Minimizing Deer Damage in Landscapes



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http://go.ncsu.edu/managingdeer

Review these slides and explore online resources to learn more about:

- Repellents
- Deer biology
- Fencing
- More plants!



Vinca

Deer resistant summer annual

Chatham County Agriculture and Conference Center

- Hwy 64 west, Pittsboro near CCCC campus
- Will house:
 - Cooperative Extension
 - Soil and Water Conservation
 - USDA Farm Service Agency
 - NC Forestry Service
 - 800 seat auditorium!



Extension Master Gardener Volunteer Program

- Extend our reach into local communities, schools, and neighborhoods
- Coming toChathamCounty in 2016!



Minimizing Deer Damage

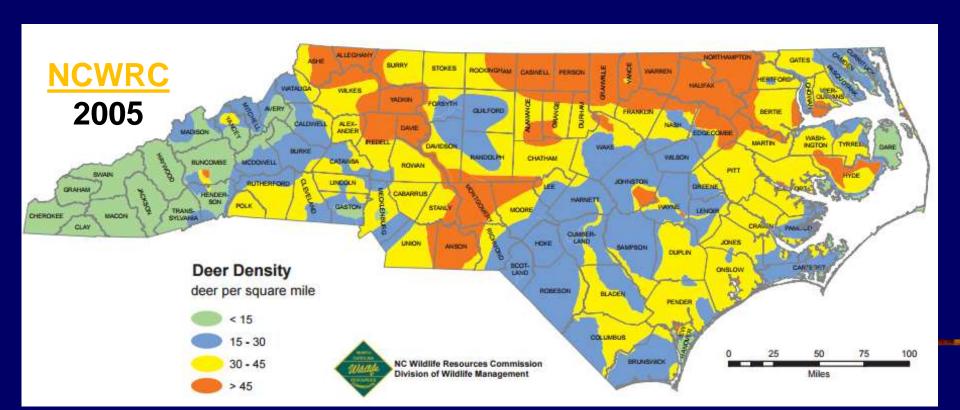
- Repellents
- Fencing
- Scare Devices
- Deer Resistant Plants

Effectiveness depends on population density



Deer Population Density

Approximately 1.35 million deer in NC! Not evenly distributed



Deer Population Increasing

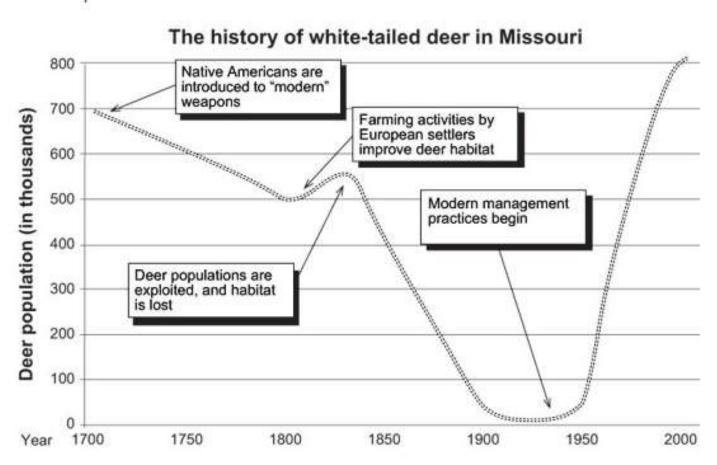
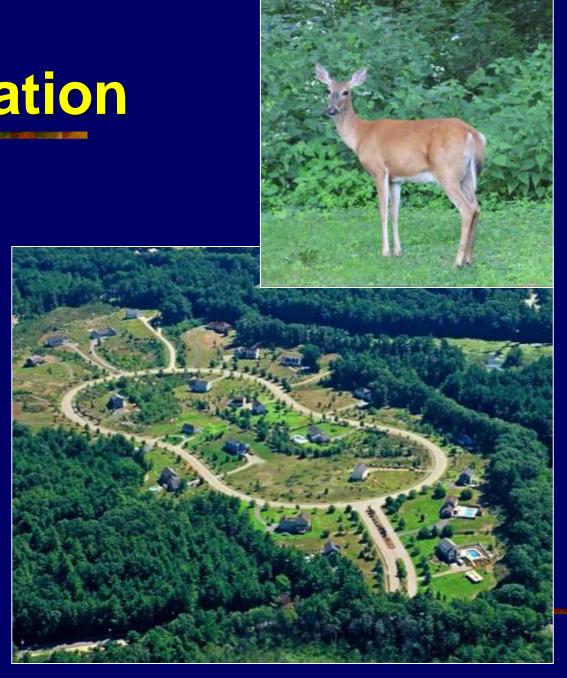


Figure 2. The influx of European settlers in the latter half of the nineteenth century coincided with a rapid decline in the deer population. (Source: Missouri Department of Conservation)

Deer Population

Increasing rapidly in urbanizing areas

- No predators
- Limited hunting
- Lots of edge habitat
- Nutrient rich plantings



Localized Dense Populations

- Home range ~1 sq. mile
- Local human behaviors (feeding, hunting bans) result in higher populations
- Contact NC Wildlife
 Resources Commission
 for advice on population
 management at
 community level



Dense Populations

- Dense deer populations damage ecosystems
 - Prevent forest regeneration
 - Favor growth of invasive plants, such as:
 - Japanese stiltgrass
 - Eleagnus -Silverberry/Autumn Olive
 - Chinese privet
 - Japanese honeysuckle



Autumn Olive

Dense Population

More deer =

Greater feeding pressure =

Strategies less effective =

Expect some damage



Strategies to Minimizing Damage

- At the home landscape level
- Begins with understanding deer behavior
- Minimize/reduce damage, NOT eliminate!



