Topdressing a baseball field

By Henry T. Wilkinson

Topdressing describes the application of a structural material to the top layer of turf. A structural material is one that is not solubilized rapidly in water; examples are soil conditioners, sand, and soil. Fertilizers and pesticides are examples of non-structural materials that are also applied to the top of turf. Topdressings benefit your field several ways:

1. Improve the quality of the turf surface. Topdressings fill the voids or uneven spots in a field, thus making it more uniform. Balls will roll true, and athletes will run more efficiently.

2. Protect the turf crowns. When balls hit them or feet tear and stomp them, turf crowns are weakened or killed; when the crown is damaged, the turf will thin and then die. Topdressing will surround the crowns and give them some protection from damage.

3. Improve the soil’s porosity and reduce the organic thatch. Thatch requires an abundance of soil pores for growth. These pores should be big enough to allow roots, water, and air movement. As turf grows, it forms a large amount of organic matter that supports the crowns and the upper part of the roots. The dead organic matter (thatch) is most beneficial for baseball if it is about 5/8 in. If the organic matter is thinner than that, the turf will be hard and jolting to the athletes’ feet. If it is thicker than this, it will start to impede water and fertilizer movement through the turf root zone, resulting in wet, shallow roots. The rate at which thatch forms depends on both the variety of grass used and turf growth speed.

Topdressing the turf will incorporate structural materials into the thatch. This will improve the rate of thatch degradation and maintain better soil porosity.

Do I need to use topdressing?
Most baseball fields can be improved by topdressing. Both the skinned area and the turf areas will benefit. To keep the skinned area in the best possible condition you will need to topdress. The skinned area of a baseball field is often built using heavy-textured clay, and then a soil clay amendment is worked into the top few inches to achieve a desired surface. It is difficult to give specific recommendations for adding more ceramic conditioner to a skinned area, because each field is managed for the preferences of the home team. The surface of a skinned area should be almost 100% soil clay amendment. Your choice will depend on what the team and you want.

The benefits of topdressing include:

1. Improved quality of the playing surface. The surface of a base should be almost 100% soil clay amendment. Your choice will depend on what the team and you want. How often your field should be topdressed is a decision that you must make based on the manageability of the field. When you are struggling to keep the skinned area smooth or supple for the movement of either the athlete or the ball, you will probably add 2-4 bags each time you topdress, and you will need to topdress about once or twice a month.

2. Protecting the turf crowns. When balls hit them or feet tear and stomp them, turf crowns are weakened or killed. When the crown is damaged, the turf will thin and then die. Topdressing will surround the crowns and give them some protection from damage.

3. Improving the soil’s porosity and reducing the organic thatch. Thatch requires an abundance of soil pores for growth. These pores should be big enough to allow roots, water, and air movement. As turf grows, it forms a large amount of organic matter that supports the crowns and the upper part of the roots. The dead organic matter (thatch) is most beneficial for baseball if it is about 5/8 in. If the organic matter is thinner than that, the turf will be hard and crack. You must add water to the skinned area to achieve a great playing surface. The only way to know how much and how often to water a skinned area is to practice.

Topdressing baseball turf can help your turf and produce a great playing surface. You will want to review the information on how to use products for constructing a baseball root zone. Topdressing with any calcined clay can lead to problems if you do it improperly.

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When you apply the soil amendment, make sure you not only spread it out to maintain a uniform surface, but take it into the top inch of the soil. You want to achieve a gradient of clay and soil amendment in your skinned area. This will help you manage the water you add to the skinned area to achieve the desired playing surface.

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How much topdressing should be applied?
For a single application of topdressing, add enough to achieve a layer 1/8-in. thick or less. Never add more than a 1/8-in. layer of any structural topdressing per single application.

How often should a field be topdressed?
This depends on many factors, including how much play the field gets, how fast the grass is growing, and the type of grass you have. In general, an aggressive topdressing program would include applications once per month while the grass is growing. Further, a topdressing program will achieve the greatest benefits when done for the life of the field. However, even one application per season will provide some benefits.

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