

Dressing your field

Q: *When, if ever should 419 be topdressed? What type of material should be used? When should we do it? It is a very nice athletic field we are working on but it has some low and high spots that we would like to smooth out to prevent turned ankles. I have a concern over material cost. Note that we just aerated a few weeks ago (July).*

— via e-mail



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Tifway bermudagrass (sometimes called 419 or Tifway 419) is commonly topdressed for three reasons: thatch control, to promote lateral growth, and to smooth out uneven surfaces. It sounds like your primary reason is to smooth out uneven surfaces.

How often a field is topdressed may depend on why you are topdressing and severity of the situation. For routine topdressing for thatch control, once to twice a year is fairly common. Since Tifway is such a robust growing grass in the spring and summer, it can be topdressed fairly heavily (up to 0.25 inches per application) without negative consequences. This is how some turf managers get away with only one topdressing a year. Nevertheless, light frequent topdressing applications are preferred to less frequent, heavier ones.

Some golf course superintendents have started topdressing their low-cut greens very lightly weekly, a practice some call "dusting." This would be an extreme practice and unnecessary for a sports turf field. After topdressing, use a pull behind steel dragmat, cocoa fiber mat, or brushes to incorporate the topdressing material into the turfgrass.

When filling really low areas a manager may want to put a pretty thick depth of sand topdressing (up to half an inch). The bermudagrass will grow through if it is healthy and actively growing. Applying this thick a layer should only be done when the grass is healthy and being maintained at a mowing height of at least 0.75 inches. It is always better to make multiple applications over time rather than burying the turf.

When promoting lateral growth (e.g., trying to get it to grow across weak areas) it is helpful to apply the topdressing over a relatively short period of time. I suggest lightly topdressing several times a month or until the area has filled from lateral growth. This not only promotes shoot and root growth at the stem nodes, it also reduces algae formation on the soil surface. Also, if the weak areas are localized, you may even want to apply the topdressing in specific areas of need rather than over the entire field.

The type of material used for topdressing should be physically and chemically very similar to the existing soil unless

the intent is to modify the soil profile. Some type of sand is probably the most commonly used material for topdressing. Due to the larger particle size of sand, it is generally more resistant to compaction and has a higher rate of permeability than most native soils.

Since not all sands are alike, it is important to get some information from your sand supplier before purchasing. You will want to know particle size percentages. Gravel is of course not wanted on an athletic field surface, and too much coarse sand can result in an unstable, droughty field. And "building" sand or "concrete sand" is usually considered too fine for most topdressing applications. I would also suggest you ask about make-up of the sand. Some topdressing sands may have excess calcium carbonate. This could be a positive or negative depending on your current soil status.

Topdress when the grass is actively growing. For bermudagrass that is usually between April and September in most bermudagrass growing areas. Often topdressing is done in combination with core aerification, vertical mowing, and fertilization. Some turf managers will also lightly topdress in the fall after overseeding with perennial ryegrass.

To cover 1,000 square feet of turf with 0.125 inches it will take about 0.4 cubic yards of material. For a 2-acre field that is about 35 cubic yards. The largest common dump trucks (truck and trailer) have a capacity around 20-22 cubic yards. So if you are spreading the topdressing over the entire surface, this is a lot of material. And unless you live next to a sand pit, the shipping cost is likely to be more than the sand cost. So I understand your concern over the expense of topdressing.

Since a lot of moderate use fields do not build up appreciable organic material because of all the wear and tear of cleats, topdressing to control thatch may not be necessary. Even you said that your main reason for topdressing is to level the surface. You also indicated you have an aerification program (which may reduce thatch in addition to reducing compaction). So, my suggestion for leveling is to consider a heavy core aerification followed by judicious use of a 1 to 1.5 ton roller (dual drum). These can normally be rented from major rental outlets.

Some field managers are afraid of putting rollers on their field, but I think we probably do not use them enough. Like any other practice, there are times when using a roller is smart decision and times when it can be very foolish. Rolling has to be used in combination with core aerification. Too much rolling, especially when your field is wet or the roller is oversized, can lead to severe compaction. So, choose your rolling equipment carefully, monitor the results, and do not stop aerification. ■