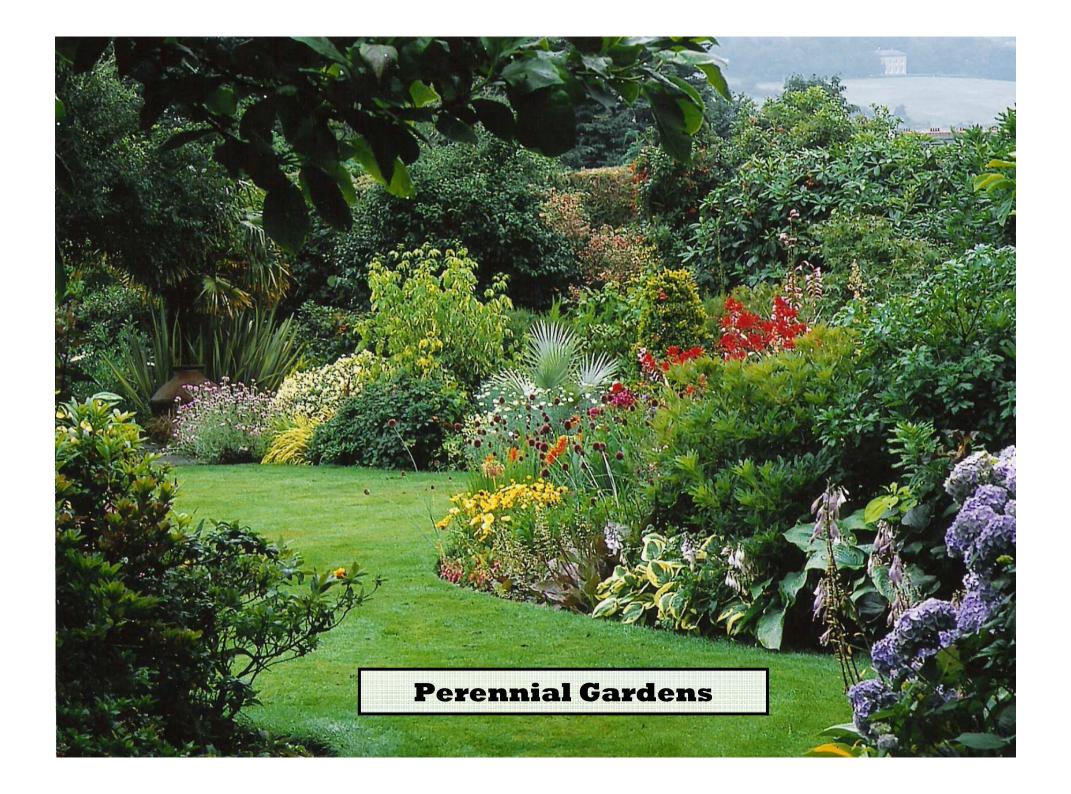




The Basics

- Things this presentation will cover:
 - Your soil
 - Figuring out sunlight needs
 - Watering
 - Fertilizing
 - Planting perennials, annuals, bulbs, and trees
 - Tricks for magazine-worthy gardens
 - Establishing plants
 - Container gardening







Identifying your Soil

- Most important knowledge for a successful garden.
- Spectrum from sand to clay.
 - Based on particle size which affects the ability to hold water and nutrients.



Soil Test at Home

Squeeze Test

Clay soil

 It will hold its shape, and, when poked, sits stubbornly in your hand.

Sand

It will fall apart as soon as you open your hand.

Loam

 It will hold its shape, and when you give it a light poke, it crumbles. Lucky You!





EnergyScapes, Inc.

Soil in Gardening

- Soil tells you what planting strategies you need.
- Sand:
 - All plants can grow in this.
 - Need to water more.
- Silt (also loam):
 - Best!
 - All plants grow well.
 - Lowest maintenance.



Soil in Gardening

- Clay:
 - Most areas of the West Island.
 - Very fertile.
 - But poor drainage.
 - Most plants do not grow well without help.
 - Need to add different type of soil around planted garden plants for success.



Planting for Success

- Many plants only do well in one type of soil.
- You can overcome the limitations of any soil!
 - Poor soil, clay only, doesn't matter!
- Just need to plant properly.
 - Less important for annuals.



How to Plant Perennials

- Look up the soil preferences of your plant.
 - If unknown, compost is a good guess.
 - NEVER buy discount soil from hardware stores.
- Dig a hole twice as wide as the root ball.
- Place pot with plant in hole to make sure it is deep enough.
 - Base of plant should be level with soil line.



