Larger topdressing equipment is a necessity!

Dressing Up For The 1990s!

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IN MAY OF 1980, Mt. St. Helens decided to come back to life. With a monumental eruption, this perfectly symmetrical mound of rock produced one of the largest topdressings ever seen in the history of mankind.

While fairway topdressing may not take on such epic proportions for most courses, it does provide a method for improving problem fairway areas. With this in mind, let's look at agronomy, field experience, and course playing conditions in light of the recent increase in fairway topdressing programs.

Agronomic Considerations

For years, superintendents have known the importance of topdressing greens following aerification, and over time this standard program has been adopted on teeing surfaces and other small areas. Increased play brought about the use of high sand content and straight sand topdressing materials to minimize compaction effects, and topdressing programs eventually evolved into light, frequent applications for the sake of playability as well as agronomics. Topdressing at 3- to 5-week intervals at a rate of about 1/3 cubic yard of topdressing material per 5,000 square feet helps minimize thatch and compaction problems while improving surface drainage, green speed, and surface smoothness. There can be no question that the topdressing of greens has produced positive results on our nation's golf courses.

In the Pacific Northwest, where the combination of clay soil and heavy rainfall makes playability and turf maintenance difficult, golf course superintendents have successfully adapted greens topdressing programs for use on their fairways. While subsurface drainage installation remains the most important means of removing excess moisture, the use of sand for topdressing fairways has had a positive impact.

Considering Some Important Questions

Instituting a large-scale program like the topdressing of fairways should be given some careful advance consideration. Many questions should be brought up and answered, and club

officials and maintenance staff alike should be appraised of the potential benefits, pitfalls, and costs. What follows are some of the important questions that should be asked, along with some comments which should help you make up your mind.

1. How important is the fairway problem and how much money are you willing to spend?

The application of one inch of sand per year to one acre of ground using sand that costs $10 per cubic yard would cost about $1,350, not including labor and equipment. Courses that have followed through with the program, though, have found the effort to be worth every cent.

Is it worth it to you? Answer the following questions to find out.

Are embedded balls a consistent problem? After a hard rain, is the course closed, or are golf carts restricted for an extended period of time? Are there problems with mower track marks on the fairways? Is the course being used just six months per year in spite of good golfing weather during March, April, October, and November? If the answer is yes to one or more of these questions, consider yourself a good candidate for fairway topdressing. How much it costs will depend on the acreage involved and the cost of materials and labor, but if money is a big issue, perhaps a trial area of 10,000 to 20,000 square feet might be the best approach to demonstrate the value of this program.

2. What are the rates and intervals of application and how many years will topdressing be required?

Judging from the experiences of many courses, good results are obtained by applying ¼ inch of sand every 3 to 6 weeks throughout the growing season. During periods of heavy rainfall during the spring and fall, it could be difficult to keep up this schedule because of wet soil conditions. Also, golf courses located in very warm regions should be careful with their summer applications. Try to apply about 1 to 1½ inches of sand per year for 3 to 4 years, for a total of 3 to 6 inches of sand over that period of time. In many circumstances, topdressing can then be greatly reduced or terminated.

3. What type of sand should be used?

Compared to the topdressing of greens, this program has an advantage in that a wide variety of sands can be used for good results. Use a sand devoid of excess coarse and fine material if possible, but coarser plaster sands that are less expensive also have been successful.

In some cases, golf courses that are changing or cleaning bunker sands have found the old sand to be an excellent fairway topdressing. Even though they might contain some fine or coarse particles, they still outperform the clays and silts that exist on the fairways.

4. What type of equipment is needed?

That depends on how much of an area you wish to treat. Existing topdressing equipment might be adequate for small areas, but topdressing larger areas generally requires a topdressing unit with a capacity of 1 to 4 cubic yards.

5. What are the problems associated with fairway topdressing?

Aside from the costs involved, the most consistent complaint has been the scratching of club surfaces while the course is topdressed. To avoid this problem, some clubs have used a temporary rule on the day of topdressing: Players are allowed to place their ball on a tee if the sand has not been thoroughly matted into the turf. As you might expect, complaints are few with this type of advantage. An alternative is to allow preferred lies during or immediately after a heavy sand topdressing application.

Turf problems can occur if the sand is applied during wet and hot weather. Avoiding the two extremes is critical. But as the areas begin to respond to the topdressing applications, the problem of topdressing during weather extremes will diminish.

