

LAWNS.

THEIR MAKING AND MAINTENANCE.

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It is now generally recognized that a good lawn is the first and most fundamental feature of the home grounds, so it is not necessary to go into this phase of the subject further than to say that though great are the rewards nothing in garden making requires more thorough preparation and diligent care than does a perfect lawn in New England. By following carefully the subjoined directions your lawn may be just as fine as the beautiful green-sward of your neighbor, which has been the envy of so many.

Carefully compose your planting and lawn areas as to location and extent. Do not attempt a greater area than you can maintain in perfect condition. It is better to increase the areas in shrubs and trees than to have a large and untidy lawn.

Estimate the cost of making and maintaining before further work, as you may find it possible to do only the preliminary operations at the outset. In fact, it is better to proceed slowly, giving the soil an opportunity to become thoroughly cultivated and in good tilth before trusting it with the grass seed. It will probably cost \$10 an acre to prepare the soil, irrespective of draining, water piping and subgrading. For small areas the cost will be proportionately greater. Seed will cost about \$25 per acre, and the fertilizer about \$50 an acre, exclusive of the manure, the cost of which varies, but 75 tons would average about \$250.

PREPARATION.

If the soil is heavy it should be underdrained from 3 to 5 feet deep with tile drains, varying in distance apart from 10 to 30 feet, according to the natural drainage. The heavier and more impervious the soil, the more tile must be used.

If water is convenient and the lawn is not too large, 1 inch piping should be laid, with street washers, so that all parts of the lawn may be reached with a hundred-foot hose.

Where the existing topsoil is poor and unproductive, the whole area should be excavated to a depth of not less than 12 inches. Upon the loosened subsoil place 1 inch of well-rotted manure, covering the entire area with 12 inches of the best available loam or topsoil. Should the existing soil be of excellent quality and the grade as desired, then apply the 1 inch of well-rotted manure

on the surface and plough under. When this is done late in the fall the ground can be left in this condition all winter, getting the benefits from the winter frosts, etc.

However, if you begin in the spring and care to wait a year for your lawn, the best way is to cultivate the land with a crop of corn, potatoes, or green cover crop to add vegetable matter or humus to the soil, putting in the grass seed the following September.

After plowing or filling, harrow both ways, three to five times in each direction, depending on the condition of the soil. Then apply 12½ pounds of bone meal to the square rod, 1 ton per acre, and 12½ pounds of agricultural lime. These fertilizers should be put in and lightly harrowed a couple of weeks before seeding.

Remove all stones, and rake to a perfect grade. A leveling board may be used and grades obtained by sighting along three stakes in all directions with a spirits level. All trees and shrubs should be planted, of course, before the seed is sown.

SEEDING.

The seed should be put in on a very quiet day, 75 to 100 pounds of "fancy re-cleaned" seed per acre being used, or about one-half pound per square rod of the following mixture:—

	Pounds.
Kentucky blue grass (<i>Poa pratensis</i>),	9
Rhode Island bent grass (<i>Agrostis canina</i>),	3
Red top (<i>Agrostis alba vulgaris</i>),	4
English rye (<i>Lolium perenne</i>),	3
White clover (optional) (<i>Trifolium repens</i>),	1

The quantities given are sufficient to seed one-fifth of an acre, or 32 square rods. In case of extreme shade or other peculiar conditions special mixtures should be used. The following mixtures are those recommended by Leonard Barron in his book on Lawns:—

FOR SHADY PLACES.

	Pounds.
Kentucky blue grass (<i>Poa pratensis</i>),	8
Crested dog's tail (<i>Cynosurus cristatus</i>),	2
Wood meadow grass (<i>Poa nemoralis</i>),	4
Various-leaved fescue (<i>Festuca heterophylla</i>),	2

FOR SANDY SOILS.

Kentucky blue grass (<i>Poa pratensis</i>),	5
Creeping bent (<i>Agrostis stolonifera</i>),	6
Rhode Island bent (<i>Agrostis canina</i>),	6
Fine-leaved fescue (<i>Festuca ovina tenuifolia</i>),	3

FOR SEASIDE LAWNS.

Rhode Island bent (<i>Agrostis canina</i>),	6
Creeping bent (<i>Agrostis stolonifera</i>),	6
Kentucky blue grass (<i>Poa pratensis</i>),	5
Beach grass (<i>Ammophila arenaria</i>),	3

FOR CLAY SOILS.

Kentucky blue grass (<i>Poa pratensis</i>),	10
English rye (<i>Lolium perenne</i>),	4
Fancy red top (<i>Agrostis alba vulgaris</i>),	6

In buying be sure to specify "fancy re-cleaned" seed, and weed troubles will be greatly lessened. It is often well to sow 2 or 3 pounds of oats with the grass to serve as a nurse crop. Seed should be sown half one way of the lawn and half at right angles. In New England States seed should go in during April or early May; or, if planted in the fall, the first of September is the proper season. Lightly rake in the seed. Roll with as heavy a roller as is available, not less than 300 and preferably 1,000 pounds.

