

Outline of Presentation

- ❑ Site Analysis
 - ✓ New and existing sites
 - Physical and chemical properties of the soil
 - Soil drainage, sunlight exposure
 - ✓ Options for avoiding site problems
- ❑ Planting
 - ✓ Step by step procedures for best results

Outline of Presentation

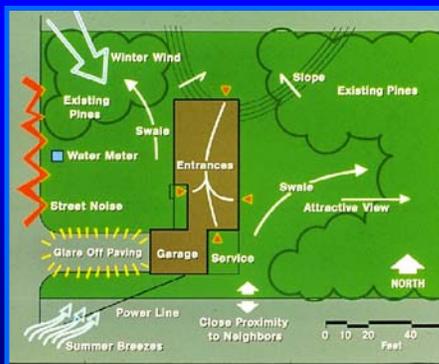
- ❑ Management
 - ✓ Fertilization
 - Selecting fertilizers
 - When to fertilize
 - How much to apply
 - How to fertilize
 - ✓ Irrigation: Making Every Drop Count
 - ✓ Pruning
 - Tools, technique, and timing

Site Analysis

A Critical Step in Landscape Development

- Before pen goes to paper
- Before the first plant goes in the ground
- Before you begin managing the site

80% of plant problems result from the inability of the plant to tolerate or adapt to the local environment



Once you catalog the site criteria, you can better select plants adapted to each location in the landscape

East-facing exposure, morning sun, well-drained soil

Azaleas

West-facing exposure, shade from nearby tree, moist, well-drained soil

Azaleas

Change the Site to Fit the Intended Plants

- ✓ Introduce shade for shade-loving plants
- ✓ Thin out existing vegetation to accommodate sun-loving plants
- ✓ Add topsoil or compost to improve soil structure
- ✓ Change the grade to influence drainage
- ✓ Install drainage pipe to carry water off the site

Analyze the Structure and Texture of the Soil



New Construction Sites

- Left-over debris - chunks of concrete, tar paper, roofing shingles, sheetrock, etc.
- Soil compaction from construction equipment
- Hidden oil, gasoline and other chemical spills

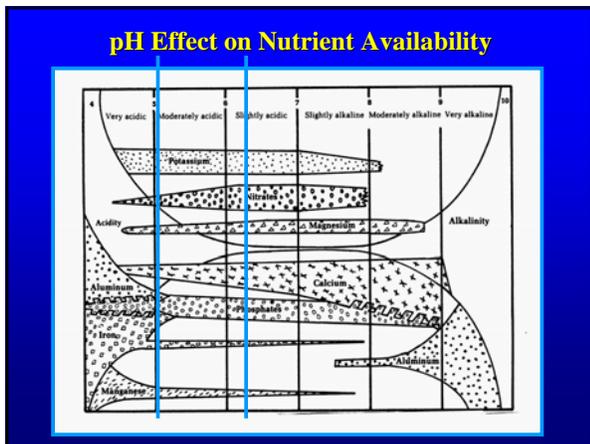


Most Ornamental Plants Prefer a Soil pH Between 5.2 and 6.5

Prefer an Alkaline pH (6.5 to 7.5)

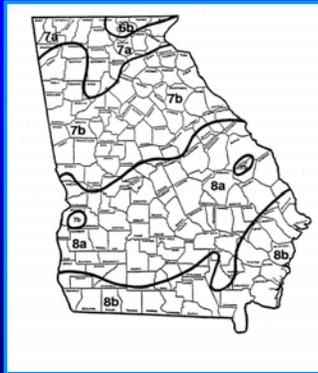
- Barberry
- Ornamental Cherry
- Honeysuckle
- Mulberry
- Virginia Creeper
- Lilac
- Wisteria

Iron deficiency of azalea at pH > 7.0





Cold Hardiness Zones



Range of Average Annual Minimum Temperatures for Each Zone

Zone	Range in Degrees F
6b	-5 to 0
7a	0 to 5
7b	5 to 10
8a	10 to 15
8b	15 to 20



Heat Zone Map For Georgia



Ave. no. of days per year above 86 degrees F

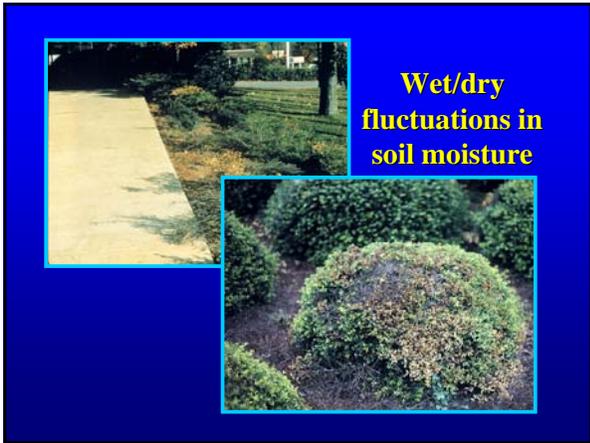
Zone	Ave. No. Days
5	30 - 45
6	45 - 60
7	69 - 90
8	90 - 120
9	120 - 150

More plants are killed each year from over-watering than from the lack of water



Drainage Problem







Possible Solutions to Wet Sites

- Plant on an elevated bed at least 12- inches above grade
- Sub-soil to break up a hard-pan layer
- Select plants adapted to wet soils
- Install sub-surface drain pipe
- Move away and avoid the problem







Plants with Above-average Tolerance to Moist Sites

- Weeping Willow
- Red Maple
- Bald Cypress
- Yaupon Holly
- Sweet Bay Magnolia
- Wax Myrtle
- Virginia Sweetspire
- Summersweet



