

Vertical mowing: unsung hero of sportsturf management

By Andrew Hoiberg

When maintaining a high use, high quality sports turf field, there are many things to consider to keep your field in tip-top shape. While it would take many articles to cover all those topics, one that is often overlooked because of its mysterious nature is vertical mowing, or as it's more commonly known, verticutting. Our neighbors to the south that deal with bermudagrass are, I would assume, quite familiar with it already, but its use in the northern climates on ryegrass and bluegrass seems to be fairly limited.

Why verticut?

There are many reasons to verticut; let's start with thatch removal. Depending on how often you renovate your fields, you may be experiencing a large buildup of thatch. While aerification is a good way to help this problem, you really can't stop there. Verticutting needs to enter the picture to get a closer spaced, more widespread removal of thatch. And of course a vacuum is necessary to permanently remove the upturned thatch. This will help ensure that nutrients aren't being filtered out in the thatch layer before they get a chance to enter the soil and eventually the roots of your grass plants.

Also, with a large or even medium buildup of thatch, athletes will often complain of a "spongy" feel to the grass that is undesirable to a sports turf manager. This can cause joint fatigue and a "slow" feel to your field.

Next, there is plant density to consider. Most people assume that a dense canopy is a good field. While this can be true, a field that is too dense can create an unwanted level of surface gunk or, for lack of a better term, rubbish, on the soil. I assume this is due to a greater



concentration of microbial activity, but science hasn't backed me up on this one quite yet. The bottom line is the soil never gets a chance to dry out and provide the best possible footing for athletes.

I have seen firsthand the effect this can have on a game and it's not pretty. As a sports turf manager, I hate to see people wearing cleats slipping unnecessarily on my field. These unnecessary slips shouldn't happen and once regular verticutting enters the picture, you will stop seeing it as a problem. And you better keep on it once you start because verticutting stimulates shoot density and rhizomes as well, so you may, a few weeks down the road, end up with thicker grass than you had to begin with. Divotting may even be less widespread with a smaller density of plants to allow a divot to pull from.

The channels that verticutting creates also allow moisture and oxygen to penetrate the soil. The spacing and depth of the channels can easily be adjusted with spacers and depth setters that come on most verticutter models. We generally use a 1 and 1/4-inch spacing with a 1/2 inch to 5/8 inch depth. Some turf managers have a problem with a black layer or a crusted-over soil and verticutting definitely helps break this up and allow normal conditions to return to the soil. These channels can also serve as fantastic seedbeds. A shallow verticutting followed by seeding and a heavy roll can bring great results.

Some people may be concerned that verticutting takes a long time to do and with small crews, there won't be enough time to do it. This couldn't be further from the truth; a 2-acre area can be verticut in an hour. Followed by an hour of vacuuming, the process comes in at less than half a day's work.

Quite honestly, I don't know how we would combat some of our most common problems without a verticutter. It truly is an unsung hero on our crew (we just run it!).

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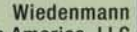


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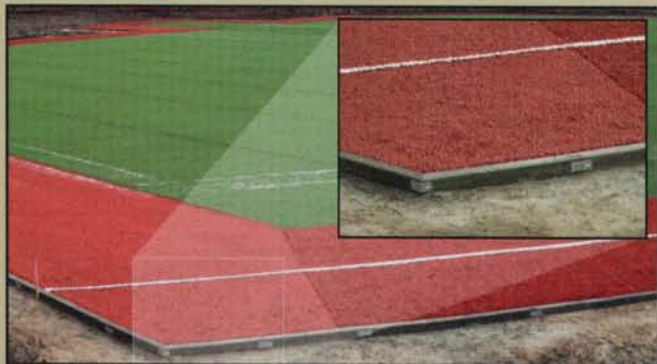
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