Tomato plant eaten by deer-Damage tolerances vary!

Understanding Deer Behavior

Browsers

- Can eat wide range of plants, have preferred species
- Ruminants
- Reach up to 6'
- Do not see color but have acute sense of smell



Creatures of habit

- Previous damage often indicates future damage potential
- Follow established trails

Prefer woodland edges

Want cover (woods) close by when feeding

Landscape damage more common in wooded communities





No sharp upper teeth

- Jerk stems ragged, torn edges
- May strip leaves from stems
- May pull up newly planted annuals, perennials



Picky Eaters

- Prefer to eat some plant species over others
- Favor irrigated and fertilized plants and crops!
- Love flower buds and tender new growth





Deer will happily pick around plants to find their favorites!

Deer Can Jump!

- Especially when chased
- At least 9' high, 20' span
- Don't like to if they cannot see landing area– poor depth perception
- Prefer to go around, through or under rather than over





Use knowledge of behavior to minimize damage

- Fencing
- Repellents and Scare Devices
- Landscape Design
- Plant Selection



Deer Paradise:

Lush, irrigated, fertilized landscape full of their favorite flowers and shrubs

Relatively open but with cover nearby

Fencing

- Most effective method but most expensive
 - Only option for vegetables and fruits
- Complete enclosure
 - Will search for openings!
- At least 8' tall if not electric



Wire Mesh Fencing

Deer Fencing

Non-electric

- 8' solid fence, to ground level most effective
- Wire mesh
 - Well anchored at bottom
- Lower fences
 - Plant shrubs on inside so deer can't see landing area
 - Line with wire mesh to prevent going under





Electric Fencing

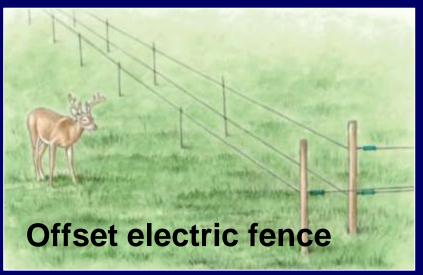
- Effective, less expensive
- Primarily psychological barrier
- Single or double wire fence - temporary
 - Single, 30"
 - Double, 18" and 36"
 - Bait with peanut butter



Polytape/polywire easier to work with than high tensile wire, not as long-lasting

Electric Fencing

- Offset and slanted designs take advantage of poor depth perception
- Design diagrams:
 - NCWRC
 - Controlling DeerDamage
 - Wildlife Damage Mgmt





Deer Repellents

Reduce damage – do not eliminate it!

- Repel by taste and/or odor
- If taste spray on plants, ground level up to 6'
- Odor repellents can be applied as band around plants, garden perimeter
- Few can be applied directly to edible plants





Deer Repellents

- Work best when applied before deer have established routine feeding patterns
 - Availability of alternate food sources best predictor of success!
- Must reapply often (every few weeks to months) beginning 2 weeks before bud break
- Alternate products for best results – see links





Table 1. Popular Deer Repellents.

ActiveIngredient	Mode of Action	Use on Edibles	Longevity	Trade Names
Salts/fatty acids of ammonia	Odor	Yes	Up to 4 weeks depending on the amount of rainfall	-Hinder -Deerbusters Deer and Rabbit Repellent
Garlic o <mark>i</mark> l	Odor	Yes	Reapply after a heavy rain	-GD Deer and Insect Repellent -Garlic Barrier
Capsaicin Castor Oil	Taste	Yes	Up to 30 days depending on the amount of rainfall	-Miller's Hot Sauce -Scoot Deer
Predator Urines	Odor	Not Directly	± 30 days	-Coyote, wolf urine—many products available
Fish and/or beef by-prod- ucts	Odor/taste	Not within 8 weeks of consumption	± 30 days during dor- mant season, every 10 to 14 days during the grow- ing season	-Bobbex -Deerbusters Plant Growth Stimulant
Putrescent egg-based products	Odor	No	1 to 3 months or more	-Deer Away BGR -Rejex -It Deer Chaser
Thiram fungicide-based products	Taste/odor	No	1 to 3 months or more	-Bonide Chew-Nott -Deerbusters Deer Repellent and Turf Fungicide -Shotgun Deer & Rabbit Repellent
Blood-based products	Taste/odor	No	1-3 months or more	-Plantskydd -Repellex
Denatonium benzoate or bitrex	Taste	No	1-3 months or more	-Tree Guard -Ropel, Repel
Egg, garlic, fish oil, hot pepper, bitrex or some combination	Taste/odor	No No No No No No Yes	1-3 months or more	-Deerbusters Deer I -Deer Stopper II -Deer Off -Bobbex -Liquid Fence -MGD Deer Repellent -Not Tonight Deer -Deer Blocker