How to Plant Perennials

- Water the potted plant.
- Water the hole.
- Remove the root ball from the pot.
 - Gently loosen roots at the edges of the root ball.
- Place plant in the center of the hole.
- Fill the hole with the preferred soil.
- Water thoroughly.





Sunlight

- Second only to soil.
- Always check the sunlight requirements of each plant.
 - Universal symbols on plant tags.
 - Not always reliable.
 - If you really want a plant to work, look up each individual plant.



Sunlight

- Full Sun =
 - minimum 6 hours, 8 hours usually recommended.
- Part Sun =
 - 3 6 hours direct sunlight
- Full Shade =
 - Less than 3 hours direct sunlight.
- Few plants do well in complete shade with no sunlight.



Sunlight

- Planting outside of recommended sunlight:
- Sun plants in shade:
 - Will flower less or not at all.
 - Greater incidence of plant disease
 - In extreme cases, plant will die out slowly.
- Shade plants in sun:
 - Leaves will burn.
 - Plants typically die quickly.





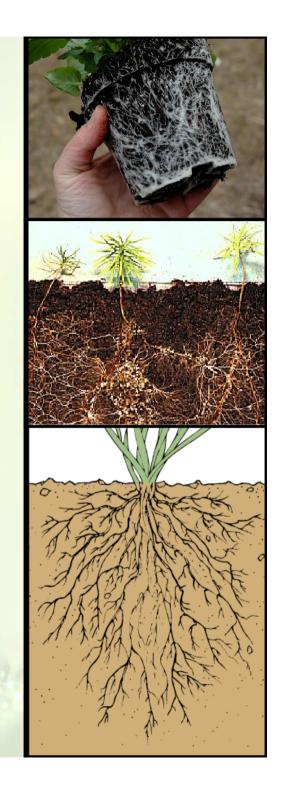
Watering

- Not as important as sunlight and soil.
- Plants in your garden for more than one season:
 - Only need extra watering in times of drought.
- Plants in your garden for less than one season:
 - Need extra care to establish properly.



'Establishing'

- 'Establishing':
 - Term for a plant growing a large root system.
- Large root system:
 - Allows plant to resist environmental stress:
 - Drought
 - Extreme winters
 - Ect.
 - Many roots can take up and store a maximum about of nutrients and water.



Watering

- Key to establishing a new plant:
 - Watering.
- Water ~ once a week.
 - Heavy rainfall = do not need to water.
 - Drought = water as often as needed to keep plants from wilting.
- How do you know if you've watered enough?
 - 'Finger test': sticking a finger in the soil should reveal wet soil for 2-3 inches.





Fertilizer

- N-P-K
 - N: Nitrogen: leaf growth
 - P: Phosphorus: flower production
 - K: Potassium: root production and immune system.
- Higher numbers = more concentrated.
 - Can hurt plants if you're not careful.
- Equal numbers = for overall growth.
 - Higher proportions of one nutrient mean emphasis on that form of growth.





Fertilizer

- 'Dissolving' types:
 - Require you to make mixtures.
 - Most common.
 - Typically fertilize multiple times.
- Granular types:
 - Large grains.
 - Harder to find.
 - Have a coating which dissolves slowly, releasing fertilizer over the season.
 - Typically fertilize once.
- Granular types are best for beginners.





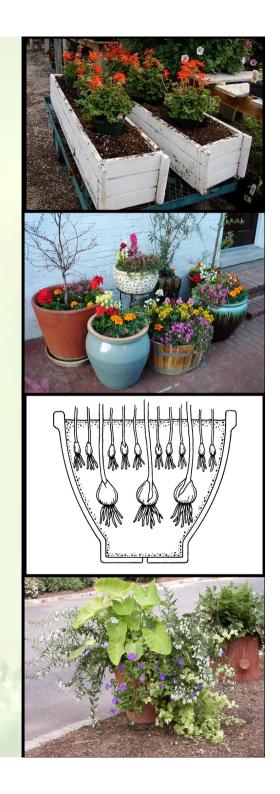
Container Gardening

- Great way to garden in limited space.
- Allows you to create your own conditions in your garden.
 - Any soil can be used.
 - Can be placed in any light conditions.
 - Beautiful arrangements can be made.
- Drawbacks:
 - Only annuals, most perennials will not survive winter.
 - Need more care.



Container Gardening

- Different rules than gardening in the backyard.
- Containers = self-contained ecosystems
 - You need to provide everything the plants need to survive.



Container Gardening

- Soil:
 - Soil specific to container gardening.
 - Has lots of fertilizer and water-retention materials.
- Watering:
 - Containers MUST have drainage holes.
 - Containers must be watered when they dry
 - May be as often as once a day!
- Fertilizing:
 - Fertilizer in soil may not be enough.
 - Regular flowering plant fertilizer.





