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Your Gardens Don't Have to be Thirsty!





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Outline

- Introductions
- Garden Planning
 - Soil
 - Location
 - Watering
- Water Efficient Plants
- Next Steps
 - City Resources and Programs











Introductions











Location, Location, Location!

- Things to consider when choosing location:
 - Sun exposure
 - Exposure to weather
 - Topography of property
 - Natural watering potential or drainage
 - Soil
 - Challenges
 - Roots, invasive species, companion planting, toxic locations, seasonal exposure, proximity to house, driveway and street.









Location, Location, Location!

Time	6	8	10	12	2	4	6	8
Back Corner	Sun	Sun						
Front Garden	Sun	Partial						
Veggie Garden	Partial	Shade						









Connecting Location and Water

- Through investigating sun exposure, you can properly choose plants that can handle the exposure.
- This reduces stress, increases plant health, and reduces the watering requirement.
- Install a Rain Garden to take advantage of location and reduce watering.









Soil: A Garden's Foundation

- Using both soil type and location to choose plants = Water Efficient Gardening
- Certain plants are very particular about soil type

Common Name	Scientific Name	Sur	We Moist Dry	Clay Loarr Sanc	Shape
Arrowwood, Downy	Viburnum rafinesqueanum	<u> </u>			
Arrowwood, Bowthy Arrowwood, Southern	Viburnum dentatum			988	
		X		000	
Blackberry, Common	Rubus allegheniensis	9		9 9	_
Bladdernut, American	Staphylea trifolia				
Blueberry, Low Sweet	Vaccinium angustifolium	0			

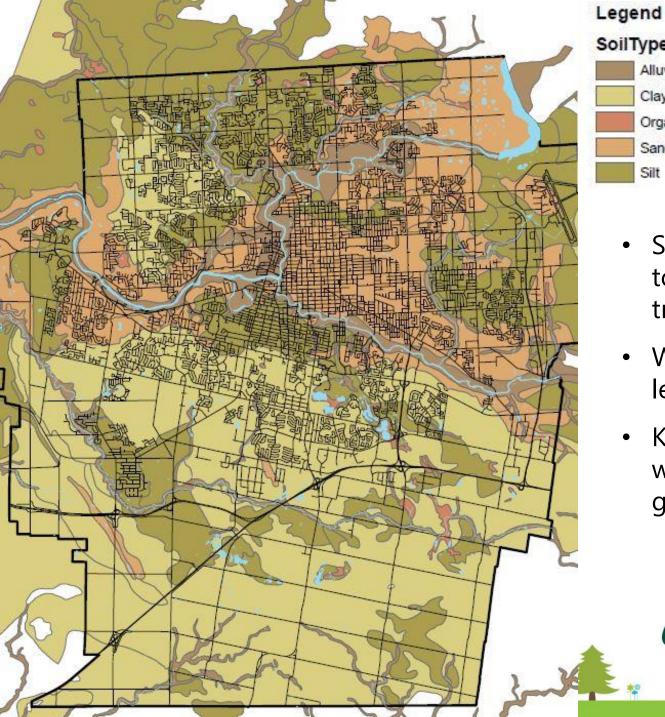
ReForest London, Choosing the Right Shrub











SoilTypes Alluvium Clay Organics

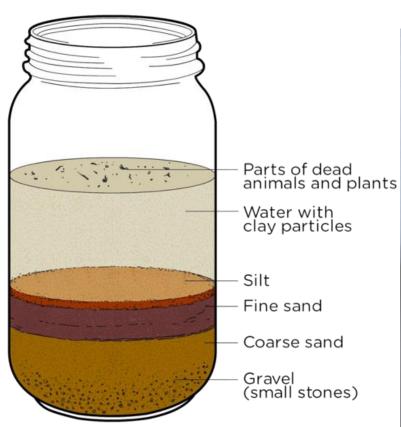
Sand-Gravel

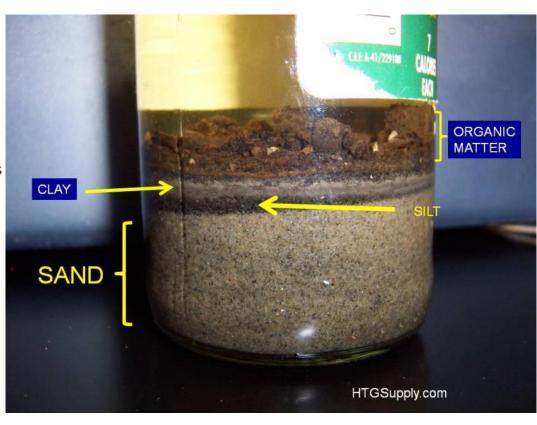
- Soil type is connected to basement flooding trends in the city.
- Watch how water leaves your property.
- Keep this in mind when planning gardens.