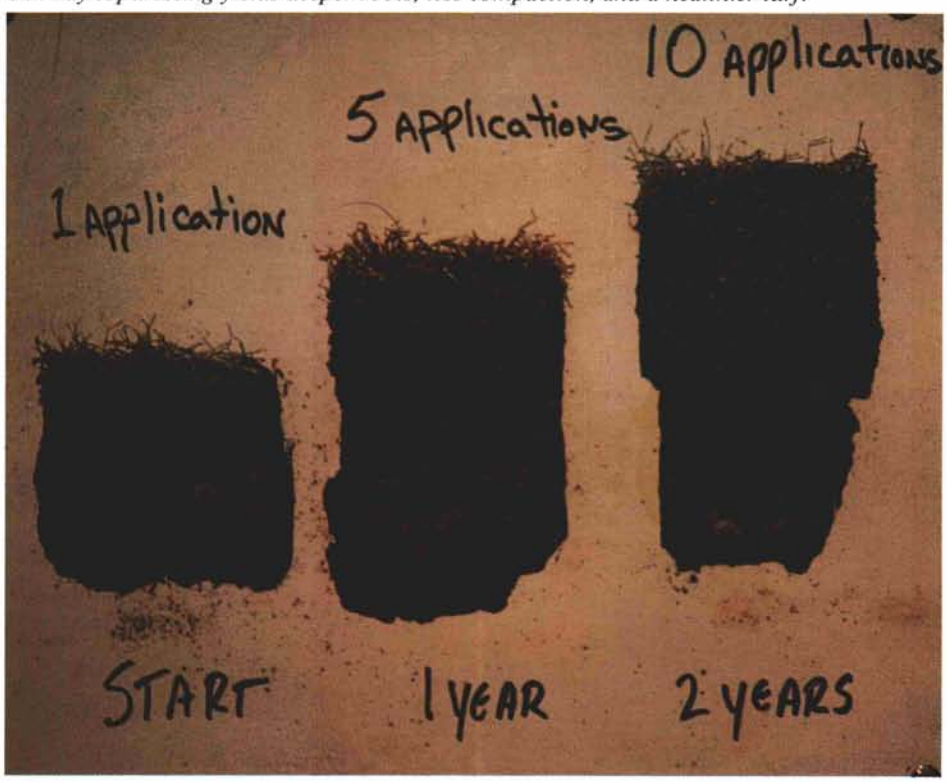
Finally, applications of large amounts of sand will dull fairway mowing units. It is important to have an additional set of "rock crushers" available for mowing fairways after each topdressing application until the sand has been moved off the surface of the turf.

Learning from Experience

Applying large amounts of topdressing sand to fairways is a viable method for counteracting problems with poor soils and poor drainage in the Pacific Northwest. It is natural to be apprehensive about a program with which you are not familiar and which is costly if large areas are involved, but consider the following success stories.

Longview, Washington — The Mint Valley Golf Course has had to cope with a problem of monumental proportions for many years. During most of the year, the water table is very near the play-

Fairway topdressing yields deeper roots, less compaction, and a healthier turf.



ing surface. Superintendent Dave MacDonald decided in 1985 to address this issue with a fairway topdressing program. Since then, approximately 2 inches of sand has been applied on one fairway, and lesser amounts on several other fairways. Remarkable improvements have been noted. Areas which had been completely unplayable during the winter are back to playability. The fairways are now much drier and firmer than the roughs, and tire marking has been reduced. Although small areas of standing water still occur, these are being systematically eliminated with subsurface drain lines. Budget considerations do not allow for the expansion of this program, but the Mint Valley Golf Course is well on its way to providing the local citizenry extended and improved play.

Victoria, British Columbia — Victoria Golf Club is one of the oldest courses in the West. For years, several low-lying fairways were virtually unplayable during the winter. Beginning in 1984, superintendent Alex Kazai started topdressing a 10,000-square-foot landing zone on one fairway. By putting down ¼ inch per application, a total of 1½ inches of accumulated material in this area resulted in improved smoothness and better turf growth. After this success, a far more extensive program was started a year later. From April through September, weekly applications of slightly less than ¼ inch of topdressing material were made. Approximately 2 inches of sand was applied per year, and the program was completed in 1988. This 6-inch layer of topdressing has turned three wet and often unplayable fairways into year-round quality fairways. Subsurface drainage is still needed in some areas, but the membership is pleased. These same results could have been achieved through reconstruction, but the cost would have been 8 to 10 times higher, and construction would have taken these holes out of play for a period of time.

Medina, Washington — The Overlake Country Club justifiably carried the nickname "Underlake Country Club" for many years. Miles of drainage tile had been installed, yet the golf course suffered from consistently wet conditions in the fall, winter, and spring. Superintendent Gary Sayre had a plan to topdress all of the par-4 and par-5 fairways over a 3-year period. Applications were begun in 1987 at a rate of about ¼ inch per application, and as of the end of 1989, 4 to 5 inches of topdressing has been applied. Improvements noted were better mowing under wet conditions, greater turf density, more consistent utilization of irrigation water, fewer weeds, and improved winter playing conditions. In short, another success story!

Summary

Is fairway topdressing right for your golf course? In many cases, the answer is probably yes! If your membership has the patience required to undergo three or four years of sand applications, the results will be worth the inconvenience. Consider, too, that fairway topdressing is being successfully used on many fairways that don't necessarily suffer from the extreme problems described.

One point is certain. Fairway topdressing is a program that is rapidly gaining acceptance. As you contemplate improvements to your course, consider dressing up your fairways for the 1990s.

Basic subsurface drainage tile installation is still the most important means of removing excess moisture.

The topdressing sand disperses quickly into the turf canopy after two days.