Verticutting 101

**Why**
Verticutting is for thatch control and/or to prepare turf for overseeding. Thatch is an organic layer that develops between the soil surface and the turf canopy, mostly made up of non-decomposed stems. It indicates an imbalance in the turf management system simply because the soil microbial population cannot degrade the stems fast enough. Thatch is a haven for insects and fungal spores that can become problems during times of stress to turf.

**How**
Blades cut vertically into the turf canopy and sever lateral stems, thin grass and thatch. The tearing action can disrupt the playing surface similarly to core aeration. Thatch must be removed by raking blowing or sweeping. Leaving it on the turf will just add to the thatch layer.

Apply sufficient amounts of fertilizer and water after verticutting to promote rapid turf recovery.

You want to take advantage of the grass’s recuperative potential.

**When**
Examine your thatch layer by removing a core; if it’s definitely deeper than one-half inch, consider it time to dethatch. Do not however verticut before expected environmental stress. Warm-season turf the best time is late spring/early summer; when the turf-grass is actively growing; for cool-season spring is the best time and again late summer/early fall. You want to take advantage of the grass’s recuperative potential. Consider verticutting 1x per “growing” season.

**What**
Heavy thatch producers include bermudagrass (after verticutting Bermuda, take the many live stems and use as part of some planting material), zoysia, and Kentucky bluegrass. An aggressive fertilization/use of N and irrigation program makes this situation worse. Perennial ryegrass and tall fescue produce less thatch.

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**NewRider 5000™ HPA**
The NewRider 5000 HPA from Newstripe is the first true ride-on airless striping machine for marking athletic fields. Featuring front wheel drive with rear steering, it can quickly spray straighter, brighter looking lines on multiple fields with the 50-gal. tank. Save money by adjusting the 0-3000 psi pump to spray ‘just the turf’ and ‘not the dirt’ with any paint. Clogged spray tips and paint lines are a thing of the past with the 2.5-gal. on-board purge tank. The NewRider 5000 HPA also features a hydrostatic drive with 14hp Subaru OHC engine, electric start and removable gun with 25’ hose for stencil work.

**SafeMark field layout system**
Newstripe’s SafeMark field layout system is the safest way to layout any athletic field, and eliminates measuring year after year. There are no holes to catch cleats or plugs to trip over. The SafeMark high density foam locators can’t rust or be destroyed by aerators, mowers or vehicles. The UV protected foam matches the texture and feel of natural turf. They are so safe they can even be installed within the field of play. Tripping and injuries from falls are greatly reduced as there are no exposed plugs, holes or hard materials that cleats can skid on. Once installed with the supplied auger, the 2.5” diameter markers make locating key field layout points a snap.

**Verti-Cut 1200**
The Verti-Cut 1200 is a machine that will dethatch and penetrate even in hard ground using the standard carbide tipped blades. It is the ultimate root zone management tool for all surfaces and can work at depths from 0 – 2” at high working speeds. Unlike some verticutters, the Verti-Cut 1200 can be used behind utility vehicles, small tractors and most other prime movers, due to it being offered with a standard PTO drive or as a self contained machine that is powered with an 18-hp Briggs and Stratton engine.

**ProCore SR series**
Reduce soil compaction for healthier turf. The Toro Company’s ProCore SR Series deep-tine aerators offer a variety of solutions to alleviate subsurface soil compaction on greens, fairways, sports fields, parks and many other areas. These durable and time-tested products are capable of withstanding the most extreme aeration conditions. The ProCore SR Series will get the job done!

**New Turfco aerator**
The TurnAer XTS uses Turfco’s patented steerable aeration technology with a new variable-speed and reversible hydrostatic drive system. The result is an aerator that’s 50% more productive than traditional aerators. Operators can steer and reverse with tines in the ground eliminating need to stop, lift and turn with each pass, reducing fatigue, cutting job time and increasing productivity. A well-balanced machine, the XTS places weight directly over the tines for better penetration. EasyChange tines reduce changeover time. A removable tine cover provides fast, easy access for changes and cleaning. Sealed, self-aligning tine shaft bearings keep maintenance to a minimum.

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Tools & Equipment | Products
Aercore 1500 & 2000
With an 80-inch coring swath the John Deere Aercore 2000 (1500 model is 57.5") is designed to produce good quality coring holes up to 4 inches deep, can cover 100,066 square feet per hour. Its heavy-duty frame, tine rams and adjustable hole spacing, makes this aerator durable and versatile. Operators have a choice of two coring patterns – a 2.4-inch pattern or a 3.2-inch pattern, depending on the speed of movement. Flexi-link supporting arm keeps tines perpendicular to the ground longer for high-quality holes. Fiberglass reinforced belts for quiet operation, simple maintenance. Produces up to 1,200,800 holes per hour. Six tine options to choose from.

John Deere

Verticutters
STEC Equipment offers the VCU series of verticutters from TRILO. The VCU range consists of three working widths, 48", 60" and 80." They all feature a chain drive, allowing you to perform a light verticut or a deep dethatching. In addition to the standard 3-point linkage, there is an ALL NEW tow behind kit available, featuring a drawbar, hydraulically operated lift wheels and wide angle PTO shaft. All models are fitted with an anti-scalp roller, and feature a 2 year warranty.

STEC Equipment

Wiedenmann’s Super 500
The Super 500 high dump is a heavy-duty sweeper/verticutter/flail mower collection system by Wiedenmann. The optional multi-purpose sweeper head allows for verticutting and flail mowing while collecting clippings into a 3.5 cubic yard hopper with a high dump reach up to 83". Verticut spacing ranges from ¾", 1 ½", or 2 ¼". Options include a golf course kit and floating axles for following undulated surfaces and to avoid scalping.