What is your soil type?



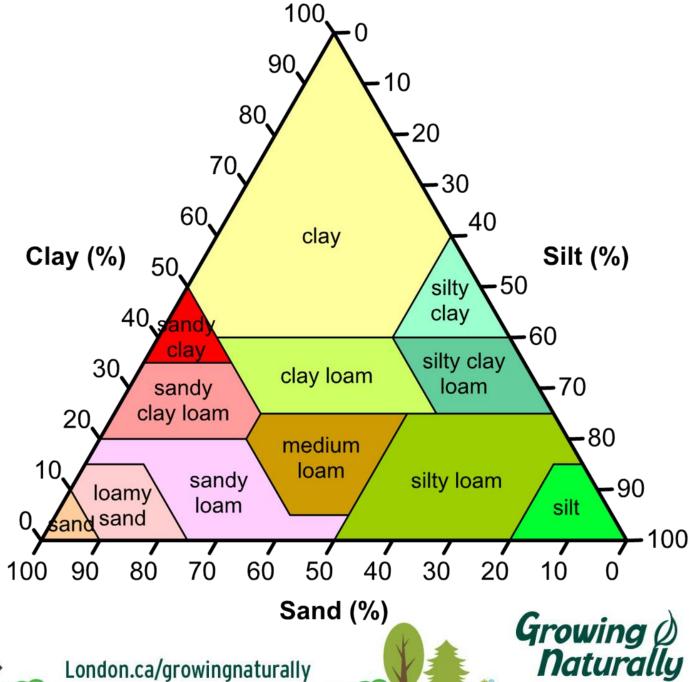






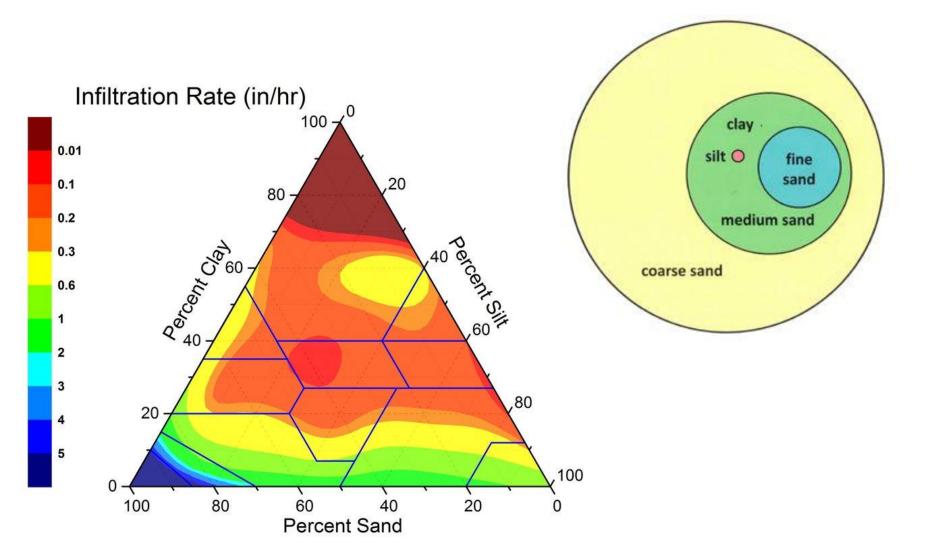




















Other Considerations

- Soil pH impacts availability of nutrients to plants, optimal at 5.5-7.0
 - Raise pH (lower acidity) add lime
 - Lower pH (increase acidity)
 add ammonium sulphate
- Nutrient Deficiency
 - Chart Available











Water-Wise Landscaping Principles

- Plan and design gardens with water conservation, beauty and utility in mind.
- Design hydrozones.
- Water efficiently with proper methods (More to come).
- Design the space based on how you want to use it.











