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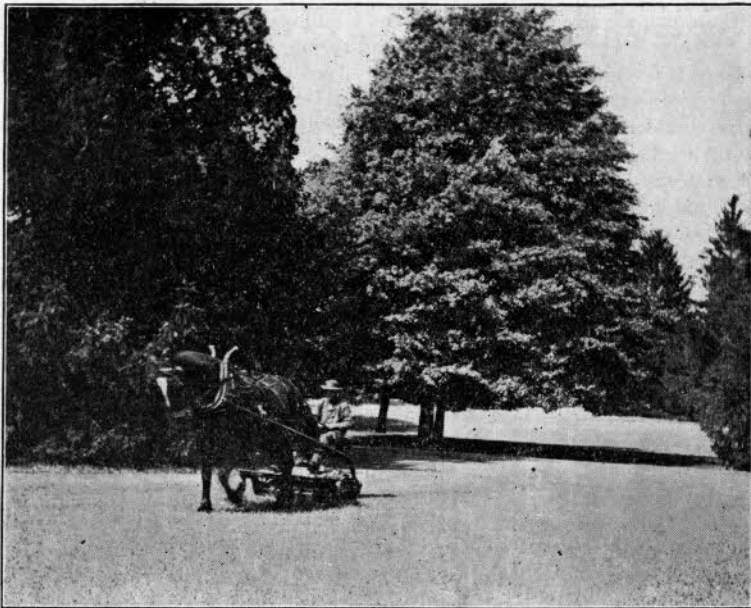
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MICHIGAN AGRICULTURAL COLLEGE

EXPERIMENT STATION

DIVISION OF HORTICULTURE



STARTING A LAWN.

EAST LANSING, MICHIGAN

STARTING A LAWN

There is nothing in the decoration of the home grounds that is so pleasing and beautifying as a good lawn.

CONSTRUCTION

Soil. The soil for a lawn should be of good texture containing plenty of plant food and enough humus to retain moisture. A strong clay loam or a sandy loam with a clay subsoil most nearly approaches these conditions. When a lawn is to be constructed upon light sandy soil, a top dressing of about two inches of clay with a heavy application of well rotted manure should be mixed with the first three to four inches of sand. Frequently, in building a house, the soil excavated from the cellar is spread about covering the good top soil with a poor sub-soil. This sub-soil is of poor texture, contains little available plant food and is an extremely poor soil for lawns. Where it is necessary to use this sub-soil for filling, the top soil should be first removed to be later used as a surface dressing.

Grading. In the grading of a lawn, first endeavor to obtain good surface drainage, see that there is a slight slope away from the buildings; that there are no low pockets where water may stand during the winter and spring, and that the area as a whole, is either naturally or artificially well drained.

Except in some very special cases, a level lawn should not be constructed. It lacks naturalness and decreases the apparent extent of the lawn. In grading, endeavor to preserve the slight natural slopes and curves of the land, remembering that nature never produces perfectly level surfaces. This part of the grading should be carefully studied and considered before starting the work. The way in which it is done will determine whether a graceful, pleasing, natural lawn is secured or a stiff, restrained, unsatisfactory one is the result.

After the general slopes have been established, the land may be harrowed if necessary and any small uneven places leveled off.

If the land has been allowed to remain over winter in the rough condition, the soil will have become well settled by spring and will be ready for the final work before seeding. Pick off all the stones which have come to the surface during the winter and then go over the land with a shallow harrowing or raking. If it can then be rolled, the small uneven spots will become very apparent and they can then be leveled off with a hand rake. By re-rolling and re-raking the land in this way, the surface can be made as smooth and even as desired.

Fertilizers. Well decomposed stable manure is the best general purpose fertilizer for lawns. It contains all the chemical elements essential for plant growth and adds humus to the soil, thus making it more retentive of moisture and also improving its texture. If this can be used, a heavy dressing should be applied. A ton to two thousand square feet would not be too heavy.

Chemical fertilizers may be used to advantage after the grass is well started but should never be applied at the seeding time as it may kill the young roots which come in contact with it during germination. It must be remembered also, in using commercial fertilizers that they never improve the physical condition of the soil. There is no humus added to the soil by their use and hence the soil texture is not improved. It is simply an addition of the essential food elements and should always be regarded as such. It is easily applied, contains no weed seeds and may be readily obtained.