Using Commercial Deer Repellents Maryland Extension

An Overview and Cost Analysis of Deer Repellents . . . Alabama Extension

Table 7. Cost Analysis of Common Commercial Deer Repellents

Repellent Name	Cost/100 sq. ft. area	Cost/100 sq. ft. area/year
Bobbex	\$3.27/ 100 sq. ft.	\$19.62/ 100 sq. ft.
Buck Off	\$1.09/ 100 sq. ft.	\$13.08/ 100 sq. ft.
Deer Off Squirrel, Rabbit, & Deer Repellent	\$0.91/ 100 sq. ft.	\$5.46/ 100 sq. ft.
Deer Out	\$0.25/ 100 sq. ft.	\$1.00/ 100 sq. ft.
Deer Pharm	\$0.09/ 100 sq. ft.	\$2.16/ 100 sq. ft. **
Deer Scram Deer & Rabbit Repellent	\$1.18/ 100 sq. ft.	\$14.16/ 100 sq. ft.
Deer Stopper Plotsaver Deer Barrier System Kit	\$1.00/ 100 sq. ft.	\$4.00 / 100 sq. ft.
Deer Stopper Repellent	\$0.31/ 100 sq. ft.	\$3.72/ 100 sq. ft.
Deerbusters Brand Deer Repellent	\$0.55/ 100 sq. ft.	\$2.20/ 100 sq. ft.
Hin <mark>d</mark> er	\$0.86/ 100 sq. ft.	\$10.32/ 100 sq. ft.
Liquid Fence Deer & Rabbit Repellent	\$0.39/ 100 sq. ft.	\$5.07/ 100 sq. ft.
Miller Hot Sauce	\$19.93/ 100 sq. ft.	\$518.18/ 100 sq. ft.
No Deer Zone*	\$5.99/ 100 sq. ft.	\$23.96/ 100 sq. ft.
Plant Pro-Tec Repellents	\$17.55/ 100 sq. ft.	\$35.10/ 100 sq. ft.
Plantskydd	\$0.35/ 100 sq. ft.	\$1.40/ 100 sq. ft.
Shake-Away Deer Repellent Granules	\$2.49/ linear ft.	\$59.76/ linear ft.
Spotrete F	\$0.09/ 100 sq. ft.	\$1.07/ 100 sq. ft.
Tree Guard*	\$4.80/ 100 sq. ft.	\$14.40/ 100 sq. ft.
*Indicates ready-to-use products	-	1 2010 P : :

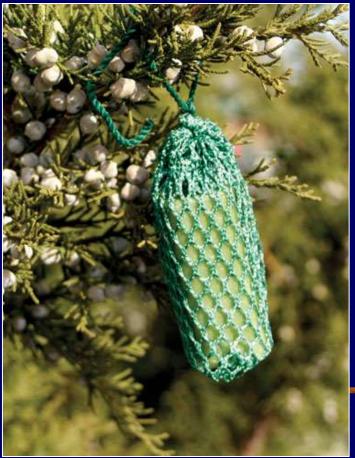
Based on 2010 Pricing

^{**}Calculated for reapplication every 2 weeks

Non-Commercial Repellents

- Bars of soap
- Bags of hair
 - Have some efficacy but must be placed every 3'; replace every 3-4 weeks
- Duke GardensRecipe: 1 egg mixed in1 gallon water





Scare Devices

- Motion activated light/sound/water devices
 - On overnight
- Lay chicken wire on the ground?
- Others???



ScareCrow Deer Sprinkler

Zoning the Landscape

Divide landscape into zones based on management intensity

High Management Zone

- Typically area closest to home
- Grow plants deer most likely to damage
- Enclose with fencing or protect with frequent applications of repellents/scare devices





Deer Favorites

- Fruit trees and berries
- Vegetables
- Roses (flowers)
- Daylilies
- Azaleas
- Hydrangea
- Clematis
- Most annuals



Many more - listed in online fact sheet

Zoning the Landscape

Low Management Zone

- Little actively done to reduce feeding
- Plant only deer resistant species
- Plant diverse range of species
- Essential next to woods

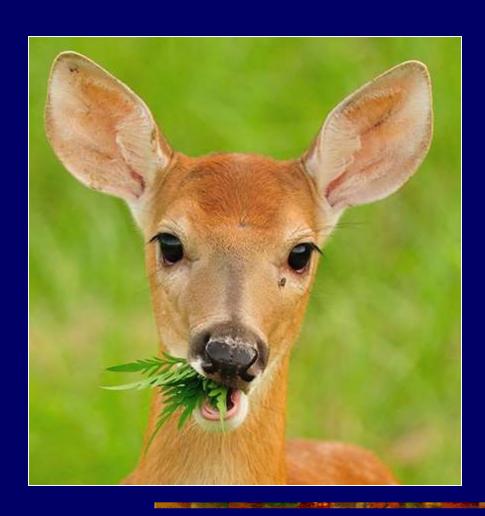


- Deer Resistant ≠ Deer Proof!
- Deer resistant plants are those deer prefer not to eat
 - May nibble but usually will not demolish
- Will eat most anything rather than starve!
- Feeding preferences vary from season to season and regionally



