

# Too Much Water, Just Add Fertilizer

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# Automatic Lawn Sprinkler System



# Too Much Water



# Soil Conditions Effect Watering



# Volcano Mulching Impacts Watering



# Trees Planted Too Deep Impacts Watering



# Girdling Roots



# Leaf Spot Diseases



# Stakes & Hoses



# Lightning Strikes



# Verticillium Wilt of Maples



# Construction Damage & Soil Compaction



# Improper Pruning



# Cement is the Quick Fix



# Wire Baskets



# Floating Root Ball



# Tree Roots



# Fertilizing Trees & Shrubs

- GET A SOIL ANALYSIS BEFORE YOU FERTILIZE TREES.
- DETERMINE WHAT NUTRIENTS YOUR PLANTS NEED.
- OBTAIN SOIL TEST FORMS & INSTRUCTIONS FROM WOOD COUNTY OSU EXTENSION.

# New Subdivisions

- MODERN HOME-BUILDING METHODS CREATE ADVERSE GROWING CONDITIONS FOR PLANTS.
- GOOD TOPSOIL IS REMOVED AND NOT REPLACED.
- HEAVY MACHINERY SCRAPS AND COMPACTS FERTILE SOIL REDUCING DRAINAGE AND AERIAL.

# FERTILIZER TAGS

- 12-12-12 = 12% NITROGEN, 12% PHOSPHORUS, 12% POTASSIUM.
- SLOW RELEASE IS THE BEST FORM TO APPLY.
- APPLY BASED ON FORMULA OF SQUARE FEET COVERED BY ROOTS.
- $3.14 \times (\text{ROOT RADIUS}) \times (\text{ROOT RADIUS})$
- IF BRANCHES SPREAD 15 FEET FROM THE TRUNK, THEN THE ROOTS SPREAD AT 30 FEET.
- $3.14 \times 30 \times 30 = 2,826$  SQUARE FEET.
- FOR EXAMPLE, EVERGREEN USE 1-3 POUNDS OF FERTILIZER PER 1000 SQUARE FEET.
- NO MORE 2 POUNDS PER 1000 SQUARE FEET FOR TREES THAT LOSE THEIR LEAVES.

# APPLY FERTILIZER PROPERLY

- MOST OF THE FEEDER ROOTS OF A TREE OR SHRUB IN THE UPPER 6 INCHES OF SOIL.
- DEEP ROOT FEEDING IS NOT THE BEST METHOD, BUT IS TOOL IN THE BOX.
- BROADCAST THE FERTILIZER OVER THE ENTIRE ROOTS SYSTEM IS THE BEST METHOD.
- TYPICALLY IF FETILIZE YOUR LAWN YOU MAY NOT NEED TO APLY FERTILIZER TO YOUR TREES AND SHRUBS.

# BOWLING GREEN SOILS

- HOYTVILLE CLAY
- SAND RIDGE – FORMER LAKE MORRAINE.
- IMPACTS FERTILIZER.
- PHOPHORUS IS TIED UP IN CLAY SOILS.
- MANGANESE & ZINC ARE TIED UP IN CLAY SOILS.
- RED MAPLE (GREEN LEAF) AND PIN OAKS SUFFER FROM NUTIRNET DEFICIENCIES.
- ONLY DIRECT TRUNK INJECTION WILL GET NUTIRENTS INTO CANOPY.
- BETTER TO SELECT A DIFFERENT SPECIES OF TREE RATHER THAN EXTRA COST OF INJECTION.

# OLD SUBDIVISION & ACREAGES

- USUALLY BETTER SOILS.
- MORE FERTILE THAN NEW SUBSDIVISIONS.
- PLANT A LARGER VARIETY OF TREES AND SHRUBS.
- TRY TO USE NATIVE VARITIES OR LOCAL GROWN IF POSSIBLE.
- DETERMINE SOIL TREE OR SHRUBS WAS GROWN BEF ORE SLECTING PLANTING LOCATION.