Annuals vs. Perennials

- Annual:
 - A plant which only grows for one season in our climate.
 - Some 'annual' plants here are actually perennials in warmer climates!
- Perennials:
 - Emphasis on long term care.
- Annuals:
 - Emphasis on short term performance.



Planting Annuals

- Want maximum nutrition at planting for best root growth and flowering.
- Magic mixture:
 - 70% Black Earth.
 - 30% Peat moss.
 - Hand full of compost.
 - Mix together with lots of water until you have an earth 'soup'.
- Planting method very similar to perennials.





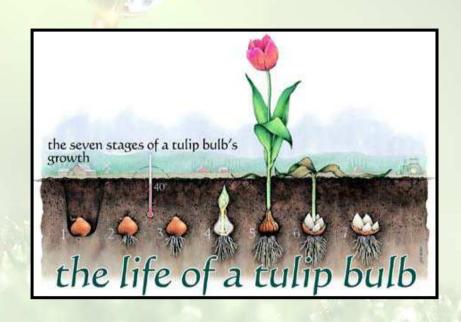






Planting Tulip Bulbs

- Many different bulb species, most similar.
- Not all colors are as hardy:
 - Simply colors most hardy, complex colors with different flower shapes are 'hybrids', not hardy.
- Essential:
 - Proper fertilizer
 - Well drained soil
 - Digging up bulbs once a year





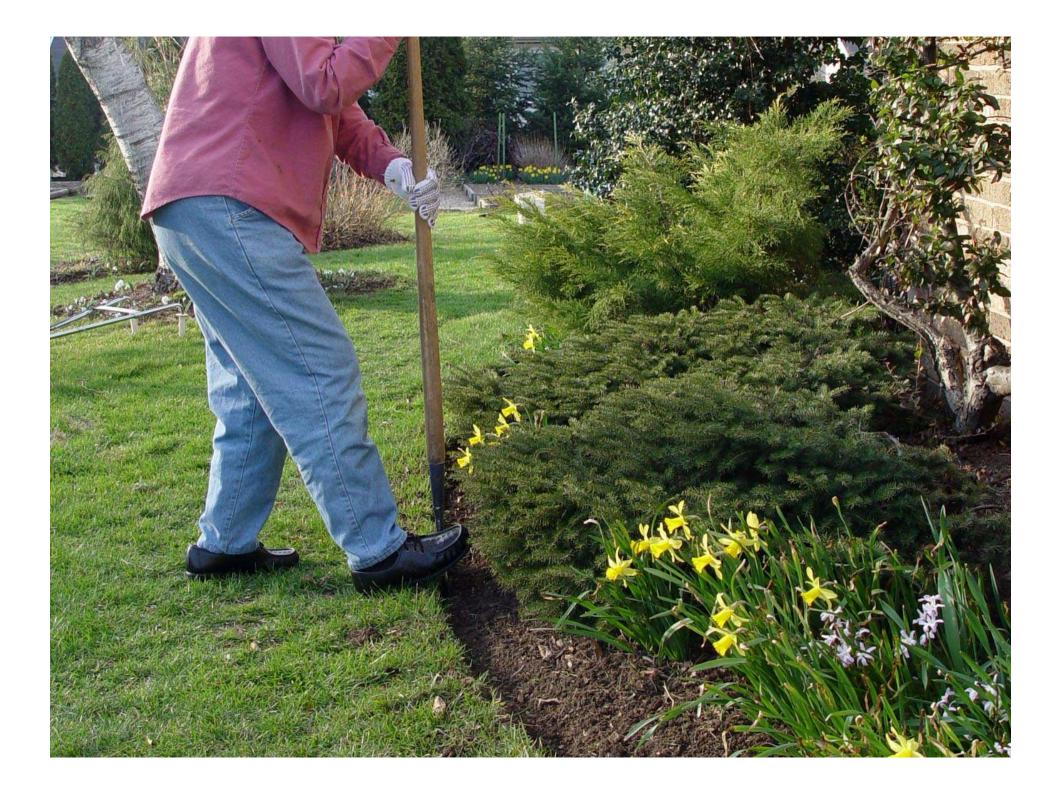
Planting Trees

- Trees with soil on their roots:
 - Planted similarly to perennials.
- 'Bareroot' trees:
 - Need more care.
- Three keys to successful trees:
 - Watch the graft line.
 - Dig a hole as wide as the branches.
 - Water regularly to establish.

















Take Home Notes

Gardening is not a science, it's an art.

Start slowly, master each thing at a time.

Have Fun!