Fawns more likely to taste a wide range of plants than adults

- Factors that increase feeding pressure
 - High population density
 - Season
 - Greatest pressure winter/early spring
 - New growth in spring prone to damage
 - Weather
 - Food availability elsewhere within range



- Plant a diverse range of species – flowers, shrubs, trees
- Include natives and flowering perennials to support other wildlife
 - Songbirds
 - Pollinators
 - Beneficial insects



Diversity is the key to a healthy landscape!

- Fall is the best time to plant trees, shrubs, perennials in the southeast!
- New plantings attractive to deer - high nutrient status, lush new growth
- Provide extra protection
 - Cover or cage with chicken wire
 - Spray repellents
 - Temporary fence



Protect through spring

Recommendations based upon:

- Personal observation
- Gardener/landscaper feedback
- Published lists deer don't read these!

Focus:

- Evergreen shrubs
- Perennials
- Adapted to central NC

North Carolina Cooperative Extension

NC STATE UNIVERSITY

DEER RESISTANT PLANTS

Recommended for Central and Southeastern NC Landscapes

Charlotte Glen, NC Cooperative Extension—Chatham County Center



Deer can wreak havoe on a landscape in a matter of just a few nights. There are many options to reduce the nisk of deer damage in landscapes, such as applying repellents on a regular basis and restricting access through the use of femeing. One of the easiest ways to reduce deer damage in your yard is

to landscape with plants deer prefer not to ear. This fact sheet is intended to serve as a guide for choosing landscape plants resistant to deer feeding in North Carolina. Since a starving deer will eat anything to stay alive, no plant is guaranteed!

Deer Feeding Preferences

The plants deer prefer to eat vary from region to region and can even change seasonally. In the lasts on the following pages, deer feeding preferences are classified as follows:

Frequently Damaged

Plants that are deer favorites. These are the first plants deer will seek to feed upon.

Occasionally Damaged

These are the plants deer will turn to once their favorites are depleted.

Seldom Damaged

Plants that deer will rarely eat unless there are no other options. Plants that are in bold print are extremely resistant to deer feeding.

Using a combination of a variety of methods to deter deer will give the most dependable results. To find out more about additional strategies to minmize deer damage in your landscape, visit the online publications listed in the Learn More section at the end of this fact sheet.

Tips on Deer and Plants

- No plant is deer proof! When hungry, deer will eat anything to survive. During stressful times such as drought, plants that are usually avoided may be damaged.
- Deer will cut almost anything in spring, as tender new growth emerges from plants. Deer perfer vegetation that is soft to the touch and high in water content. They especially relish flower buds.
- Over fertilized and over watered plants are particularly lash and appealing to deer.
- Deer resistant does not mean deer proof.
 These are plants deer prefer not to eat. Common characteristics of plants that deer prefer not to eat include:
 - Plants with thomy or prickly leaves or stems
 - Plants with strong scents and pungent tastes, such as herbs
 - ⇒ Plants that are poisonous or produce thick, latex-like sap
 - ⇒ Plants with hairy leaves.

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Deer Resistant Plants

Some Common Characteristics

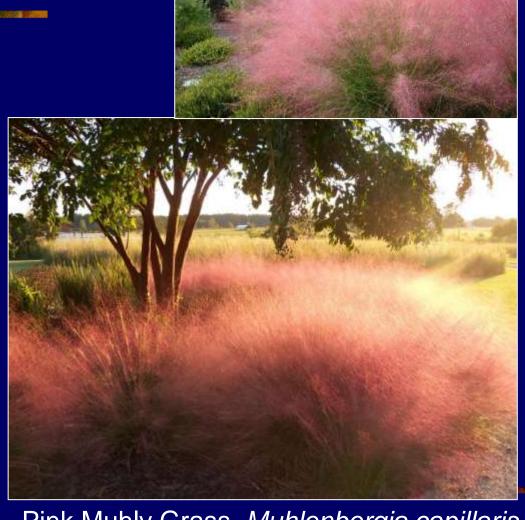
- Thorny stems
- Prickly or hairy leaves
- Tough, fibrous leaves
- Bitter taste
- Strong aromatic scent, herbs
- Ornamental grasses



Panicum 'Northwind'
Deer rarely bother
ornamental grasses

Ornamental Grasses

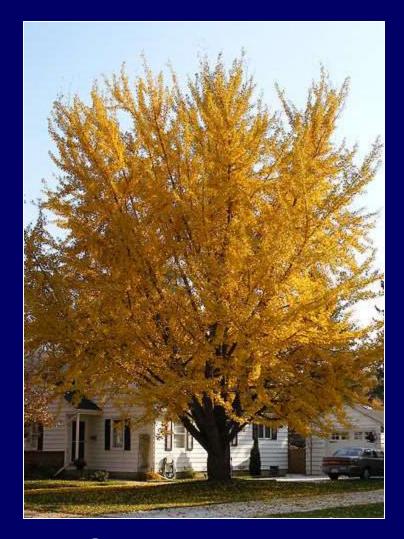
- As a group, ornamental grasses are highly deer resistant
- Low maintenance– cut back inJan/Feb
- Most need full sun
- Most are drought tolerant