MAINTENANCE.

Too much emphasis cannot be placed upon the importance of maintenance. In this country we seem to think that after the initial outlay the lawn ought to require nothing but mowing, and the result is we get very second-rate lawns compared to the beautiful turf of England, where constant care is the rule and not the exception. We can have just as green lawns during a large part of the season as those on the other side, but we must give them even greater care, as we have not as suitable a climate for turf growing.

Every one of the following directions is important in maintaining your lawn, and you cannot afford to slight a single one.

Watering. — As soon as the seed has been harrowed and rolled, a light but gentle sprinkling (in the absence of rain) is very beneficial. Do not make the mistake of too frequent waterings, as they have a tendency to weaken the drouth-resisting qualities of the lawn, and when subjected to a period of dry weather disastrous results follow. The hose sprinklers make pretty fountains, but the best way is to lay the hose flat on the ground (or on a board when the grass is young, to prevent washing), turned on full, and leave it for at least a half hour; then move it to an adjoining section. When this is done over the entire lawn it is not necessary to water again for a week or ten days.

Fertilizing and Feeding. — If you have made your lawn according to the foregoing directions it will not be necessary for you to feed it for eight or ten years. However, a light winter mulch in the colder climates is always beneficial. This can be either *well-rotted* stable manure or tobacco stems. In either case the residue should be removed in the spring. If the soil is well supplied with humus or vegetable matter the stable manure may be omitted. In later years a spring dressing of 12½ pounds of meal and wood ashes to a square rod, 1 ton to the acre, as well as 2 pounds nitrate of soda, 250 to 300 pounds to the acre, will put new life into the lawn. The nitrate of soda must be sown either in liquid form (1 pound to 40 gallons of water) or just before a shower, as otherwise it burns the grass.

Mowing. — Do not mow a new lawn too soon. A fall-planted lawn should not be mown until the following spring. Let the grass grow to 3 inches before mowing the first time, then keep it about 2 inches high. A scythe does not pull on the roots. Once a week or ten days is often enough to mow. When possible, choose a gray day for mowing, as grass cuts better, and less injury results to the cut blades of grass. Leave the clippings on the lawn, unless the growth is very heavy.

Rolling. — Early in the spring the lawn must be rolled with a heavy roller, 1,000 or 1,200 pounds. Nothing is more important to the success of the lawn than thorough rolling, as it presses the crowns of the grasses firmly into the soil, where they can grow to best advantage. A mower with a roller attached is most efficient, as it keeps the ground firm during the season.

Weeds. — If you bought "fancy-re-cleaned" seed you are not liable to have serious weed troubles unless the manure was not sufficiently well rotted. In

the case of an old lawn the dandelions, dock and plantains must be dug out, the bare spaces raked over, fertilizer mixed in, and the space reseeded. "Crab grass" must be pulled up to the surface with a rake in the fall and clipped off with the mower. The same treatment is good for eradicating chickweed.

Other Pests. — Ants when very troublesome can be killed by the use of bisulphide of carbon. Two or three tablespoonfuls poured into a nest and the top packed with earth or other material will do the trick. Do *not* use bisulphide around fire of any kind. Heavy rolling or an application of kerosene emulsion will kill the white grub which causes brown patches to appear in the lawn in summer. The roller will also tend to keep out moles, though trapping is the only sure way to rid the lawn of this pest.

RENOVATING A LAWN.

Before trying to fix up the old lawn, carefully consider whether it would not be better to make a clean job of it and plow up the whole area than to try patching. If possible, determine the cause of present unsatisfactory conditions. If the grass is uniformly bad, with an abundance of weeds, showing a lack of nourishment, by all means remake the entire area according to foregoing directions.

If, however, the lawn has been but recently neglected and weeds allowed to enter in a few places, then proceed as follows: —

1. Cut the grass rather long, preferably with a scythe.
2. Roll thoroughly.
3. Fertilize with $12\frac{1}{2}$ pounds bone meal per square rod, adding the same amount of lime if soil shows sour conditions. Sprinkle nitrate of soda on bare spots after removing weeds and fill hollows with best top-soil.
4. Rake over fertilized bare spots where weeds occupied the ground and sow with one-half to two-thirds the full amount of "fancy re-cleaned" seed.
5. Rake and roll again.
6. Keep well watered and cut only when necessary.
7. In the fall protect the lawn with a light mulch, which may be raked in the following spring and all coarse material removed.

Conclusion. — In making a lawn it must be borne in mind that a few extra dollars spent in thorough preparation more than pays in the resulting lawn. A half-prepared lawn continually requires feeding and fertilizing.

The importance of good "fancy re-cleaned" seed cannot be overestimated. Above all things, do not forget to roll the lawn in early spring, and use a good roller with the mower all the season.

If the above directions are diligently and painstakingly followed, the result will be an excellent greensward throughout the entire season, and its owner can well be proud of this beautiful feature of his garden, farm or estate.