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**GOOD GRASS . . .**

**GOOD BASEBALL**



*Prepared for*

**NATIONAL ASSOCIATION  
PROFESSIONAL BASEBALL LEAGUES**

*by*

**O M *Scott* & SONS COMPANY**

*Seedsman since 1870 at Marysville, Ohio*

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dated Jan '60  
J W LENTZ  
Marysville, Ohio

# Good Grass — Good Baseball

*Any man who has ever participated in or had more than a casual interest in the great American sport appreciates that a smooth, uniform expanse of grass is helpful to good baseball.*

*This pamphlet has been prepared at the suggestion and through the coöperation of the National Association of Professional Baseball Leagues.*

*An effort has been made to summarize the information peculiar to grass maintenance on baseball diamonds gathered from several sources of practical experience.*

O. M. SCOTT & SONS COMPANY

**B**EFORE constructing a new baseball diamond careful attention must be given to planning the grade of the area, both in the outfield and the infield. Final surface grading is carried out so as to provide a slope in the outfield away from the center toward right and left field. This grade may be up to one percent; that is, a drop of one foot in 100 lineal feet. Such a grade is necessary to facilitate surface drainage.

Plan the infield grade away from the pitcher's box toward all baselines. On baseball diamonds laid out according to the official regulations, a drop of 15 inches from the pitcher's box to the baseline is called for.

Should considerable cutting and filling be necessary to establish a satisfactory grade, experience proves it pays to save the topsoil by scraping it to the side with bulldozer or similar equipment, to be replaced after rough grading is completed. In establishing the subsurface grade it is necessary to make allowances for the return of native top-

soil and any additional topsoil needed so final surface grade will be as desired.

## Drainage

When the subsoil is an impervious, heavy clay, subsurface drainage is also needed. The first step in planning a tile drainage system is to locate an outlet of sufficient depth to properly drain the property. It is important to carry away excess moisture as quickly as possible following heavy rains. A waterlogged soil is not conducive to good grass growth because roots do not get needed oxygen.

Subsoil drainage consists of placing agricultural tile lines in parallel or herringbone pattern. The heavier the clay soil the closer together the lines are placed, varying from 15 to 30 feet apart. They are usually placed 12 to 18 inches beneath the final surface grade. The tile lines are laid to provide a minimum fall of three inches per 100 lineal feet. If the trenches are back-filled with coarse cinders or crushed rock to within 8 or 10 inches of the surface, quicker drainage is assured. Topsoil is then filled in on top of the gravel or cinder backfill.

## Soil Preparation

After installation of drainage and replacement of topsoil to the approximate finished grade, the entire area is cultivated to a depth of 5 or 6 inches by the use of suitable implements such as plow, disc, or cultipacker. Thorough cultivation is helpful in blending the topsoil into the soil beneath and in completing the final preparation of the seed bed. Avoid cultivation while the soil is extremely wet.

The summer months usually are better for grading and soil preparation. At that time the soil is usually dry enough to be worked without harm.

A sandy clay soil free of stones and pebbles, stable enough to insure good footage yet soft enough to allow players' spikes to hold is considered best for baselines and other skinned areas between the infield and outfield.

## When to Plant

The grading and drainage may be accomplished at any time the soil is in a workable condition and the grading and tiling equipment is convenient to use. The fertilizing and seeding, however, may well be done when the best results can be expected. Plan to seed in late summer or early fall, if possible.

The best period for planting a large area for athletics falls between mid-August and early October. The reasons for this are well founded. Weather and soil conditions are more favorable to prepare the seedbed at that time. The new grass gets off to a quicker, more uniform start when it does not have to compete with rank growing weeds and wild grasses. A deeper rooted, stronger turf is prepared to face the new year.

The next best planting time follows in late October or November. It is not likely that germination will take place from such late plantings but it is still better than delaying until spring. The

seed from late fall or early winter plantings rests dormant in the soil until the ground warms the following spring. Cold weather and frost do not harm good seed.