Wiedenmann North America
Using a web-based weather service

Editor’s note: Don Leick is a senior product manager for Telvent and is responsible for all aspects of WeatherSentry.

Lightning strikes, damaging gusts of wind, players suffering heat strokes … out on the turf, you have probably seen it all. Severe weather is a force to be reckoned with and not one to leave to chance; today’s sophisticated weather technology can help ensure the safety of your venue and the execution of your operations.

This is why thousands of high schools and colleges rely on the same level of weather service used by professional sports organizations. To monitor severe weather events, they use MxVision Weather Sentry Sports Edition, a web-based weather service that provides subscribers forecasting data. The user defines parameters at set up and then with a few clicks the system delivers color-coded instant go/no go decision recommendations during extreme weather events, which might eliminate having to second-guess the severity and scope of an approaching storm. The system also sends instant alerts both to computers and mobile devices when dangerous weather patterns occur within a previously defined parameter.

Like most high schools in Texas, Northwest High School’s operations are heavily impacted by lightning, severe storms, tornadoes and strong winds. With 3,200 students – 1,200 of which are involved in outdoor activities – the school needed a weather information system that would provide critical alerts for all of its locations. So the school subscribed to MxVision Weather Sentry including Lightning Manager, which offers reliable advanced warnings by using real-time lightning data; there is no delayed reporting.

The system proved its value a week after being implemented. Scott Fletcher, the school’s head athletic trainer, received a mobile alert on his cell phone for lightning approaching their location. Both the freshman football team and the high school band were called to safety. “Less than 5 minutes after we had everyone inside and safe, our band director witnessed a lightning bolt hit the parking lot where the band was practicing. In light of this event, we already consider the system as having paid for itself, as it prevented injury to our 150 band members.”

A new iPhone application sends alerts and displays current conditions based on your GPS position when travelling and during away games. For example, athletic trainers can receive instant alerts via text message if their team is in the path of a storm, leaving no one to wonder if a severe weather alert heard on radio applies to their specific location on the road. Of course, staying on top of changing weather conditions also informs turf maintenance decisions. Penn State University has more than 100 acres of outdoor fields requiring regular maintenance. Accurate forecasts for this specific location help assistant field supervisor Herb Combs better manage staffing and maintenance activities. On windy days, he reschedules chemical applications and when rain is approaching, fertilizer applications and field line painting are cancelled, all without having to worry about accruing unnecessary delay due to vague or inaccurate forecasts.

Besides safety and turf maintenance, MxVision Weather Sentry can be a useful tool in helping to prevent heat strokes, as schools can set alerts for heat indexes according to their heat policy. Even when the outdoor sports season is over, the system continues to be indispensable: School administrators use it to make better decisions about declaring snow days or evacuating the building complex due to approaching severe weather.

While the website features a recently redesigned, easy-to-use interface and unique visualization, subscribers also have around-the-clock online access to a team of 50 meteorologists. “We typed in our question regarding a major lightning storm, and within 15 minutes we had an answer, letting us know what’s going on,” explained Todd Kiefer, licensed athletic trainer for the Red Oak Independent School District in Texas. “This confirmation helps us with our decision-making process.”

Don Leick has more than 25 years experience in software and technology companies.
Thatch Master

TurfTime Equipment promotes healthy turf, year round, with its Advantage Aerator and the Thatch Master dethatcher/verticutter. The new Thatch Master seven point blade provides a crisp, quick healing cut, with blade spacing adjustable by 1/4" increments. Frequent aeration with the Advantage Aerator eases compaction between seasonal deep tine or coring treatments. "Revolution" tines give more than 7” ground penetration with less surface tufting than other tines. Water weighted tanks, standard on all models adjust for soil conditions. Our range of large and small models fit your aeration needs where ever you want to grow healthy turf.

Turf Time Equipment

TURFSAW aerator

Earth & Turf Products’ TURFSAW is a rolling aerator that attaches buckets of tractor loaders by sliding onto a bucket and tightening mounting bolts. The weight and down pressure of the loader are used to furnish most of the working weight. About 200 pounds comes from the aerator and an additional several hundred pounds or more comes from the bucket. Solid blades are adjustable from 2.5 inches to 3.75". An additional benefit appealing to turf professionals: Spiker aerators produce lateral compaction, corer aerators produce bottom-of-stroke compaction, but the TURFSAW has a shattering action that produces little or no compaction.

Earth & Turf

Parker dethatcher

Parker offers durable Thatch-O-Matic Power Rakes to dig out heavy thatch. With a 19-inch sweeping width and a 6hp 170cc Subaru® engine, the power rake can be used for dethatching and re-seeding. Housed in 12-gauge steel, the Power Rakes come with optional tine, flail or knife reels ideal for commercial and rental applications. An 11-position height of cut moves in one-fourth inch increments from 1-4" with a locking collar. The rakes have a manually-operated clutch lever and an adjustable height handle with a vibration absorbing comfort grip.

Parker Sweeper

Turf Teq broom-dethatching kit

Turf Teq offers a de-thatching kit for the 1305BR Power Broom, a 46-inch wide brush. Easily adjustable brush pressure, brush depth and brush angle allow the operator to match turf conditions while windrowing the thatch for quick clean up. These features also make the Power Broom ideal for striping turf, spring clean up in lawns and installing "in-filled" synthetic turf. Multiple brush heights make our Power Broom the perfect tool for installing and maintaining your synthetic turf. The multi use capability or our tractor allows the unit to be converted into a Power Edger, Power Rake or Brush Cutter.

Turfteq

For more information on any of these products, please visit www.greenmediaonline.com/productportal