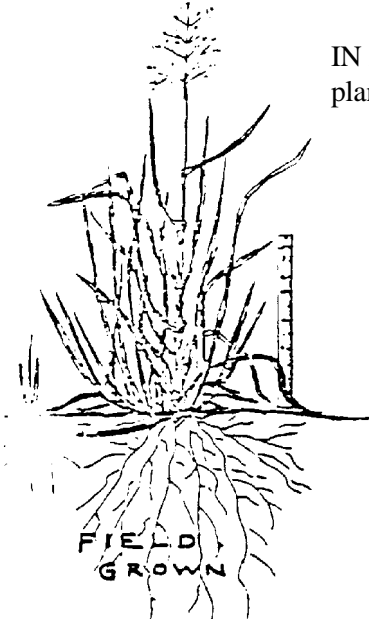


# Lab 11 - Lawn Care

## Lawn Grass

BY DEFINITION: "A lawn is a plot of closely mown grass."

IN ACTUAL FACT - Your lawn is composed of thousands of individual plants crowded and forced into a very unnatural growth habit.



To achieve the desired results, having an attractive uniform turf, we should know a few other facts.

LAWNS MUST HAVE WATER

LAWNS MUST HAVE FERTILIZER

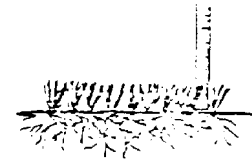
LAWNS MUST HAVE LIGHT

LAWNS MUST HAVE COMPATIBLE TEMPERATURES

LAWNS MUST HAVE COMPATIBLE SOIL CONDITIONS

LAWNS MUST BE MOWED, HOWEVER

LAWNS MUST HAVE ADEQUATE TOP GROWTH!



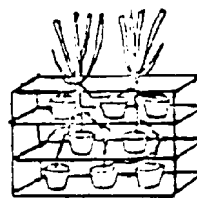
LAWN GROWN

Not just the lawn collectively, but each plant in this actual "forest" needs to be supplied with all of these in proper amounts, and at all times to some degree.

Many factors tend to restrict or prevent full use of these things. Even when they are available.

FACT: Clay soils hold more water than sandy soils.

QUIRK: Compaction, poor aeration, etc., may limit root distribution and penetration, to the point where the water is not obtainable!



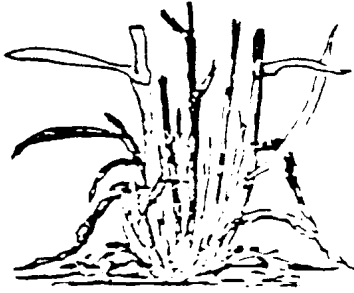
SANDY SOIL: 8 units available, 8 units obtainable through good root system.



CLAY SOIL: 12 units available, 4 units obtainable limited by poor root system.

FACT: Old lawns often make the best turf.

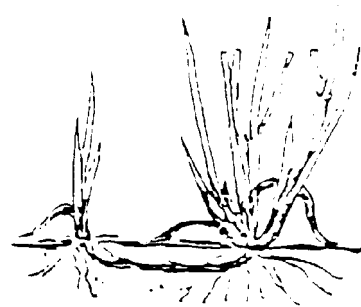
QUIRK: "Old" grass plants make poor lawns. Grass is one of nature's best soil builders. If maintained and properly managed, soil under sod "builds up" to be conducive of sustained new growth. New growth makes for beautiful lawns.



**OLD PLANT**  
Over mature and a large percentage of brown and yellow foliage.

FACT: Lawns need fertilizers to grow properly.

QUIRK: Fertilizers are not "food" but raw materials used in the manufacturing of foods by the plants. Sugars, starches, proteins, etc. are the real foods. Both made and used by the plant for growth and production.



**YOUNG PLANTS**  
Healthy growth with predominantly green foliage.

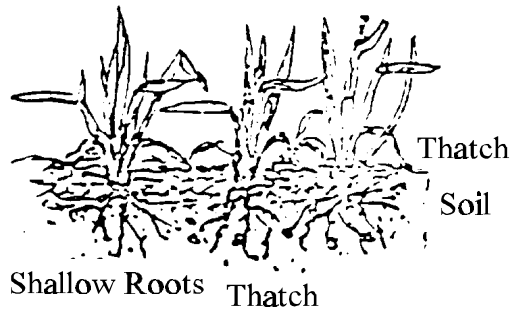
FACT: Food is required for growth.

QUIRK: Food is manufactured in the green leaves of the grass plant. So, the longer the tops the more tissue for food production. Then the better the plants are prepared for deeper rooting, increased disease resistance, and the initiation of new growth.