Some of the most desirable forms of chemical fertilizers for lawns are fine ground bone, wood ashes, and the high grade forms of complete fertilizers. Ground bone is a

very good form of fertilizer for lawns and although it contains principally phosphoric acid, it furnishes some nitrogen and lime. Unleached hardwood ashes is used as a source of potash and if applied each spring soon after growth begins, will generally prove very beneficial. Complete high grade fertilizers for lawns may be obtained from almost any fertilizer dealer and, while more expensive than the other forms, they are often quite efficient in maintaining the lawn.

Although the amount of fertilizer advisable to apply will depend much upon the condition of the soil as well as upon the form and strength of the fertilizer to be used, a dressing of about 2.5 pounds per hundred square feet would be a moderate application under average conditions.

VARIETIES OF GRASS FOR LAWNS

The best variety of grass for lawns, under general conditions in Michigan, is Kentucky Bluegrass (*Poa pratensis*). While it is rather slow in starting, it produces a permanent lawn of fine texture and of a rich green color. The crown of the plants set very close to the ground thus permitting close clipping and the plant, after becoming established, spreads rapidly by underground roots.

Although a permanent bluegrass lawn may be desired, it is often advisable to sow other varieties with the bluegrass seed. Of the rapid growing grasses that may be used for this purpose, the English rye grass (*Lolium perenne var. tenue*) is one of the best. It is an annual grass and a little coarse in leaf, but starts rapidly, produces a very early effect and covers the ground which might otherwise be occupied by weeds. Do not use oats, rye or timothy for this purpose.

Redtop (*Agrostis alba*) is a quick growing grass which produces a good lawn effect the first season. It is of a finer texture than rye grass but does not grow quite as rapidly on the start. It grows better under adverse soil and moisture conditions than most other grasses.

White clover (*Trifolium alba*) is frequently used on lawns as many people desire the appearance of the white clover blossoms in the summer. Others object to its tendency of giving the lawn a spotted effect.

On a very sandy soil the Rhode Island Bent grass (*Agrostis conina*) does well, while in very shady places the Woodland Meadow grass (*Poa nemoralis*) may be used. Where the lawn is on high, dry situations or slopes the Sheeps Fescue (*Festuca ovina*) will be found desirable, while on low wet places the Various-leaved fescue (*Festuca heterophylla*) will thrive.

For the average lawn, a good mixture is one-fourth Fancy Red Top, one-fourth English Rye grass and one-half Kentucky blue grss. If the area to be sown is small and the conditions of soil or exposure somewhat variable, it is advisable to buy a high grade prepared lawn mixture from a reliable seedsman. This mixture will generally contain seed adapted to various conditions and will prove more convenient and frequently better than the homemade mixture on such a small scale.

Frequently grass seed contains a great many weed seeds, often of a kind that may prove a serious nuisance and expense to get out of the lawn if they once become established. It is best to buy only the best seeds from the most reliable seedsmen. If a large quantity is to be procured, it would be advisable to send a sample to the Division of Botany of the State Experiment Station where it will be examined for purity free of charge.

Sowing the Seed. In starting a lawn use plenty of seed, one pound to about 1000 square feet or fifty pounds to the acre (42560 sq. ft.) being none too much. Thick seeding chokes out weeds and assists in producing a quick effect.

Select a day when there is no wind to sow the seed. Early in the morning or about sun down is a very good time, and if just before a rain, so much the better.

By sowing the seed in the following way, an even stand is quite assured: taking one half of the amount of the seed to be sown and beginning at one end of the lawn, sow in parallel strips until the entire lawn is covered; then take the remaining one half of the seed and sow in strips in the other direction. If this is properly done, there should be no streaks or vacant spots in the future lawn.

After sowing the seed, unless directly followed by rain, the soil should be rolled. Raking or harrowing after sowing is apt to bury the seed unevenly.

Maintenance. After the grass has grown to a height of from four to six inches, it should be given the first clipping, being careful not to cut very close. A scythe is better for this cutting than a lawn mower as it will not pull out the young plants or cut as close as the mower. The future cuttings should be performed frequently enough to permit the clippings to remain on the lawn without being unsightly. These clippings, if allowed to remain, will form a dense mulch around the base of the plants and protect the soil from drying out during the summer months. Cut frequently then but not too close.

Additional seed should be applied to all lawns at least every spring and often another sowing would prove beneficial the latter part of June or in September.

The most effective method of controlling weeds in lawns is by securing good drainage to the soil, keeping the lawn well supplied with plant food and the soil well filled with pure seed. Make the conditions for plant growth most favorable and there will be little chance for weeds to gain a foothold and develop.

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ASSISTANT HORTICULTURIST