Water-Wise Landscaping Principles



- Improve the soil, and/or plant accordingly.
- Use mulch to reduce evaporation.
- Maintenance is key to happy, healthy, water efficient plants.









Proper Watering, Reduces Watering

- Use a rain gauge
- Water slowly, deeply, and less often to promote root growth
- Avoid overwatering
- Water before 10AM
- Use the proper equipment



Water once a week, applying 2.5cm (1 inch) of water









Watering for Soil Type

Soil	Characteristics	Watering	Remedy	
Sand	Usually low in organic matter. Good drainage, poor water retention.	Must be watered and fertilized frequently.	Add organic material (compost, manure, wood chips). Mulch to retain moisture.	
Clay	Holds nutrients well. Sticky when wet, hard when dry. Poor drainage.	Do not overwater – water slowly and deeply but infrequently. Resist water infiltration when dry. Become easily compacted	Add organic mater to break up clay soils (allows air, water and roots to penetrate better). Compost is best, work in often.	
Silt	Retain more water, hold more nutrients than sand.	Do not overwater. Silt soils are like clay and become easily compacted.	Add organic matter allowing better plant growth and water infiltration.	





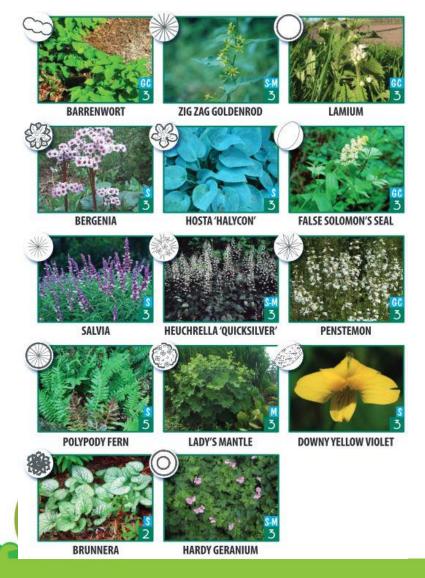




Shade Clay

SPOTTED DEADNETTLE BARRENWORT WILD GINGER **SWEET WOODRUFT** AJUGA HYBRID GERANIUM LUNGWORT **CREEPING PHLOX** BERGENIA **JAPANESE SPURGE FALL CORAL BELLS** SOLOMON'S SEAL

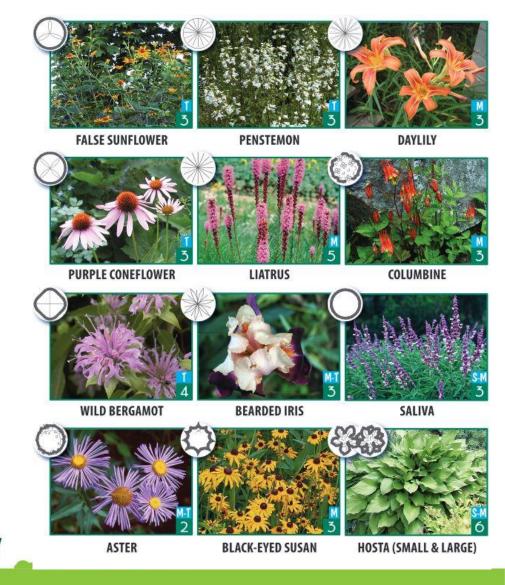
Sun Clay



Sun Sand

TALL COREOPSIS **NEW ENGLAND ASTER** WILD BERGAMONT **EVENING PRIMROSE INDIAN GRASS FOXGLOVE BEARDTONGUE** COMMON MILKWEED **BUTTERFLY MILKWEED** SIDE OATS GAMMA YELLOW CONEFLOWER VERBENA PRAIRIE SMOKE WILD STRAWBERRY WILD LUPINE **HEATH ASTER**

Shade Sand





Handouts

- Identifying Soil Types
- Identifying Nutrient Deficiencies
- Water Wise Landscaping
- Sample Garden Plans
 - Sun (dry, butterfly, clay)
 - Shade (sand, clay)
 - Rain Gardens











Thank You!





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