Topdressing tips

BY SCOTT KINKEAD

Topdressing, done correctly, can provide many benefits that help sports turf managers maintain a healthy, safe and highly playable field. Some of the benefits are controlling the thatch build-up, leveling playing fields, and changing the soil composition to create a better growing medium that is less prone to compaction. Of course topdressing is most effective when it is integrated with other maintenance practices.

Like any maintenance practice, a topdressing program requires planning and preparation before getting started to ensure that things are done right. Forty years of experience designing topdressers and working with turf professionals on topdressing programs has taught us the importance of doing the proper planning up front. Once you start a program, you want to be able to stick with it. Infrequent applications with differing material can cause more problems with your turf. The following are some of the factors to consider when selecting topdressing material and topdressing equipment that will help you meet your particular needs.

Choosing material. The best topdressing mix may not consist of the same material that is on your field, e.g., if your field soil drains poorly and compacts easily, it makes sense to avoid using the same soil in your topdressing mix. The first and best option should be to consult with a local agronomist or a university soil testing facility to explore the different types of material available and determine which type makes sense for your field and your goals. Materials can range from 100 percent silica sand to a 70/30 mixture of sand and peat, but usually consists of high sand quantities.

A topdressing program should include consistent, routine application and a consistent mixture of material to avoid layering. Particles should be screened and typically 60-75 percent should be between .25 to .75 millimeters in size; coarser sand that measures .1mm or more should be kept to a minimum because mowers can pick up larger particles. Extremely fine sand should be kept to a minimum, as well.
Applying the proper rate. Topdressing applications can range from 1/32-inch for thatch control to 1/4 after aerification for leveling and changing the growing medium. Most sports fields will focus more on the heavier application two to three times a year after aerification.

Amount of material. The size of the turf area and the thickness of application will help you determine the amount of material needed.

Equipment options. Topdressing equipment should have features that can apply topdressing with control, uniformity, accuracy and reliability. The less uniform and consistent the spread the more man-hours spent overlapping and dragging in the material. The less accurate and consistent the application, the less benefits you will experience from the program.

The two different types of top dressers are a broadcast spreader and traditional drop spreaders. Drop spreaders generally use a hopper, a belt and a brush to deliver the topdressing and tend to be better at consistent heavier applications. Broadcast spreaders use spinners to deliver the topdressing and tend to be better for frequent lighter applications.

One of the important features is the ability to handle material regardless of composition or moisture content. Material with higher peat content can tend to be wetter and more difficult to spread. Chevron, or patterned belt technology with a brush, for example, allows topdressers to handle materials consistently and apply materials evenly, which results in a more efficient application. This also allows applying calcine clay to infield fields.

There are also hydraulic driven topdressing units and ground driven topdressers. Ground driven units can guarantee consistent applications regardless of speed changes. It is important to keep units that are hydraulically driven at consistent speeds as slowing your speed will thicken the spread and increasing your speed will lighten the spread.

The most important part in choosing equipment is testing the machine out before purchasing it. If a manufacturer says they can spread wet material consistently, then have them demonstrate this. Don’t make your program fit the machine; the machine should fit your program.

Capacity. A larger hopper capacity topdresser means less downtime in having to load the hopper, so typically the larger the fields or greater number of fields, the bigger the top dresser should be.

Towing equipment. The smaller top dressing units can be connected to most standard utility vehicles or towed by a small tractor. Units with 4-cubic yard hoppers require much larger tractors. Always check the weight fully loaded with sand to the capacity of your towing vehicle.

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