

UNITED STATES GOLF ASSOCIATION  
GREEN SECTION  
WESTERN OFFICE



P.O. Box 567

Garden Grove, California

WM. H. BENGLEYFIELD  
Western Director

Vol. 10 - No. 6

November - December 1961

• **Western Turfletter** •

"The easy way is efficacious and speedy ---- the hard way arduous and long. But as the clock ticks, the easy way becomes harder and the hard way becomes easier. And as the calendar records the years, it becomes increasingly evident that the easy way rests hazardously upon shifting sands, while the hard way builds solidly a foundation of confidence that cannot be swept away."

Daniel Rand

T O P D R E S S I N G P U T T I N G G R E E N S :  
O L D F A S H I O N E D O R N O T ?

In the early days of greenkeeping (and possession of 'professional secrets'), top-dressing greens was a hard and fast rule. Every few weeks the ritual was carried out. But with the tick of the clock and swing of the pendulum, the practice was largely discontinued during and after World War II as good top-dressing material became hard to find and labor costly. Only in the past few years have the faults of both extremes (i.e. too much vs. too little top-dressing) been exposed and appreciated. Now a new era is upon us: one of an adequate and sensible top-dressing program: proven of importance to anyone desiring championship putting surfaces.

Why Top Dress?

Top-dressing, or the spreading of a prepared soil mixture over a green, has a great many advantages for today's golfer and course superintendent. Not only does it help create true putting surfaces, but also provides fresh material for the growth of new grass stems and runners. A tighter, denser turf is produced with finer texture. It also contributes to thatch control and often improves the "holding qualities" of a green. Al Radko, USGA Eastern Green Section Director reports that top-dressing greens just prior to the winter season helps in preventing desiccation and winter injury. Dr. Marvin Ferguson, Mid-Continent Director predicts more top-dressing will be needed during the next decade as heavy play continues. Old and new greens alike will benefit from this practice.

### The First Step:

Who will deny that unsuitable top-dressing materials and incorrect methods of application were to blame for many of our putting green troubles in the past? And these same malpractices are being continued today on many courses! Soil layers, different soil types, burying turf mats, smothering and weed infestation still take place. We must be alert to these problems and guard against them.

One of the great difficulties encountered by superintendents today is in 'standardizing' their top-dressing material. It is hard to locate good top soil in many areas and even harder to find the same type of soil year after year. All too often the result is a top-dressing preparation made from whatever materials happen to be on hand or available at the moment. This type of program is more likely to lead to future trouble than it is to future progress. ----- Recognizing this difficulty, many superintendents avoid top-dressing greens entirely and yet they realize they are missing out on a most important and valuable management practice. Is there an answer to this dilemma? We believe so, but it is not an "easy" one.

In any form of agriculture, there is no substitute for long range planning. It seems therefore, that the first step in a top-dressing program is to determine what type of soil mixture will be available and best for top-dressing under your conditions for the foreseeable future. If the present soil in greens has a history of success (good drainage, deep rooting, minimum of compaction, etc.) the top-dressing material should be of the same general nature, if available. -- On the other hand, if it is not available or if the greens are tight and compact readily, then long range planning becomes of even greater importance. In this case, a physical soil analysis (as described in the USGA reprint "Specifications for a Method of Putting Green Construction") should be made of those materials (soil, sand and organic matter) that are and will be available to you at a cost within budget means. The analysis will tell you what soil mixture is best and this then becomes the permanent mixture for all future top-dressings and construction.

"But what if we cannot find a permanent source of soil for the mixture?" is the next question. The only solution here seems to be in stockpiling sufficient soil (at time of initial purchase) for as many years as the present budget will allow. Continuous effort should be made to find similar soil for future use and the budget might be so set up that quantities of such soil may be purchased as it becomes available.

Once the top-dressing mixture is determined, a long range intensified aeration program must also be scheduled. A minimum of three to five years of increased aeration and top-dressing of old greens will be necessary to bring about an improved condition in the soil profile, at least to the depth of the aeration spoons. (See "Techniques" below). Frequent aeration also has merit in that it will prevent the burying of thatch or mat layers.

### How Much ----- How Often?

Although there are always exceptions, it seems that a sound standard maintenance practice should include a minimum of two putting green top-dressings annually. Perhaps an optimum schedule would include three or four annually, spaced throughout the active growing season. Of course top-dressing during the heat of the summer is usually avoided. Aeration (and removal of soil cores) along with vertical mowing just prior to each dressing has merit and is widely practiced. (See "Techniques" below).

How Much ----- How Often? (CONT'D)

Again, the exact amount of top-dressing per application will vary according to each situation. However, for the average 4,500 sq. ft. green a moderate dressing will require from 1 to 1½ cubic yards. If the aeration holes are approximately 2-inches apart, from 1½ to 2-cubic yards will probably be necessary.

Techniques For Methods of Application

Unfortunately, the techniques of proper top-dressing are sometimes overlooked or forgotten. But they cannot be overstressed!

1. Greens should be fertilized approximately one week to ten days before top-dressing and aeration.
2. Top-dressing material should be well screened and reasonably dry at application time. The putting green surface should also be dry.
3. Even distribution of the top-dressing material is essential. Some type of mechanical spreader seems best as the art of evenly spreading soil by hand with a shovel has been lost.
4. The use of boards or the back of rakes will move the top-dressing more uniformly over the surface (or into aeration holes) and better than drag or link mats.
5. The "boarding" (or "matting") operation should be done very slowly and in several directions. If the work is done rapidly (as is usually the case today), the soil is not moved properly (it flies about or bubbles over the mat or board) and does not move into the minor depressions of the putting green surface. A rushed job is not a professional job!

Preparation of Top-Dressing Material

Just as it takes time to make good wine, so it does to make a good soil! The nearly forgotten practice of composting soils for top-dressing is finding renewed favor today. There are an ever increasing number of capable superintendents who will be preparing 1963's top-dressing material this winter. It will be in storage for over a year and a friable, homogeneous, weed free soil will result because of this type of planning and organization.

Soil sterilization for weed control -- advocated as early as 1932 by Dr. John Monteith of the Green Section -- is now gaining favor throughout the country. The next Western Turfletter will deal with soil sterilization techniques and materials in detail.

When preparing top-dressing material, every effort should be made to mix the soil, sand and organic matter thoroughly. In fact, it may be 'turned' occasionally while in storage to bring about a better "soil". ----- After the mix has been made, a check of pH and soluble salt levels should be conducted and adjustments carried out if necessary.

IN SUMMARY

There are many things one might say for or against top-dressing. It may be expensive and labor costs may be high. It does require advanced planning and organization. But the strange and unbeatable fact is that - as of this moment - no substitute has yet been found for it in the production of high quality golfing turf. And today's golfer expects - yes, demands just that!

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"We live in the present, we dream of the future  
and we learn eternal truths from the past."

Mme. Chiang Kai-shek

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