Why is your lawn so important and read below to make it the best in the neighborhood.

History- Historians have written about the lawns which appeared in Persian, Greek, and Roman gardens before the birth of Christ. A form of soccer was played on public greens in England during the 16th century and grasses were cultured for use in lawn gardens, flower gardens, pleasure gardens, and greens during the 16th and 17th centuries throughout Europe. The main green of Brown was laid out during the early 1800’s and the first formal research on turf grasses and their culture were initiated in the United States in Michigan, New Haven, Connecticut, and Kingston, RI around 1890.

Environmental Benefits- Turf grass is the key to a beautiful tomorrow. It has been the basis for a green America. Turf is considered an “anti pollutant” unapproached by any artificial means. A thick green lawn prevents soil erosion, and subsequent stream pollution, helps control heat pollution and reduces noise pollution. More important is the fact that it replenishes the oxygen supply in the air we breathe. An average lawn can replenish the air with enough oxygen for eight people. Not only that turf absorbs and detoxifies sulfur dioxide, a critical air pollutant associated with the burning of fossil fuels.

Plant Growth- All plants have the same basic requirements. They need a supply of water, a fairly continuous source of nutrients, a certain quantity of light, and proper temperature. Plants make their own food or carbohydrates using carbon dioxide and water in the presence of light to make sugar with oxygen released as a by-product.

Fertilize- Why Fertilize?? We fertilize to improve color, density, texture, and uniformity. It also means a better resistance to weeds, insects, disease, drought, cold, and wear. Usually fertilizer contains one or more of the three primary plant nutrients. Nitrogen(N), Phosphate(P2O5), and Potash(K2O). This is true of both organic and commercial fertilizers. Fertilizers are refined or upgraded products of nature and contain nothing that is not already present in productive soil. I am giving all of you a handout that shows exactly what needs to be applied and at what times of the year. (Lichen- Can I include the handout.) Always apply fertilizers with a rotary spreader and just before it is going to rain.

Fertilizer Bag Numbers- 32-3-8
Nitrogen the first number on the bag provides dark green color, promotes increased leaf, stem and root growth, improves quality of leaf, increases protein content of plants, and feeds soil microorganisms during their decomposition.
Phosphorus is the second number. It stimulates root formation and growth, hastens maturity during reseeding, stimulates blooming, aids in seed formation, and improves winter hardiness.
Potash is the third number. It imparts increased vigor and disease resistance, is essential to the formation and transfer of sugars, starches and proteins, helps develop root systems and regulates cell water content.

Lime- Applying lime is to regulate the pH( Acidity or Alkalinity) of the soil. Soil pH is important because it affects soil bacteria, nutrient leaching, toxic elements, nutrient availability, and soil structure. Lime should be applied every year at the rate of 50 lbs per 1000 ft2 of lawn. Pelletized is a lot easier to work with than ground limestone which is extremely dusty. Apply as is the case with fertilizer, with a rotary spreader and either before or during a rain event.

Mowing- Perhaps the single most important cultural practice associated with lawn maintenance is mowing. It also requires the most time and labor. When considering the possible effects mowing may have on the turf grass plant, remember that the plant is designed by nature to grow and
mature at a height far in access of selected mowing height. Mowing is critical to lawn success because it is not natural and upsets natural growth patterns in the plant. The most apparent effect is reduced leaf surface which manufactures and supplies the plant with food, both usable and stored. During periods of stress, the plant draws on these reserves in order to survive. Therefore the biggest cause for lawn problems can be attributed to mowing height and frequency. Mowing at lower than optimum heights seriously impairs the plants ability to function, especially during periods of stress. The resulting death may be falsely attributed to insects, disease, cold, heat or drought, when in fact the food reserves were not high enough to carry it through the period. In short, do not mow low. Mowers should be set at no lower than 2.5 inches.

**Watering-** Lawns that are thick and green in the spring will not be killed by dry weather. It may turn brown but recover when the drought is over. Thus if a green lawn is desired it will need watering during the summer dry months. It is impossible to prescribe a fixed schedule for watering because of the differences in soils, grass species, climates, and weather variations from year to year. The best way to determine watering is to examine the soil. When the soil is dry to a depth of 2 to 3 inches, it is time to water. After a little practice, you will note that the grass will have a grayish tinge when water is needed. This grayish tinge is the plant wilting. Water only when needed, space watering far enough apart and moisten the full depth of the root zone and realize that various sections of the turf may have different water requirements.

**Aerator-** Growing plants need plenty of air and water. Certain soils become compacted and seal out these essential elements. Thatch or decomposing organic matter may also accumulate decreasing infiltration and movement of nutrients, water and air into the soil. Aerating your lawn will go a long way toward improving your lawn.

**Weeds-** Probably the most serious and frustrating pest problem associated with most landscapes is weeds. Weeds are the opportunists of the plant world, ready to take advantage of any failure of the maintenance program. The best weed control is a healthy vigorous growing turf. Weeds have a difficult time invading high quality turf. Crabgrass is the most serious weed and can make a really nice lawn look unsightly. Fortunately, certain pre-emergence control products applied in mid April are very effective in preventing this problem.

**Insects-** The biggest insect problem is grubs. Birds and skunks digging for the grubs can devastate a lawn. The best time to control them is in mid August. Merit and GrubX are two common products that will take care of this problem.