THE YARD DOESN'T LOOK SO GOOD

NOW THAT YOU MENTION IT...

OUR BLADE OF GRASS COULD DO WITH A TRIM
What do you want to hear about?

• Why Organic (Why not Chemical)
• How to Have a Beautiful Organic Lawn
• Common Lawn Problems & Solutions
• Organic Lawn Care Calendar
A Few Weeds Won’t Kill You....
But a few chemicals just might!
"It's just crabgrass, dear."
CHEMICAL FERTILIZER APPLIED

- Kills vital soil life
- Pollutants
- Grass grows fast
- Soil compaction
- Thatch layer grows
- Weed invasion
- Insect invasion
- Lawn diseases

ORGANIC FERTILIZER APPLIED

- Adds food for microbes (organic matter)
- Adds nutrients in less mobile form (no pollution)
- Soil life decomposes thatch
- Nutrients become available slowly as needed (even growth)

HERBICIDES, INSECTICIDES AND FUNGICIDES FURTHER DESTRUCTION OF SOIL LIFE AND DIMINISHING LAWN RETURN

HEALTHY SOIL = HEALTHY TURF (FEWER INSECT, WEED & DISEASE PROBLEMS)
A Beautiful Organic Lawn

• The Right Grasses
• Healthy Soil
• Common Lawn Issues & Solutions
• Good Cultural Practices
• Lawn Care Calendar
Do Grass Types Really Matter?
Are there Any Good Grasses?
The Right Grasses Matter

- Good Nature Tuff Turf
- 95% Turf Type Tall Fescue
- 5% Kentucky Bluegrass
- Micro Clover
How do you get the right grasses?

• Over Seeding
• Slice Seeding
• Total Renovation
How to Have Healthy Soil

• *Favorite Science Classes?*
• Physics?
• Chemistry?
• Biology?
Get a Useful Sample

15-20 cores

Soil Probe

Right Depth
(plow layer or 6 inches)

Clean Bucket
## Soil Test Results

**Sample Location:** FRONT ENTRANCE

**Report Date:** 7/7/2009

### Exchange Capacity
- **Result:** 16.89
- **Desired Result:**
- **Deficit-Sufficiency:** +1
- **Deficit-Sufficiency lbs/1000 sq ft:**
- **Graphical Result:**

### Water pH (1:1)
- **Result:** 7.5
- **Desired Result:** 6.5
- **Deficit-Sufficiency:** +1
- **Graphical Result:** Very Low, Low, Desired, Excess

### Organic Matter (%)
- **Result:** 4.82
- **Desired Result:** 6.0
- **Deficit-Sufficiency:** -1.18
- **Graphical Result:**

### Soluble Sulfur (ppm)
- **Result:** 27
- **Desired Result:** 37.5
- **Deficit-Sufficiency:** -10.5
- **Deficit-Sufficiency lbs/1000 sq ft:** -0.48
- **Graphical Result:**

### Easily Extractable P as P2O5 (lbs/ac)
- **Result:** 101.0
- **Desired Result:** 200.0
- **Deficit-Sufficiency:** -99
- **Deficit-Sufficiency lbs/1000 sq ft:** -2.28
- **Graphical Result:**

### Bray II P as P2O5 (lbs/ac)
- **Result:** 298
- **Desired Result:** 400.0
- **Deficit-Sufficiency:** -102
- **Deficit-Sufficiency lbs/1000 sq ft:** -2.34
- **Graphical Result:**

### Calcium (lbs/ac)
- **Result:** 5152
- **Desired Result:** 4594.0
- **Deficit-Sufficiency:** +558
- **Deficit-Sulficiency lbs/1000 sq ft:** 12.83
- **Graphical Result:**

### Magnesium (lbs/ac)
- **Result:** 658
- **Desired Result:** 527.0
- **Deficit-Sufficiency:** +131
- **Deficit-Sufficiency lbs/1000 sq ft:** 3.01
- **Graphical Result:**

### Potassium (lbs/ac)
- **Result:** 326.0
- **Desired Result:** 527.0
- **Deficit-Sufficiency:** -201
- **Deficit-Sufficiency lbs/1000 sq ft:** -4.62
- **Graphical Result:**

### Sodium (lbs/ac)
- **Result:** 86
- **Desired Result:** 77.7
- **Deficit-Sufficiency:** +8.3
- **Deficit-Sufficiency lbs/1000 sq ft:** +0.19
- **Graphical Result:**

### Base Saturation

#### Desired
- **Calcium%:** 68.0
- **Magnesium%:** 13.0
- **Potassium%:** 4.0
- **Sodium%:** <1.0
- **Hydrogen%:** 10.0
- **Other%:** 3.0

#### Actual
- **Calcium%:** 76.3
- **Magnesium%:** 16.2
- **Potassium%:** 2.5
- **Sodium%:** 1.1
- **Hydrogen%:** 0.0
- **Other%:** 3.9
An average population of earthworms can dig 250 miles of tunnels per acre per week.

