home, About, Contact Us, Meet Our Staff, Events, NC A&T, and Our County Centers. A large banner image features a collage of photos: two young girls, a woman reading a book, a watermelon, a young girl holding a watermelon, and a sunflower. Below the banner is a sidebar menu with categories: Growing Small Farms, 4-H Youth Development, Agriculture & Food (with sub-links for Animal Agriculture, Commercial Horticulture, Nursery & Turf, Farm Health & Safety, Field Crops, Food Safety & Processing, Local Foods, Pest Management, and Specialty Crops), Community, Forest Resources, Health & Nutrition, Home & Family, Lawn & Garden, and Soil, Water & Air. The main content area is titled "FEATURED CONTENT" and features a "Gardening E-Newsletter" section with a description and a "READ THE REST" button. To the right of this section is a vertical list of featured content items: "Plant Sciences Initiative", "Soil 101: Introduction to Soil - Online!", "Gardening E-Newsletter", "Food Processing and Manufacturing Initiative", and "Soil Testing". Below the featured content is a "FEATURED EXTENSION VIDEO" section with two video thumbnails: "How to take a soil sample" and "Preparing Insect and Plant Disease Samples". At the bottom, there are sections for "NEWS" (with a "View All" link) and "EVENTS" (with a "View All" link). The footer includes the "Chatham County Center" logo, a "Horsekateer Members Win at" announcement, and a "Chatham Landscape Conference" announcement.

Extension Gardener Handbook

<https://content.ces.ncsu.edu/extension-gardener-handbook>

NC STATE UNIVERSITY | CAMPUS DIRECTORY | LIBRARIES | MYTRACK PORTAL | CAMPUS MAP

NC STATE
NC State University
A&T State University
**COOPERATIVE
EXTENSION**
Empowering People • Providing Solutions

NC Cooperative Extension Resources

Resource Catalog Log in Search Search Print

Extension Gardener Handbook Extension Gardener Handbook

Table of Contents

- [1. Soils and Plant Nutrients](#)
- [2. Composting](#)
- [3. Botany](#)
- [4. Insects](#)
- [5. Diseases and Disorders](#)
- [6. Weeds](#)
- [7. Diagnostics](#)
- [8. IPM](#)
- [9. Lawns](#)
10. Herbaceous Ornamentals (Coming soon!)
11. Woody Ornamentals (Coming soon!)
12. Native Plants (Coming soon!)
- [13. Propagation](#)

Chapter 9: Lawns

Carolina Lawns

*A Guide to Maintaining
Quality Turf in the Landscape*



NC State University
A&T State University
**COOPERATIVE
EXTENSION**
Empowering People · Providing Solutions

Available:
[https://content
.ces.ncsu.edu
/carolina-
lawns](https://content.ces.ncsu.edu/carolina-lawns)

Also be sure to
download **lawn
maintenance
calendar** for
your turf type!

Going Native Website

<http://www.ncsu.edu/goingnative/>

Searchable plant database!

NC STATE UNIVERSITY



GOING NATIVE

URBAN LANDSCAPING FOR WILDLIFE WITH NATIVE PLANTS

HOME

NATIVE PLANTS ATTRACTIVE TO WILDLIFE

WHERE TO GET NATIVE PLANTS

INVASIVE, EXOTIC PLANTS OF THE SOUTHEAST

MY PLANT LIST



Home >

WHY GO NATIVE

HOW TO GO NATIVE

CREATE YOUR OWN NATIVE LANDSCAPE

Going Native: Urban Landscaping for Wildlife with Native Plants

You can go native!...with native plants in your landscape.

- See [why](#) landscaping with native plants is better for wildlife and for the environment.
- Find out about the problems caused by [invasive, exotic plants](#). Odds are you have invasive exotics in your own backyard!
- Discover the [native plants](#) you can use as alternatives to exotic plants. We even tell you [where](#) you can

Extension Plants Database:

Can help you select native and non-invasive non-native species for your yard

<http://plants.ces.ncsu.edu/>


NC STATE UNIVERSITY CAMPUS DIRECTORY | LIBRARIES | MYPACK PORTAL | CAMPUS MAP

NC STATE UNIVERSITY Search

NC COOPERATIVE EXTENSION
State University State University
100 Empowering People • Providing Solutions

Plants [Grow Plants](#) [Buy Plants](#)

Annuals	Poisonous Plants
Carnivorous Plants	Roses
Edible Plants	Shrubs
Ferns	Spring Bulbs
Groundcover	Summer Bulbs
Herbs	Trees
Native Plants	Vines
Ornamental Grass	Water Garden
Perennial Bulbs	Wildflowers
Perennials	All Plants



Plant Profiles:

- Height
- Hardiness
- Soil
- Exposure
- Description
- Images
- More!

Plants > Native Plants > Hydrangea quercifolia

Hydrangea quercifolia

This plant has poison characteristics. See below.

Common Name(s):

Oakleaf hydrangea

Cultivar(s):

Snow Queen , Snowflake , Harmony , Pee Wee, Sykes Dwarf, Alice, Little Honey (golden foliage), Munchkin (semi-dwarf), Ruby Slippers (semi-dwarf)

Categories:

[Native Plants](#), [Poisonous Plants](#), [Shrubs](#)

Comment:

Bold leathery leaves; spread of 8 ft.; seeds eaten by birds; mulch to keep root system cool; exfoliating bark on mature plants; wine, orange, and mahogany fall foliage; coarse texture; drought tolerant; native to southeastern US; rapid growth rate

Description:

Deciduous shrubs; leaves opposite, simple, stalked, toothed and sometimes lobed; flowers in terminal, round or umbrella-shaped clusters, white, pink, or blue, 4- 5-parted, the sterile flowers (around the margin or the entire cluster) are much enlarged.

Height:

4-8 ft.

Foliage:

Opposite, simple, bold leathery leaves; 3-8 in. long; wine, orange, mahogany fall color

Flower:

4 -12 in. erect panicles of creamy white flowers in summer; fades to pink, then tan; fragrant; good for drying

Zones:

5 to 9

Habit:

Deciduous

Site:

Sun to partial shade; prefers moist, well-drained soil but tolerates damp soil

Texture:

Coarse

Form:

Upright, irregular, rounded, multi-stemmed shrub with limited branching; stoloniferous; forms colonies

Exposure:

Sun to partial shade; moist, well drained soil

Fruit:



H. quercifolia 'Snowflake'

Photo by Kingsbore Garden, [CC BY-ND-SA - 2.0](#)



H. quercifolia 'Snow Queen'

Photo by Henryr10, [CC BY-NC-ND - 2.0](#)

Evaluation

**Thanks to Cure
Nursery for
donating our
door prize!**



880 Buteo Ridge

Pittsboro NC 27312

Phone: 919-444-9902

<http://www.curenursery.com>

Learn more:

<http://go.ncsu.edu/lawn-resources>

Answers to Your Questions, Solutions for Your Problems

In Chatham County, EMGs are available:

- Mon & Thurs, 1-4pm
- 919-545-2715
- chathamemgv@gmail.com

**Contact your local
Extension office**

- <http://www.ces.ncsu.edu>

Ask an Expert

- <http://www.ces.ncsu.edu/ask-an-expert>

