

UNIVERSITY OF KENTUCKY

COLLEGE OF AGRICULTURE

Extension Division

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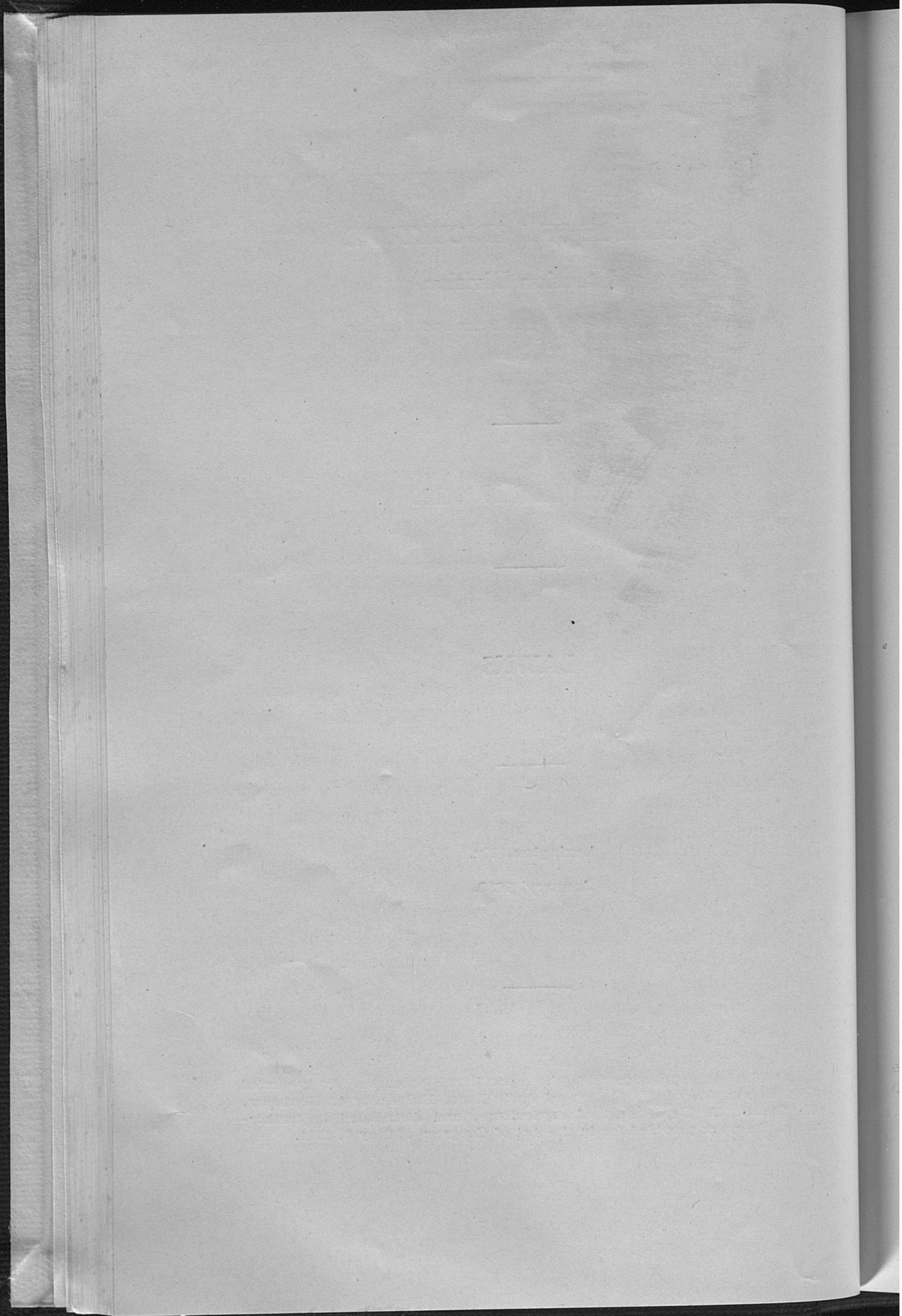
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LAWNS

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LAWNS

By A. J. OLNEY.

The lawn is the most important feature of the landscape about the home. Probably no other detail enhances the attractiveness of a residence so much as a beautiful lawn. Many difficulties are encountered in making and maintaining them. Failure to secure a good stand of grass, the dying out of parts of the lawn, and the eradication of weeds are among the more serious problems. No easy remedy for these troubles is known, but careful attention to the causes and their removal will result in better lawns.