Mat of roots on the soil surface

FACT: One or two inches of water at any one application should "wet" deep enough for any lawn.

QUIRK: All the water that "hits" a lawn is not going to soak in. Soil compaction, thatch build up, surface slope, and other factors can limit the actual penetration rate of water into a lawn.



These problems may require aeration, turf slicing, adjustment of water application rates, or some other action.

# General Lawn Care

## PLANT IT RIGHT

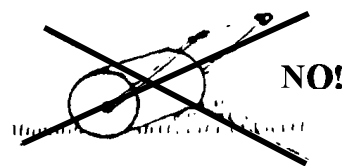
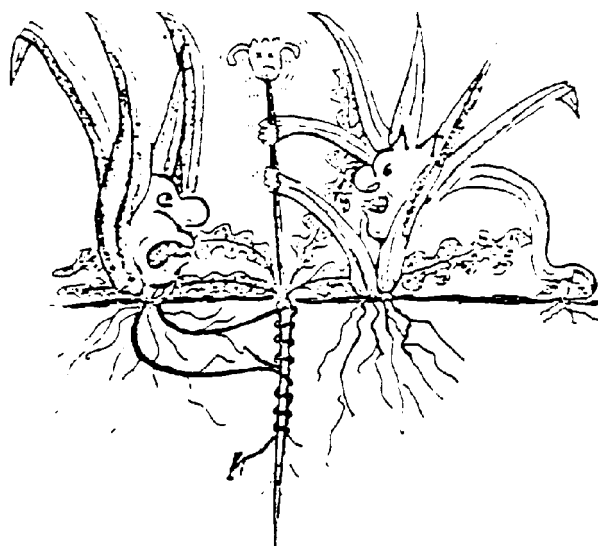
Building a good lawn is much easier and cheaper than trying to repair a poor one. Contact your State Extension Service for local advice.

## TEND IT WELL

To the healthy, well adapted turf, most weeds are a minor problem.

### GOOD SOD WILL CHOKE OUT MOST WEEDS

1. Mow often enough that you never remove more than one-third of the total height at any one cutting.
2. If and when irrigation is needed - water deep. Roots cannot get water or nutrients out of dry soil. In areas where tree and shrub roots compete with the lawn, extra deep irrigation can be of great worth.
3. Do not starve your lawn. But do not overfeed either. A good lawn is judged by its color and density, not by how often it has to be mowed. The even cut tops, not the closeness of cut, gives a lawn a more tailored look.
4. Soil compaction should be avoided where practical. Healthy grass can do much to avoid problems and resist compaction. Dry soils compact less than wet soils. If heavy use is expected for a special occasion try to have the lawn on the "dry side", even if it requires an extra irrigation in your schedule. Avoid the use of lawn rollers, in most cases rollers do more damage than good. Lawns should be left to grow a little long before times of heavy use. Extra top growth gives extra padding and encourages better root condition.
5. Leave the clippings on your lawn if they are short enough to sift into the grass. However, any clippings that remain on the top after an hour or so should be removed.
6. Rake all leaves and debris from the lawn to avoid "burned" and "smothered" spots.

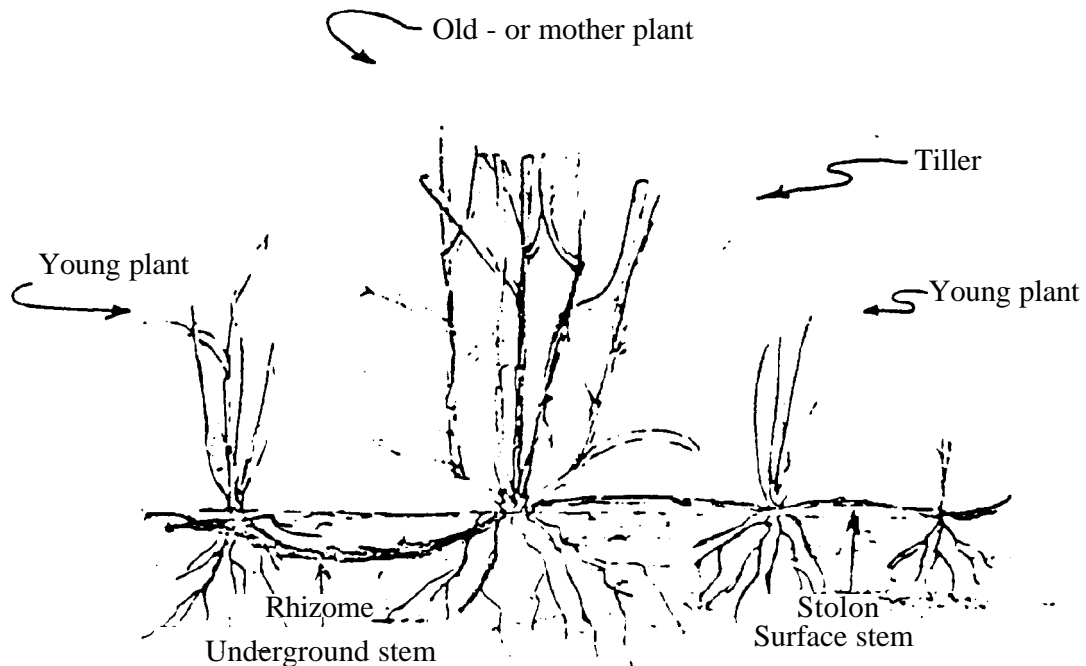
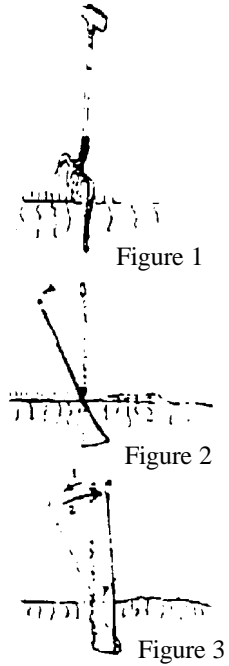


