



Connecticut Agricultural Experiment Station

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PRACTICAL LAWN SUGGESTIONS

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Practically every family in the state is concerned in the problem of securing and maintaining a beautiful lawn, but even in this favored climate few are developed to their full possibilities. Many persons confine their activities to the use of the lawn mower when absolutely necessary, and success is commensurate with their efforts. But a greater number fall far short of the ideal through misdirected enterprise. Much time, labor and expense is wasted due to lack of understanding of the essential requirements of lawn grasses.

CORRECT SOIL CONDITIONS THE FUNDAMENTAL BASIS FOR LAWN SUCCESS.

No desirable species of lawn grass, regardless of fertilizer treatment, rolling or watering, can be satisfactorily produced on sand or gravel devoid of humus. In the excavating necessary in the construction of cellar or basement, with attendant grading and filling, the area upon which the lawn is to be established is frequently left covered with subsoil material, often a coarse mass of gravel and building debris. A surface soil of at least four inches of as rich a loam as possible is needed. If the soil is not too sandy, a heavy application of manure will transform a comparatively raw subsoil into a moderately productive condition, but in many cases loam must be brought in from elsewhere. If the original top soil is good, one should use proper care in saving it when excavating and grading, to be spread over the surface. It must be borne in mind that best results are obtained upon a well drained, moderately deep, dark colored, mellow loam or fine sandy loam, underlain with a fine sandy loam, or loam subsoil, resting upon gravel or "hardpan," preferably the latter, at least two feet below the surface. Every reasonable effort should be made to approximate this condition.

THREE CLASSES OF LAWN TURF.

The lawn grower must make a choice between three general classes of turf, and all treatment should be consistent with the characteristics of the one of these to be selected.

The Blue Grass—White Clover Lawn. This forms a sod which is all that the average person desires but it presents two main difficulties. It is possible only on a soil well supplied with lime, and under these conditions greater trouble is experienced with weeds such as dandelion and plantain. In all cases where the soil is acid, as is the natural condition almost everywhere in Connecticut, lime or limestone must be applied usually at the rate of 75 lbs. per 1000 sq. ft. of hydrated lime, or 100 lbs. of finely pulverized limestone. If there is any question as to the acidity of the soil, representative samples may be sent to the Soils Department of the Experiment Station for examination. Since the soil for this type of lawn must be kept "sweet," nitrate of soda is the preferable nitrogenous top dressing. An annual spring application of 5 lbs. per 1000 sq. ft. of this material, with the addition of 3 lbs. of muriate of potash, and every two or three years, 10 lbs. of bone meal, is recommended. In midsummer the application of nitrate of soda should be repeated. The fertilizer materials may be mixed with sand or loam to facilitate their distribution and prevent burning.

The Mixed Grass, Acid-Tolerant Lawn. Many grasses, such as red top, Rhode Island bent and red fescue, are not injured by soil acidity, and produce in mixture a dense turf of fine texture and excellent appearance. On an acid soil, less difficulty is experienced from dandelion, plantain and similar weeds. On such a sod lime should *not* be used. In the fertilizer treatment sulfate of ammonia at the rate of 4 lbs. per 1000 sq. ft. should be substituted for the nitrate of soda, and it is probable that it would be well to use acid phosphate (16%) at the rate of 20 lbs. per 1000 sq. ft. instead of the bone meal.

The "Putting Green" Lawn. The enthusiastic lawn grower strives to duplicate the wonderful velvety carpet growth of uniform quality and texture which is to be seen on the putting greens of the best golf courses. Such lawns require special care in establishment to obtain pure stands of a uniform type. Either red fescue or creeping bent (German bent) are adapted to this type of lawn, preferably the latter. Creeping bent may be produced by planting stolons of a pure strain, and thus any difficulty in obtaining seed of uniform type is avoided. It is almost impossible to transform the average lawn into this condition without reseeding. Either creeping bent or red fescue are acid-tolerant, and the use of lime on such lawns is undesirable. Fertilizer treatment as for the previous type of turf is usually satisfactory.

OTHER FERTILIZER MATERIALS FREQUENTLY USED ON LAWNS.

Stable manure, when obtainable in a well rotted, pulverized condition, is an excellent top dressing in fall, winter, or early spring, but the practice of applying fresh manure in the fall, raking off the coarse material in the spring, cannot be recommended. This is almost certain to introduce many weeds into the lawn.

Pulverized sheep manure is a material of fine mechanical condition and free from weed seeds, but is often deficient in strength, and is too expensive for the average householder.

Whenever available, *compost* or *mushroom soil* are excellent for top dressing. However, all the above materials are rapidly becoming more difficult to obtain, and the average person living under urban conditions must look to chemical fertilizers for lawn maintenance.

Mixed fertilizers when composed of suitable materials in correct proportions, are simple and convenient to use. One must ascertain whether the fertilizer has a tendency to increase or decrease soil acidity, owing to the importance of this factor in relationship to the type of lawn to be produced. A fertilizer containing 8% ammonia, 6% available phosphoric acid and 6% potash (8-6-6) or similar analysis, should be a desirable lawn fertilizer, when used at the rate of 15 or 20 lbs. per 1000 sq. ft. as a spring application.

MORE WATER AND LESS WEEDS.

A good lawn should be rolled frequently and kept short through frequent clipping, and whenever possible, liberal watering during dry seasons should be practiced, especially on the sandier types of soil. It must be remembered that 1000 sq. ft. of lawn will transpire at least 300 gallons of water on warm days. Sprinkling should not be practiced during the hottest portions of the day, since much water is thus lost through direct evaporation.

Eternal vigilance is the price of success in the eradication of weeds. Plantain is best removed during July and August by pulling, while in the case of dandelions, frequent deep cuttings with a knife or spade will prove effective. A drop or two of sulfuric acid injected into the crown with the point of an ice pick, will obviate this necessity. Spraying with iron sulfate solution (2 lbs. per gallon of water) or a reliable commercial chemical weed killer, has given good results. At no time should weeds be permitted to go to seed. It will be found helpful to fertilizer and reseed spots made bare by weed removal.