

Soil preparation for sodding is the same as for seed beds. Firm the soil with a lightweight roller and dampen the surface with a fine spray mist, wetting the soil to a depth of one to two inches just before laying the sod.

Quality sod is important for athletic fields. It should be dense and well knit so that it can be cut as thin as possible. (Thin cut sod is lighter in weight, easier to handle and lies better.) The soil thickness of the sod should be one half to three fourths of an inch and in strips 12 to 16 inches wide and five to six feet long. If the sod is to be held several days before using, lay it out flat, grass side up, in a shaded area. If it is stacked or left in a roll, the heat generated can turn the grass yellow or even kill it.

The first course of sod should be laid running the length of the field. The second course should be laid against the first but the joints should not come out even but overlap such as laying brick. Any openings between sections should be filled with prepared topdressing to prevent drying of these spots. Tamp the soil lightly and water well. **DO NOT ROLL THE NEWLY LAID SOD.** After rooting has occurred, a lightweight roller may be used to even out small irregularities.

MAINTENANCE

Athletic fields will not maintain themselves, so if maintenance is neglected, all previous work will have been for nothing. Enough money should be allocated for upkeep of these fields, just as it is set aside for building maintenance.

A maintenance program will be a combination of basic principles of soil and turf management, common sense and good judgment blended to meet the needs of the particular situation.

Watering

Irrigation should be done only when the turf shows signs of drought and then the equivalent of 1 to 1 1/2 inches of rain should be applied to wet the soil to a depth of six inches. Frequent aeration will enable moisture to penetrate more rapidly and to a greater depth. Two to three days should lapse between watering and when the field is used.

Aeration

Compaction, one of the biggest problems of athletic fields, is the result of heavy use during games and the use of heavy maintenance equipment on the playing area. The amount of use will determine the frequency at which the field should be aerated. As a general rule, it should be aerated at the beginning and immediately after the playing season. If the field receives heavy use, periodic

aerations during the season will be needed. Some maintenance programs call for aeration each time the field is used.

To be effective aeration times should be so spaced as to remove plugs a maximum of 6" apart. At least two passes should be made when using aerators with a wide spacing of tines. It is advisable to criss-cross the passes to obtain the desired spacing.

Ideally, fertilizing, liming, top dressing and watering are done immediately after aeration so they can penetrate immediately to a greater depth. Drag the field after aeration with a piece of cyclone fencing or steel doormat to break up small plugs and mix the topdressing, fertilizer, lime, etc. Overseeding may also be done at this time.

Mowing

Turf should be mowed as often as necessary to maintain a uniform height. At no time should the grass be allowed to grow over 1/2 to 1 inch above the desired height. Tall fescue should be maintained at a height of 2 1/2 inches, bluegrasses, except Delta and Park, which are dwarf forms, should be kept at 2 inches and bermuda and zoysia at 3/4 to 1 inch. If mixtures are used, the mowing height should be adjusted to accommodate the mowing height of the predominant species or variety and to satisfy conditions of the particular sport.

A reel mower is the best to use as it makes a clean cut across the leaf blade rather than tearing the leaves the way rotary mowers do.

Fertilizing

The fertilization program should be based on a complete soil test analysis because requirements will vary considerably with natural soil fertility and previous applications. Athletic fields will require at least one complete fertilization each year. For cool season grasses, this is done in the fall (mid August through September) and in the spring (1st to mid May) for warm season grasses.

Supplemental nitrogen will be needed, especially if bluegrasses, which are heavy feeders of nitrogen, are used. Best results have been obtained by applying the nitrogen as a slow release fertilizer which minimizes a heavy flush of growth immediately after applying. Caution: Water immediately after applying soluble nitrogenous fertilizers, especially if ammonium nitrate, ammonium sulfate, etc., are used.

Thatch

Thatch is the accumulation of grass clippings and other organic matter on top of the soil. Leav-