7. Compaction problems can be relieved by aeration and soil conditioning.

Aeration can be done with one of many tools. For general use, the tool found easiest and most practical is the common garden digging fork.

- A. Water the area.
- B. Insert fork into the soil six to eight inches holding the fork in a near vertical position (figure 1).
- C. Pull handle back twelve to eighteen inches (figure 2). If condition is not too bad remove fork. Repeat every eight to twelve inches over the compacted area.
- D. If compaction is severe or soil is very heavy, push handle forward and fill with a mixture of 50% peat moss and 50% sand. Remove fork.

Note: This process breaks plant roots and may necessitate supplemental irrigation.



## THE GRASS PLANT NOTES - LAWN CARE VIDEO

### I. EVALUATING

Problems

- 1.
- 2.
- 3.

Tests to evaluate lawn:

1. Visual
2. Thatch
3. Conditions beneath soil
4. Compaction
5. Earthworms
6. Soil test

### II. SEED

Two questions to ask before deciding on type of seed:

1. Which grasses work for your area of the country?
2. How old is existing lawn?

Other factors in determining type of grass seed:

1. Three growing areas:

a. cool season:

Bluegrass-Kentucky bluegrass  
Perennial rye  
Fescue-fine fescue

b. warm season:

Bermudagrass  
Zoysiagrass  
Buffalograss  
St. Augustine grass

c. transitional:

2. Shade vs. sun
3. Time
4. Decoration or recreation

### III. PREPARING LAWN

Renovate or Redo?

Renovation best done in early spring or early fall

1. scalp
2. remove thatch

3. aerate soil-1/4" deep
4. fertilize and lime if needed

Special steps for bare spots:

1. remove debris and rocks
2. add organic matter to depth of 6-8"
3. rake smooth

#### **IV. SEEDING**

Best done in early spring or early fall

If overseeding use half recommended rate

Water in thoroughly

Roll it

flattens

increases contact between seed and soil

Bare spot/brand new lawn:

- 1.
- 2.
- 3.
- 4.
- 5.

#### **V. SODDING**

#### **VI. MOWING**

Frequency:

Height:

Taller grass:

- 1.
- 2.
- 3.

Seasonal Mowing:

Summer:

Fall:

Final mowing:

Shady areas:

Proper Maintenance:

#### **VII. WATERING**

Best Way:

Best Time:

#### **VIII. FEEDING**

Only need to fertilize once or twice a season

Timing:

Warm season:

Cool season:

Results:

Fall fertilizing:

Spring fertilizing:

North area:

NOTE: Clippings return 50% of N back into soil.

Types of nutrition:

## **IX. PEST/DISEASE CONTROL**

Backyard Pest Management

1.

2.

Insects:

1. Above soil:

Cinchbugs, armyworm, sod webworm

2. Below Soil:

Billbug grub, white grub

Method to check for bugs:

Contact Insecticides include Safer's Insecticidal Soap and Pyrethrums

Weeds:

Compacted Soil

Improper watering or fertilizing

1. Annual Weeds:

Crabgrass, chickweed, knotweed

2. Perennial Weeds:

Dandelions, thistle, plantain, buckhorn