Pink Muhly Grass, Muhlenbergia capillaris

Shade Trees

- Most likely to damage foliage/twigs when young
 - Protect with cages, repellents
- Deer cannot reach once lowest foliage is over 6' high
- Trees with upright branching grow out of range faster



Ginkgo trees have upright branching

Protect Trees

- Many young trees favorite of deer
- Individual cages 6' tall
- Leave until foliage out of reach – lowest foliage above 6'



Rubbing

- Very damaging, especially to young trees
- Most common in fallwinter
- No way to repair damage – permanent, sometimes fatal



Protect Trunks

Remember to remove as trees grow!





Small Trees

- More likely to be damaged – branches within deer feeding range
- Crapemyrtle
 - Tree forms rarely damaged
 - New, shrub types sometimes damaged



'Cherry Dazzle' Crapemyrtle

Choosing Crapemyrtle

- Consider:
 - Mature Size
 - Range: 5' 35'!
 - Growth Habit
 - Bark
 - Fall Color
 - Mildew Resistance
 - Flower Color
- Learn more:

http://www.clemson.edu/crapemyrtle







Vitex,
Chaste Tree

- Vitex agnus-castus
- Large shrub or multi-stemmed tree
- Full sun, drought tolerant
- 10'-15' high and wide
- Aromatic blue flowers all summer
- Bees love it!



Vitex,
Chaste Tree

When grown as a shrub, can cut back each year like butterfly bush (back to 2' tall)



Tree form specimens usually have multiple trunks

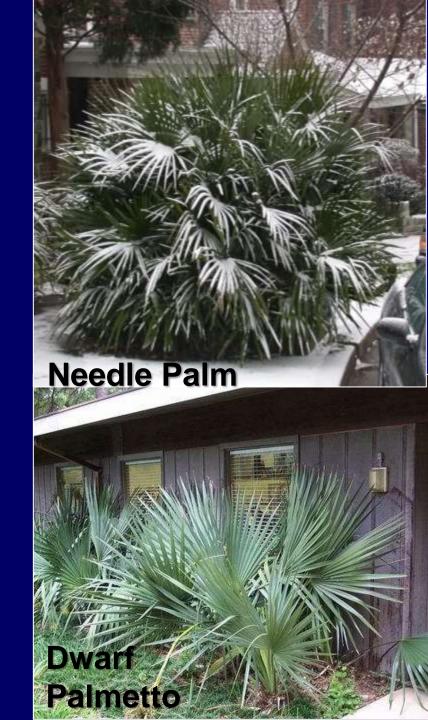
Red Buckeye

- Aesculus pavia
- Native, blooms mid-spring
- **10**'-20'
- Attracts hummingbirds
- Understory tree, best in part shade and moist soil



Evergreen Shrubs

- Frequently damaged in winter
- Palms are very deer resistant. Hardy shrub palms:
 - Dwarf palmetto
 - Native coastal SE
 - Needle palm
 - Both grow 4'-5' tall and wide; prefer part shade and moist soil



Low Growing Evergreens

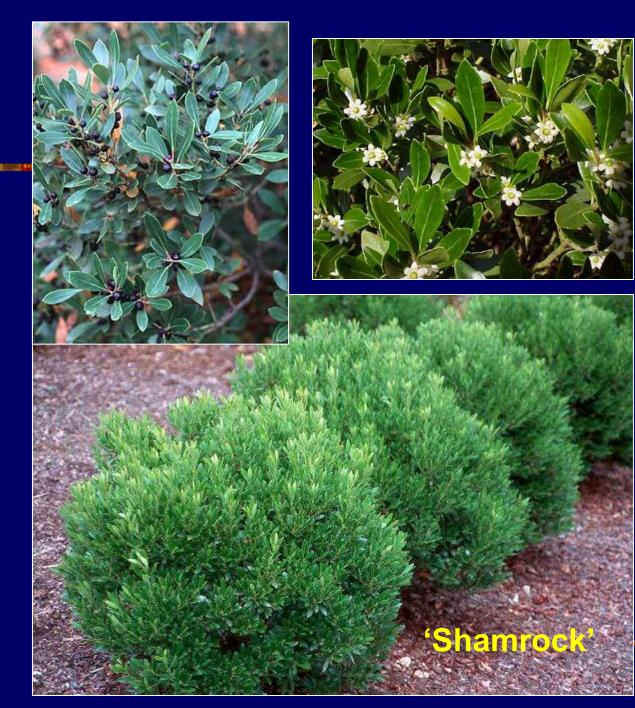
- Dwarf Yaupon
 - Very small leaves
- 'Carissa' Holly
 - Larger leaves, single spine on tip
- Both 3'-4' tall, 4'-5' wide, sun part shade, drought tolerant