The chief factors on which good lawns depend are climate and soil. Most of the grasses suitable for lawns originated in Europe where lawns are more easily maintained than they are in the United States. The hot, dry summers and snowless winters in states like Kentucky make the maintenance of lawns somewhat more difficult. Inasmuch as our climate cannot be changed to suit the grasses, the only practical thing to do is to make the soil conditions as nearly ideal as possible.

Soil and Fertilizer: Most grasses do well on soils which are deep, fertile, moisture-holding, and well drained. The subsoil should be permeable to the roots and if too compact for good natural drainage, tiling should be used. Wet soil conditions may also be due to surface water from the surrounding areas. When this is the case grading must be done to correct it.

Making a new Lawn: After the lawn is graded and the soil is in a suitable state of fertility it should be plowed deep and well pulverized. Then it should be rolled and raked alternately until a firm, even seed-bed is established.

It is a serious error to seed or sod a new lawn until a satisfactory soil has been established, as this can never be made satisfactory later by any system of top-dressing. If the soil is lacking in fertility, humus-forming materials should be added in large quantity. Well-rotted barnyard manure, free of weed seeds, is one of the best fertilizers. Cottonseed-meal, bone-meal and tankage may be used to supplement the manure if the supply is limited. Thin soils usually are improved by the use of a complete fertilizer such as is commonly used for tobacco, at the rate of five pounds per square rod. Lime should be used rarely, except on very acid soils. White clover and turf grasses, such as bluegrass and Bermuda grass, growing on acid soils, are stimulated by applications of lime, while most others are indifferent to it. However, the advantages from the use of lime are offset by the increased growth of weeds.

After the lawn is established fertilizers should be added early every spring: bone-meal at the rate of three pounds per square rod, or sulfate of ammonia at the rate of one pound per square rod. Sulfate of ammonia may be mixed with dry soil and sown at a time when the grass is perfectly dry to avoid the possibility of injury, or it may be dissolved in water and applied with a sprinkling can, followed by a thoro watering. If the grass fails to make rapid growth another application of the nitrogen fertilizer may be made in May or June.

Seeding: Seeding is done in September and October, in the fall, and from February to May, in the spring. The point in spring seeding is to get it done as early as possible after the ground can be worked. Lawns may be seeded at almost any time during the summer if watering can be done when needed. If inconvenient to sow the lawn in the fall it is a good practice to have the soil prepared then, and sow at any time during the winter.

The seed should be sown as evenly as possible. Sowing half of the seed in one direction across the lawn and half at right angles to it helps to make the distribution even. If available, a small hand-operated seeder is recommended. Since the seed is very light, a time must be selected when there is no wind.

The seed should be sown at the rate of not less than four bushels to the acre. For smaller areas allow one quart of seed to two hundred square feet, or a square 14.2 feet on a side. It is better to sow thickly since weeds have less chance if the soil is fully occupied by the grass. Immediately after the seed is sown the lawn should be raked or harrowed lightly and then rolled. The grass should be cut as soon as it has reached a height of about four inches. A scythe is good for the first cutting. Leave the grass clipping on the lawn to act as a mulch. From this time the grass may be cut at about ten-day intervals. The lawnmower should be set to cut the grass at least two inches high the first season.

Sodding: Altho much more expensive than seeding, sodding may sometimes be desirable in making a lawn. For example, it is better to depend on sodding in the summer. Sodding is better than seeding on terraces and banks because the sods can be held in position by means of pegs eight or ten inches long, driven into the ground. If watered freely the grass will grow rapidly, but even when this is done it is difficult to keep the steep areas from drying out and young seedlings from dying. One disadvantage of laid sod is the impossibility of securing as uniform a surface as by seeding. Furthermore, good sod is often difficult to secure. The same preparation of the soil should be made as for seeding, before laying the sods. The sods should be cut three feet long, one foot wide and two inches thick. They may then be rolled to facilitate handling while transporting them to the lawn. It is best to lay the sods as soon as possible after cutting.

After the turf is laid as evenly as possible and the unions are filled with fresh soil, the sods should be beaten down to insure intimate contact with the soil below. If this is not done the roots may fail to take hold and the grasses may die after a few days of dry, hot weather. The newly laid sod should be watered frequently until established.

Grasses for the Lawn: The lawn grass seed on the market is usually a mixture of several kinds of grasses. While it is often desirable to sow a mixture of grasses, it is difficult to de-

termine the kinds and amounts of the various grasses that have been used to make up the mixture. For this reason it is better to buy the kinds of seed desired and do the mixing oneself. The following is a good mixture for most lawns:

Kentucky bluegrass 4 parts by weight,
Redtop 1 part by weight.