An acre of soil can be home to 500,000 earthworms.

Earthworms can burrow more than five feet through the soil even if it is compacted.

Earthworms can increase nutrient availability by 500%.

Earthworms create 100 times their own weight in castings per year.
Healthy Soil

- Physics
- Chemistry
- Biology

- They all Matter
Common Lawn Problems & Solutions
What do they have in common?
More Weeds
What do they have in common?
Lazy Watering Wins

Deep, Infrequent
Deep, frequent
Shallow, frequent
LA HAUTEUR DE LA TONTE ET LES HERBES INDESIRABLES

- Pelouse avec 1% de pissenlits seulement
- Pelouse avec 5% de pissenlits
- Pelouse avec 50% de pissenlits

PLUS LA PELouse EST COURTE, PLUS ELLE EST VULNERABLE A L'INVASION DES HERBES INDESIRABLES.
Why Mow High?

Turfgrass mowed at the recommended height will have deeper, stronger root systems.

Close Mowing

Proper Mowing Height
Mowing Properly
1/3 Rule of Mowing

The "1/3 Mowing Rule" of blade removal.
Sharpen those Blades!
Handling Insects
The only good bug is a dead bug
BIG-EYED BUG

Preys on chinch bugs, mites, leafhoppers, aphids, other small insects, and insect eggs.
Larvae feed on insects, slugs, and snails.
White Grubs
Feeding Your Lawn

• Where do Organic Fertilizers Come From?
Feeding the Soil

Organic Fertilizers

Organic Matter
Soil Nutrients

Plant Nutrients

Micro-organisms

Feeding the Plant

Chemical Fertilizers

Plant Nutrients
Organic Fertilizers

- **Vegetable Protein Meals**
  - Seaweed, Soybean Meal, Corn Gluten Meal

- **Animal Protein Meals**
  - Bone Meal, Blood Meal, Meat Meal

- **Vegetable By Products**
  - Molasses

- **Poop**
  - Poultry Manure, Bio Solids (People Manure)

- **Compost Teas**
Organic Based Fertilizers

• Some Better than Others
• Buyer Beware
Grow with a Pro!

Turf-O-Ganic
10-6-4
75% Organic

Covers 5,000 Sq. Ft.
Guaranteed Analysis

Total Nitrogen (N)........................................10%
2.34% Ammoniacal Nitrogen
3.11% Urea Nitrogen
4.55% Water Insoluble Nitrogen

Available Phosphoric Acid (P2O5)..................6%
Soluble Potash (K2O)..................................4%
Nutrient Sources: Ammonium Phosphate, Urea, Muriate of Potash, Methylene Ureas

Long-lasting Organic Fertilizer
Turf-O-Ganic is the longest lasting lawn fertilizer that MNLRA offers. 75% Organic Nitrogen feeds the lawn continuously with slow release nitrogen and keeps lawns greener longer. May be applied up to 4 times a year for a professional looking lawn. (Spring, Summer, Early and Late Fall). To maximize the effectiveness of this product you must use a pH testing kit and adjust the soil pH to appropriate level for your lawn.
Organic Lawn Care Calendar

• Winter
  – Dormant Seed

• Spring
  – Bare Spot Seeding & Fluff
  – Corn Gluten Meal (Spring Blend)
    • 10 lbs /1000 s.f. - Easter & Memorial Day
  – Mow High
  – Spot Treat Weeds with Adios or Fiesta
Bare Spot Seeding
Organic Lawn Care Calendar

• Summer
  – Mow High
  – Water Weekly
  – Seaweed, Humate, Neem (June, July & August)
    • Nature’s Magic + Neem Tonic

• Late Summer
  – Over Seed (August / September)
Organic Lawn Care Calendar

• Fall
  – Organic Fertilizer (Labor Day)
  – Organic Fertilizer with Potassium (Thanksgiving)
  – Mulch your Leaves
  – Gradually lower blades to 2 inches
Good Luck!