Inkberry *llex glabra*

- Native
- 4'-5' x 3'-4'
- Evergreen
- Tolerates moist soil
- Bees attracted to blossoms
- 'Shamrock' 3'-4' tall and wide



Upright Hollies

llex hybrids

- Excellent, long-lived hedges
- Full part shade, well drained soil
- Most are hybrids between native and Asian species
- Prickly leaves, lots of red berries many varieties:
 - 'Needlepoint', 15' x 10'
 - 'Nellie Stevens', 20' x 15'
 - Red Hollies 15'-20' x 10'
 - 'Oakleaf'

- 'Cardinal'

'Festive'

- 'Robin'

Deer may strip foliage on new growth in spring or nip tips



Japanese Plum Yew

Cephalotaxus harringtonia

- Shade or sun
- Well drained soil
- 'Duke Gardens' grows 3'-4' x 4'-5'
- 'Fastigiata' is an upright, columnar variety, 10' x 4'





Rosemary

Rosmarinus officinalis

- Blue flowers Feb-April
- Full sun, well drained soil
- Very drought tolerant
- Ornamental and culinary
- Upright and weeping cultivars available
- Upright types grow 4'-6' tall and wide!
- Weeping types grow 2'-3' tall and 4'-6' wide





Gardenia

- Sun part shade
- Well drained soil
- Most varieties 5' x 5' or larger
- Extremely fragrant
- New Variety:
 - 'Crown Jewel'
 - 3' x 4'
 - Developed at Oakmont Nursery, Chatham County











Gardenia hips







Loropetalum

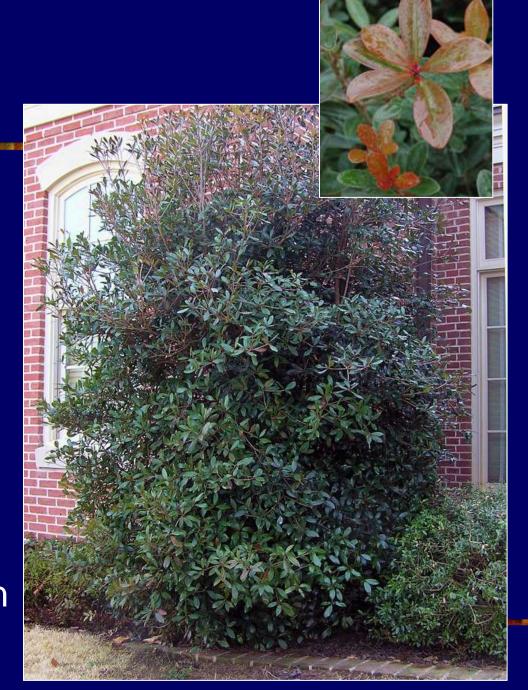
Loropetalum chinense var. rubrum

- Evergreen, purple leaved shrubs
- Fringy pink spring flowers
- Best in part shade, moist, acid soil
- Many varieties range from 3' to 15' tall depending on cultivar
- Prettiest when not overpruned!



Cleyera

- Ternstroemia gymnanthera
- Sun to full shade
- 8'+ tall x 6'+ wide
- Well drained soil
- Drought tolerant
- Tolerates heavy pruning but more attractive when grown natural



False Holly, Holly Osmanthus

- Osmanthus heterophyllus
- 6'-10' depending on cultivar
- Very prickly leaves!
- Sun part shade, well drained soil
- Flowers in fall extremely fragrant



Southern Wax Myrtle

Morella cerifera

- Full sun It. shade
- Moist to dry soil
- 10'-15' x 10'-15'
- Native eastern NC
- Semi-evergreen
- Drought tolerant
- Prone to ice and wind damage
- Winter berries for birds (female shrubs)



Junipers

- Sun good drainage, drought tolerant
- Native Red Cedar
 - Juniperus virginiana
- Many cultivars of Asian species
 - Groundcovers
 - Medium size shrubs
 - Upright shrubs



Deer Resistant Perennials

- Flowers are deer favorites!
- Deer usually avoid plants with silver leaves, hairy leaves, and/or aromatic/herbal fragrances



Catmint, Nepeta x faasenii

This deer resistant, drought tolerant, summer flowering perennial has silver, aromatic leaves

Spring Flowering Bulbs

- Plant in November
- Deer favorites:
 - Tulips, crocus, grape hyacinths
 - Lilies, dahlias
- Deer resistant:
 - Daffodils, Summer snowflake, Spanish bluebells, Starflower



Daffodil 'St. Keverne'



Spanish Bluebell, *Hyacinthoides hispanica*

Starflower, Ipheion uniflorum





Helleborus, Lenten Rose

- Helleborus hybrids
- White, pink or maroon nodding flowers in late winter
- 1' x 2'
- Evergreen foliage
- Shade
- Well drained soil





