

The Seed Bed of a Lawn

By PROFESSOR LAWRENCE S. DICKINSON

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THE seed bed of a lawn is really the top soil or loam, and like any good bed it has three layers: (1) the top inch, or bed clothes; (2) the next two inches in depth, or mattress; and (3) the remaining depth, or bed spring; all of which are essential to the comfort and health of the occupant. These layers are particularly important to grass plants, because not only do they act as a seed bed, but they must nourish the young grass plants through its youth, and then maintain it through the vigor of life and dotage 'til death.

Therefore the seed bed should be of such texture as to permit easy development of a root system, and contain a quantity of the chemical elements necessary for plant life. It should also contain at least twenty-five per cent of voids or air spaces; plenty of moisture and yet not be wet, and be prepared for occupancy in either the spring or fall seasons.

To meet the requirement for the physical properties of an ideal topsoil; one must have a loam reasonably rich in organic matter or humus and containing from 15 to 20 percent of clay, 45 to 50 percent of silt and the remainder sand. Such a topsoil is not difficult to obtain if properly managed, although one usually has to start with a topsoil that will fall under one of the following classifications: sandy, sandy loam, clay loam, or clay.

The doctrine that good construction makes for low cost of maintenance is particularly adapted at this point in the building of a lawn. Home owners, and particularly contractors and real estate agents, in their haste to get "a lawn" saddle themselves, or their customers with a lawn area that will give chronic trouble, or require an expensive operation



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who is recognized internationally as an expert on turf culture. We are greatly privileged to publish excerpts from his wonderful book.

because of poor construction. For many reasons it is not wise to permanently plant a lawn as soon as the "new house is finished" or grading completed, even though it should be properly molded. Workmen planting the shrubbery, and doing the many "last things" about the new house will leave permanent memorials, in the form of worn and excessively packed spots all over "the new lawn." Furthermore in one season poor soils can be made much better, and unevenness smoothed, so that a truly permanent lawn can be planted.

Many subdivisions are being made on land that is either very sandy or very clayey. On such topsoils no attempt should be made to plant a lawn until the area has been cover-cropped. Cover-cropping means to grow a crop for the purpose of plowing it in before maturity, thereby improving the soil both as to texture and food content. As before intimated, cover-cropping is very beneficial to both sandy and clay soils, even Cape Cod sand has been made to produce good turf after two seasons of cover-cropping.

SPRING PLANTING IS FATAL

IT SURELY is a great temptation, when one moves into a newly-built house May 1, to immediately "plant a lawn." Yield not! Grow cover crops and plant in the fall. If the lawn is molded and ready for seeding in the spring it should be cover-cropped with rye or oats sown thickly. This crop should be shallow-plowed in the latter part of June, and the area seeded to buckwheat at the rate of three pecks per acre. The buckwheat should be plowed in while the stalks are green and succulent (about Septem-

ber 1 for the Northern latitudes) and the ground permitted to remain fallow for about two weeks.

It should then be prepared for seeding. If the area is not ready until mid-summer, grow only one cover crop, and if it should be fall before any work could be done on the lawn area, sow winter rye to plow in early spring to be followed by two more cover crops. If the soil contains over twenty-five percent clay, one application of lime at the rate of fifty pounds per one thousand square feet of surface will be of great benefit.

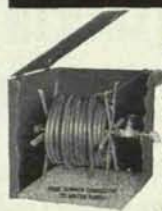
On soils capable of growing a fair vegetable garden cover-cropping need not be practiced, but it is very necessary on sandy or clay soils. In all cases the seed bed should be fully prepared in the fall, if possible in time for fall seeding and if not for spring seeding on the "honey comb," when the top is thawing and freezing.

All soils are improved by the addition of manures, and often they can be substituted for cover crops. The only factor against the use of manures is their unknown weed seed content. However, this liability need not be very serious if the manure is applied several weeks before seeding time, for a great majority of the weed seeds will have germinated and the young plants will be destroyed in the final preparation of the seed bed. It is far better to harrow the manure into a lawn surface than to plow it in.

PREPARING THE SEED BED

IN preparing the real seed bed (bed covers) the molded lawn should be thoroughly harrowed or shallow spaded. Grade strings should then be re-strung and the entire area raked with iron rakes. This raking should not only remove stones and debris, but should smooth out any unevenness and round off all sharp corners caused by abrupt bending of the grade lines. The raker should be cautioned to do as much "pushing" as "pulling" with his rake, otherwise there will be an excessive accumulation of loam at the lower part of the area.

Experience teaches (though it is seldom practiced) that it is better to rake up the slope than down it, for the same reason. As soon as this raking is completed and the area appears ready for the seed, roll the area with a medium heavy roller. Unexpected hollows and hills will appear, lumps of earth will be crushed and the temptation to seed after the first raking is alleviated by the obvious necessity for another raking. This raking, the final



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one, should be done with a wooden lawn rake. It should effectually smooth the surface and loosen the soil to a depth of at least three-quarters of an inch, leaving a soft, open clean and thoroughly pulverized seed bed.

If one desires to use a pre-seeding fertilizer other than the manures, super-phosphate at the rate of sixteen pounds per one thousand square feet will be found to be very helpful to the young grass plant. This should be incorporated into the soil with the first raking.

Golf Course News

A column of information brief and accurate.
Items are welcome and will be published.

NEW ENGLAND NOTES

By GUY C. WEST

GOLF in New England this spring has been largely very dependent upon the weather. Following a rather open winter when most courses used their regular greens at all times, April brought a very excessive rainfall, and the result was flood conditions, with many courses suffering from flooded lowlands, soggy fairways, etc.

The "No Play" signs were hung out in many clubs due to these wet conditions, and even the best of drainage facilities were taxed on all clubs.

The Greenkeepers' Club of New England held its last indoor meeting of the season on April 3 at the Hotel Statler, Boston. Dr. Howard B. Sprague of the New Jersey Agricultural Experiment station was the speaker, and explained interestingly the various experiments conducted recently and the results obtained from them.

The annual Field Day for greenkeepers at the Rhode Island State College will be held this year on May 22. Exhibits will be limited to the small equipment. A trip to the experimental plots and a speaking program following lunch will complete the program.

Arthur W. MacLean, formerly assistant greenkeeper at the Kernwood Country Club, Salem, Mass. has recently been appointed greenkeeper at the Brattleboro Country Club, Brattleboro, Vt.

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