Anyone can have a garden like this.
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!

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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
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
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!
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
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 in the Gardens
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:
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
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
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.
Gardening Tricks
Edging
Black Topsoil
Yearly Application of Compost
Take Home Notes

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

Start slowly, master each thing at a time.

Have Fun!
Thank You.

Http://blogs.mcgill.ca/gimi

Thank You.