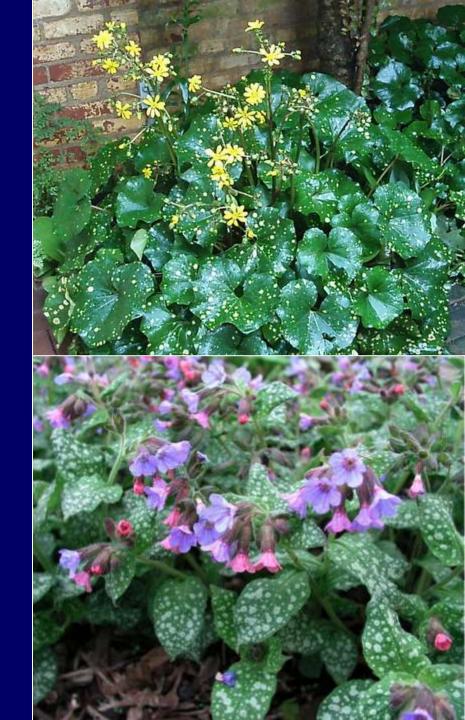
A few more for shade

Leopard Plant

- Farfugium japonicum
- Clumps of evergreen, round spotted leaves topped with yellow daisy shape flowers in fall

Lungwort

- Pulmonaria cultivars
- Somewhat evergreen, spotted leaves
- Blue/pink flowers spring

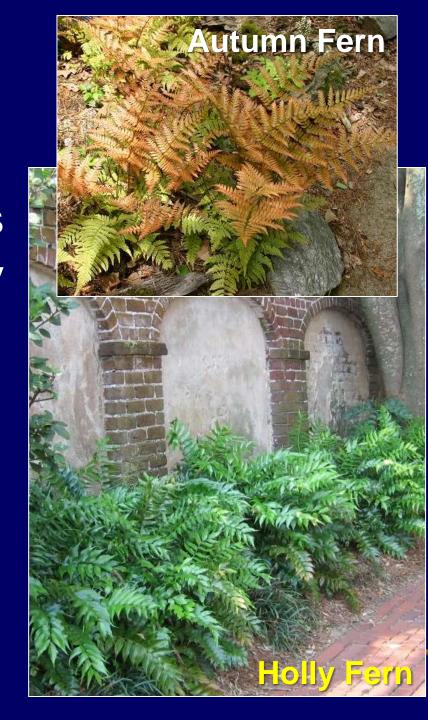


Hardy Ferns

- Deer rarely browse ferns
- Most prefer moist, shady areas

Evergreen ferns:

- Holly Fern
 - Cyrtomium falcatum
- Autumn Fern
 - Dryopteris erythrosora
- Christmas Fern
 - Polystichum acrostichoides



Wild Columbine

- Aquilegia canadensis
- Native
- Blooms It. March May
- Sun or shade, well drained soil
- 12" 24" tall in bloom
- Will naturalize in the garden by self seeding
- Establishes best when planted in fall



Green and Gold Chrysogonum virginianum

- Native
- Light to part shade, moist or well drained soil
- 1' x 2'
- Evergreen foliage
- Spring flowers
- Var. australe is stoloniferous = spreading, lower growing



Bluestar

Amsonia tabernaemontana

- Native
- Tough, long lived clumping perennial
- Pale blue flowers in spring loved by bees
- 2' tall and wide
- Glossy green foliage, turns clear yellow in the fall
- Sun to part shade, wet to well drained soil



Arkansas Blue Star

- Amsonia hubrichtii
- 3' x 3'
- Sun
- Long lived
- Flowers in spring
- Yellow autumn color
- Attractive, ferny foliage all season
- Pollinators love it!





False Indigo

- Baptisia hybrids and species
- Native eastern US
- Many cultivars blue, purple, yellow, white flowers
- 3' 4' x 2' 3'
- Sun to light shade
- Bloom late April May
- Long lived



Yucca, Adam's Needle

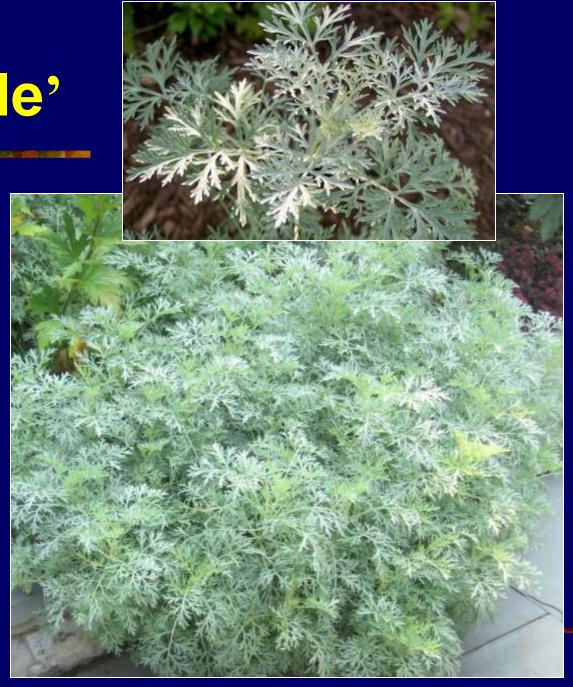
- Yucca filamentosa
- Native
- Evergreen
- Sun part shade
- 2' x 2', summer flower spikes to 5'
- Broken roots regenerate new plants
- Very drought tolerant