The third choice for seeding northern grasses is in early spring. Grass started at that time seldom develops into turf strong enough to support play until late summer or early fall.

The most difficult period for starting new seedings is during the summer months. The tender grass has to battle the extremely unfavorable condition of heat and drouth in the face of competition of weeds and rank growing, wild summer-grasses. Summer seedings are not recommended unless adequate facilities for watering are available.

## Fertilizing

After establishing the drainage system and preparing the seedbed, an adequate supply of fertilizer is applied to insure a quick and uniform start for the newly planted grass, both in the outfield and infield. A specially prepared, high nitrogen grass food, complete in phosphorus and potash is applied at the economical rate of 5 to 10 pounds per 1000 square feet, or 200 to 400 pounds per acre.

After distributing the fertilizer the area is dragged diagonally several times if necessary to smooth out the surface and work the fertilizer into the root zone. Dragging with a light-weight drag serves to fill in the low spots and level off the high areas.

## Planting Grass Seed

A special grass seed mixture is required for baseball fields. Such a mixture is composed of deep-rooting perennial varieties, capable of producing turf that will withstand heavy use. The contents of the final mixture selected

are contingent on whether the field is to be watered artificially or whether the grass will be entirely dependent on natural moisture. Other factors that determine the seed to be planted are the proposed height of cut and the location of the seeding; that is, whether in the northern states where certain grasses thrive or in the southern states where an entirely different group of semi-tropical grasses do best. The general rate of seeding is 5 or 6 pounds of high quality seed per 1000 square feet, or 250 pounds per acre.

To insure uniform distribution sow one-half the seed by operating a mechanical seeder or a spreader in one direction and the second half of the seed by operating the seeder at right angles to the first operation. It is important to use a spreader made particularly for sowing seed and to have previously tested or tried it for proper rate of distribution.

Hand rake lightly or roll with a light weight roller to complete the planting and insure even initial growth. If at all possible make necessary arrangements to water the new seedings on large areas by artificial watering. Once the seed starts germinating it is important that the surface soil be kept moist until the roots are well developed.

### **Turf Maintenance Summary**

Proper maintenance practices followed on baseball grass will point toward the minimizing of slippery weed growth and emphasizing a uniform playing surface of healthy, heavy grass. Repairing or renovating badly worn sod also comes under this heading.

Early Spring: During February or March apply grass food and reseed the thin, bare areas. Even if the ground is still frozen it is advisable to carry out this program, because the grass food

and seed will not be injured by cold weather.

A little later after the frost has left the ground and the surface is not too wet roll the turf with a light roller. This will press back into the soil grass roots heaved by frost action.

Late Spring or Early Summer: Apply another feeding or use a combination grass food and weed control if broad leaved weeds are troublesome. Begin mowing when grass has made fresh growth. First cutting may be close, 1 to 1½ inches, to encourage the spread of the grass and to permit direct sunshine to reach the ground and germinate the seed.

Summer: Watch for early signs of moisture deficiency and correct this by supplying water evenly and adequately. Ample quantities of water must be applied during periods of temporary drouth to help the grass recover from heavy use. A light application of grass food helps carry the turf through this most trying season.

Reseed the bare spots and scars as they appear. Loosen the soil by vigorous raking first, then add fresh soil before seeding, firming and watering.

Fall: Apply a normal amount of grass food evenly to the entire area. Reseed those areas worn thin by hard use or adverse weather.

In cases where the baseball diamond is used for football, it is a good idea to let the grass carry a longer growth during the season. Renovation of the damaged turf can take place at the end of the football season, by practicing dormant feeding and seeding.

Any baseball club having special grass growing problems is invited to present details of their construction or maintenance questions to any office of O. M. Scott & Sons Company. This firm offers an advisory service without charge on all aspects of developing and maintaining athletic field turf.