

Editorial Note by William B. Davis, Environmental Horticulturist,
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Many times when I talk with various superintendents who are experiencing problems with their greens they give many reasons why they can not follow a long-range program to solve their golf course problems. We still feel that properly planned and carried through a topdressing frequency program is one of the best solutions for most California golf courses. You might be interested in what Charles Nolan, Superintendent at Inglewood Country Club, Kenmore, Washington had to say at the Northwest Turfgrass Conference this past September. His specific program may not be the answer for your greens, but he has developed a program that works for him and he greatly reduced his problems while giving his membership better golfing conditions.

SAND TOPDRESSING AT INGLEWOOD COUNTRY CLUB By Charles Nolan

The topdressing of turf is certainly nothing new to golf course superintendents. For my part it goes back some 30 years, only in my part of the world it was called mulching. We as superintendents are facing ever increasing play on our courses. The golfer is demanding better playing conditions, faster greens. This coupled with inflation, puts us in a position where we should be ever searching for new and better ways to give our patrons the course they are paying for, let it be public or private. As we all know, there are many ways to achieve one's goal or to cut a blade of grass.

Before I set out on a topdressing program, I met with Dr. Roy Goss of Western Washington Research Station and some fellow superintendents to hear and see what they were up to in regards to topdressing. After some research I set out on a sanding program. The goal was to restore the greens at Inglewood Country Club or be faced with starting at the hard pan and rebuild. The ongoing sanding program at Inglewood achieved that goal.

So you can better understand why we started on a sanding program, here are a few brief facts about Inglewood Country Club.

Built in 1918, the greens were constructed from existing soils. No drain tile was, or ever has been put in. Inglewood Country Club is located in Kenmore, Washington. We have a rainfall of 35 to 160 inches per year which occurs during the fall, winter and spring months. Here at Inglewood we get some 45 inches of rain. The summers are typically dry, but golf is played 12 months a year. What the original depth of soil on the putting surface was, I can only guess at 12 inches or so, but in 1970 it was 6 to 7 inches. I believe that through aerifying and cup changing, as much as 6 inches of soil has been removed from the putting surface. The soil structure was broken down so badly that the greens were closed most of the winter months. In fact, they were maintaining 36 greens

because the regular greens were so bad. Not only the greens, but the aprons in some areas were 3 to 4 inches deep in mud, and like the greens, were churned up by foot prints making putting impossible.

Our first task was to core the greens with 5/8 inch tines, remove the cores, and topdress with a sand with particle sizes falling between No. 20 and 120 Tyler standard screen, U. S. Series equivalent. We followed up with another coring three months later, again removing the cores and topdressing with sand. Three months later we cored the greens again only this time we verticut the cores, topdressed with sand and overseeded. This was done to marry the soil and sand, thus relieving any layering that might occur.

Our third year we cored four times, verticut and topdressed. It was during the third year that we started topdressing once a week. We have now been sanding lightly each week (weather permitting) for four years. The greens now have a 3 to 4 inch mixture of sand and soil plus a 3 to 4 inch topping of sand on top giving us a total of 7 inches of new mixture to work with. We intend to continue for another two years. At that time we hope to reduce the topdressing program to once a month. We were coring the greens once a year and overseeding, but have found out that we get better greens by coring twice a year, which we are now doing. The course is closed on Mondays until noon. This gives us the time needed to topdress. Starting at 6:00 a.m. three men can topdress all 20 greens in a 3 hour period of time. The equipment we use is one tractor and trailer and one utility cart. They are used to supply the sand. We use a Lely fertilizer spreader equipped with a sand ring, pulled by a utility cart to put down 9 cubic ft, one hopper full of sand on each green. (The time on each green is about 1½ minutes.) The sand is let dry for 2 to 3 hours. By this time, all greens have been sanded and we can start dragging on No. 1 green and continue around the course, thus keeping ahead of any golfers. The light amount of sand drags in quite easily and is barely noticeable. We water Monday night, so on Tuesday morning little or no trace of sand can be seen. We leave the catchers off the mowers on Tuesday. This, plus decaying roots, adds a little humus to our mix.

We have eliminated all thatch problems. As we have none, we experience less disease, our fertilizer bill has been cut in half, verticutting need only be carried out once or twice in the spring as the drag mat eliminates graining better than any machine to date. It also eliminates the use of combs and brushes. As for the putting quality of the greens, they are all so consistent, one can't tell one surface from the other. The vertical and lateral movement of water has been improved greatly, almost eliminating puddling. As for dry spots that plagued us seven years ago, they are non-existent. To date we have experienced little damage to our mowers. The golfer can enjoy his golf course 12 months a year now, the surface stays drier, and there are less foot prints making for much improved conditions.

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As for the approaches, we spread the sand very heavy, in some cases 2 or 3 inches deep. We encourage the golfer to walk on the sanded areas until spring, at which time we overseed. In many areas this was all that was required to dry them up from mud to dry turf in only one year. We found that the heavy traffic and compaction by mowers cause the breakdown of the soil structure to the point where infiltration was near zero. After the liberal application of sand and aerification, these areas once again resumed near normal infiltration and percolation. The protective covering of sand has significantly improved the stability of these areas.

To sum up our program at Inglewood, one must say, you must be consistent in topdressing, use a sand described above, put it on little and often. It is worth noting that sand has no structure to be destroyed through traffic or by mowing equipment. Aerifying and topdressing should be considered a permanent practice since layers of grass or thatch can develop over any soil material including sand and reduce the infiltration rate with time. At first you will experience some rough greens but after about the fourth week, they smooth out. The time and dollars spent will pay great dividends. As they say, try it, you will like it.

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