Artemisia 'Powis Castle'

- 2'-3' x 3'-4'
- Mounds of silver, finely cut foliage
- Sun
- Drought tolerant
- Evergreen but cut back in early spring to prevent legginess



Gaura

- Gaura lindheimeri
- Sun light shade
- Drought tolerant!
- Many varieties white or pink flowers
- 1' 4' tall depending on cultivar
- Blooms from late spring through late summer – if trim back each time finishes blooming



Coreopsis, Tickseed

- Several species native to NC
- Sun lovers
- Threadleaf Coreopsis
 - C. verticillata
 - Long live
 - Summer blooming
 - Drought tolerant
 - 'Zagreb' 2' x 2'





Butterfly Weed

Asclepias tuberosa

- Native
- Orange flowers summer – attract many pollinators
- Sun to part shade
- Well drained soil
- Very drought tolerant
- Late to emerge in spring







Support Monarchs – Plant Asclepias!



Swamp Milkweed Asclepias incarnata

- Native Mountains, Piedmont, northern Coastal counties
- 3' tall and wide
- Spring/early summer flowers
- Sun to part shade
- Moisture tolerant
- Monarchs! Attracts many pollinators



Lantana

- Sun
- Drought tolerant
- Many varieties some are annuals
- Perennials:
 - 'Miss Huff', 4'-5' x 4'-6'
 - 'Chapel Hill Yellow', 2'x 3'
- Excellent nectar source
- Bloom mid-summer till frost



Salvias

- Sun to light shade
- Drought tolerant
- Texas Sage
 - Salvia greggii
 - Blooms spring and fall, trim after blooming
 - 2' 3' tall and wide
- Mexican Bush Sage
 - Salvia leucantha
 - Blooms fall
 - 4' 5' tall and wide!





Mountain Mints Pycnanthemum species

- 12+ species native to NC
- Bloom mid-late summer
- Sun to light shade
- Moist soil
- 3' tall and wide
- The best pollinator plants!



Joe Pye Weed Eupatorium dubium

- Native to eastern NC
- Sun to light shade, wet to moist soil
- 4'-5' tall x 3'-4' wide
- Great butterfly nectar source!
- E. fistulosum much taller, more common in piedmont



American Beautyberry

Callicarpa americana

- Tough deciduous shrub
- Sun to part shade
- Moist or dry soil
- Magenta berries late summer attract songbirds
- 4'-5' tall and wide
- Cut back to 1'-2' in early spring

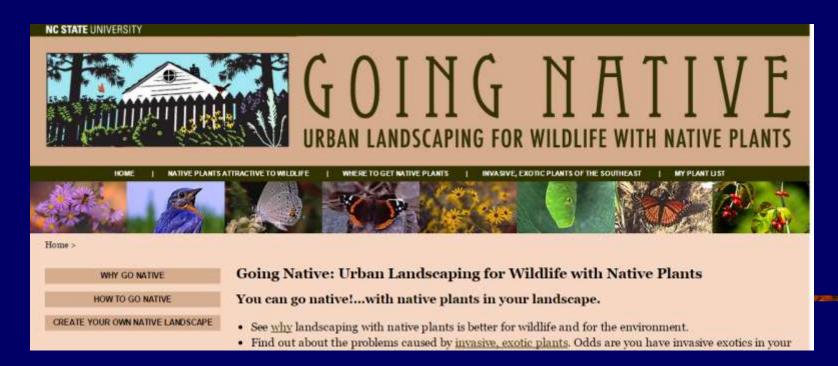




Learn More: Going Native Website

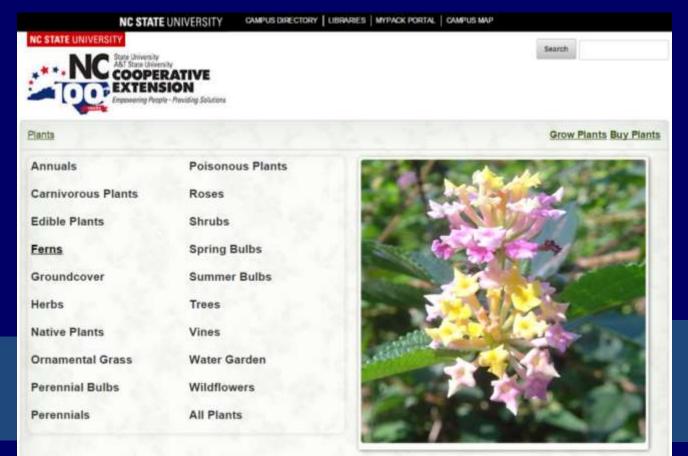
http://www.ncsu.edu/goingnative/

Searchable database of NC natives allows you to select for deer resistant plants



Extension Plants Database: Learn more about recommended plants

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



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 Kingsbrae Garden, CC BY-NO-SA - 2.0



H. quercifolia 'Snow Queen'

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