Poor plant selection for this heavy clay soil

Spider mites and diseases often attack stressed plants



Suggestions

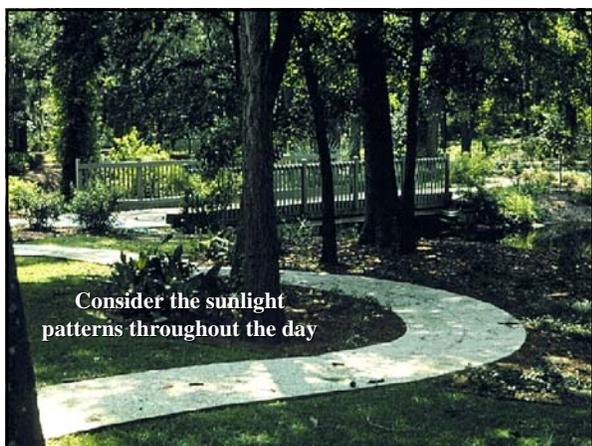
Instead of shore juniper, plant groupings of Siberian iris, ornamental grasses, daylilies, dwarf wax myrtle, Asiatic jasmine, or Carolina jessamine. Red maple and/or hibiscus for height

When it's not economically practical to change the site, select adapted plants

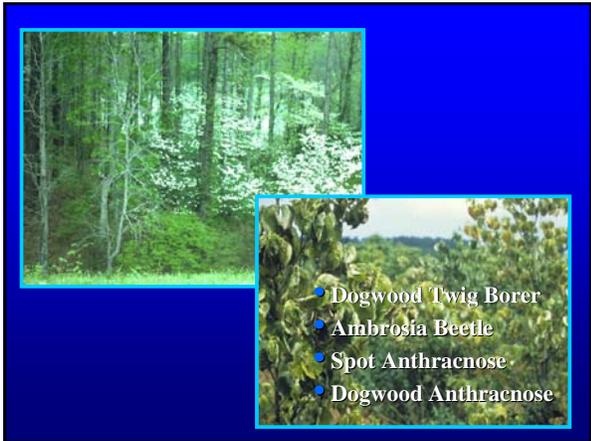


Avoiding Moisture Stress of Annuals

- ❑ Plant on an elevated bed – 12-inches above grade
- ❑ Slope beds to allow for good drainage away from the plants
- ❑ Select adapted plants: Canna Lilies, Ornamental Sweet Potato, Baby's Breath, Lythrum, Swamp Sunflower











What is the Ideal Landscape Plant?

- Requires no pruning
- Requires no supplemental fertilizer
- Requires no irrigation
- Has no pest problems
- Tolerates extreme heat and cold
- Thrives on neglect









When to Plant Trees and Shrubs?

Fall is the Best Time of Year to Plant

Container-grown ornamentals can be planted throughout the year

Balled-and-burlapped and bare-root plants should be planted when dormant (Nov. – Feb.)



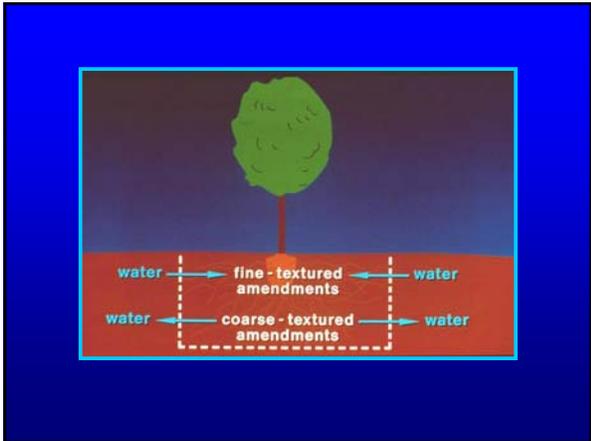














How Much Amendment to Use?

25% by Volume

3 inches incorporated to a 12 – inch depth

1 cu. yd. / 100 sq. ft. = 3 in. on soil surface

1 cu. yd. = 27 cu. ft. = 9 – 3 cu. ft. bags or
13 – 2 cu. ft. bags / 100 sq. ft.

Use only decomposed organic material
(right) as a soil amendment





If a water saucer is used, rake it outward and
away from the planting hole 2 to 3 months after
planting to keep it from eroding over the roots







How Much Mulch To Apply?

3 to 5 inches is sufficient

**1 bale of pine straw covers
50 – 80 sq. ft., depending on
the size of the bale**

**9 – 3 cu. ft. bags of pine
bark mulch will cover 100
sq. ft. to a 3-inch depth**





Newspaper placed under mulch, 2- to 3-sheets thick, helps provide an added barrier to moisture loss.



Planting Trees and Shrubs

- When planting individual plants, dig the hole 2-times wider than the root ball.
- When planting a group of plants, cultivate the planting area to a 12-inch depth.
- Do not add amendments to individual planting holes. Instead, incorporate amendments uniformly into the top 12 inches of the soil.
- Remove the wire or cord from around the stem of B&B plants.

Planting Trees and Shrubs

- Slice or break apart the root ball of pot-bound container-grown plants.
- Install guy wires on trees, if necessary, but remove them after establishment.
- A water saucer may be used to help direct water to the roots, but it is only temporary.
- Mulch.
- Water to settle soil.

Planting Seasonal Color



Remove old plants



Re-work the planting bed



Add organic amendments



Add slow-release fertilizer

Planting Seasonal Color



Lay out planting design



Lay out plants



Remove container as you plant



Mulch

Planting Seasonal Color



Water with liquid fertilizer



The finished product