If white clover is desired, one part by weight of seed may be added to the mixture. For shady places, add one part by weight of wood bluegrass seed.

The use of perennial rye grass, oats and other quick-growing grasses as nurse crops for the lawn grasses has few if any advantages and is not recommended.

A brief description of some of the most important kinds of lawn grasses, follows:

Kentucky Bluegrass (Poa pratensis): The most important lawn grass is Kentucky bluegrass. It makes a green sward, stands much tramping and tends to crowd out many other grasses, when grown in favorable soils. However, it grows slowly and requires three years to become fully established. In the meantime weeds may gain a foothold. For this reason it is desirable to use a fast-growing grass with it to occupy the ground and give a quicker effect.

Redtop (Agrostis palustris): Redtop is used because it is surer to make a good stand. It is adapted to a wide range of soil conditions, grows well in wet land, and will resist drought better than most other grasses. For poor soils redtop has long been recognized as one of the best grasses. The seed appears almost identical with creeping and Rhode Island bent-grass seed, and has often been used as an adulterant for the two bents.

Creeping Bent (Agrostis stolonifera): This is considered the finest grass for putting-greens. It makes a dense, velvety turf.

Rhode Island Bent: Altho this grass differs somewhat from creeping bent it is similar in habit and is common in north-eastern United States.

Wood Bluegrass, Wood Meadow Grass (Poa nemoralis): This is one of the best grasses for shady places. It will thrive

under trees where other grasses fail. It is best to add this to the seed-mixture in places of varying degrees of shade.

The Fescues: These grasses are common ingredients of lawn seed mixtures and are used to give the quick effect of a turf in the first year. They are suited to a wide variety of soils and are well adapted to growing in the shade. They make beautiful lawns in northern climates, but unfortunately they tend to become brown during hot, dry weather in Kentucky. For this reason their use in lawn seed mixtures is not recommended for this region.

Crested Dogstail is another grass commonly found in lawn seed mixtures. This grass is poorly adapted to Kentucky conditions.

Bermuda Grass: This is the important lawn grass of the South. In Kentucky it often grows well during the summer, but becomes rusty brown with the first frost and so cannot compete with bluegrass, redtop, and white clover, which remain green most of the winter.

White Clover: White clover, altho not a grass, is often used with a mixture of grasses. It is adapted to poor soils, produces a dense turf, and tends to choke out weeds. Some object to white clover because of the spotted effect it gives to the green color of the lawn. It also appears crushed after considerable tramping.

CARE OF THE LAWN

Rolling: Nothing contributes more to the maintenance of perfect conditions in the lawn than frequent rolling. Rolling should begin as soon as the grass starts to grow in the spring and be repeated often thru the summer. It is hardly possible to make the surface too compact by this process. The roller should be as heavy as can be handled with convenience.

Mowing: Frequent mowing is necessary to keep the lawn attractive and usable. The grass also is benefited by the mowing. Seeding is prevented and vigorous vegetative growth is encouraged.

The mower should be adjusted to cut the grass at least two inches high. If the grass is cut closer than this its vitality is taxed severely by depriving the plant of most of its foliage and exposing the crown to the hot sun.

The frequency of mowing depends on the rapidity of the growth of the grass. If the mowing is done often, the clippings will be short and may be left on the surface of the lawn as a mulch. The short clippings falling around the plants afford considerable protection during hot, dry weather. When the clippings are long and heavy it is necessary to rake them off to keep the lawn neat.

Watering: It is a common practice to sprinkle the lawn frequently during hot weather. Frequent light waterings accomplish little good and indeed may do considerable harm. It is far better to water thoroly once a week or even once in two or three weeks.

Weeds in the Lawn: The surest method of keeping weeds out of the lawn is to keep the grass growing vigorously and thoroly occupying the ground. The most common and troublesome lawn weeds are the dandelion, plantain, dock, and crab grass. Dandelion, dock and plantain may be eradicated by cutting below the crown, but this is a tedious process. A simpler method is that of applying a few drops of gasoline to the crown of the plant. This will kill the weed, top and root, and if carefully applied will not injure the grass. An oil can with a long, sharp spout provides a convenient means of applying the gasoline.

Crabgrass is the worst weed of the lawn. It is an annual and reseeds itself year after year. To prevent reseeding, the crabgrass should be raked as soon as it begins to spread, taking pains to pull up all the creeping stems so that they may be cut off in mowing and the flower heads removed from the lawn and destroyed. Crabgrass can be kept out to a considerable extent by using fertilizers to keep the lawn grasses vigorous, and by reseeding all thin spots in the lawn in the late summer.