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On the cover: Vince Henderson, who might be the only turf manager in the country with a BA in economics, is responsible for maintaining 88 irrigated athletic fields, seven clay tennis courts, and 23 lawn and landscape areas for Henrico County in Virginia. The former golf course superintendent led his team to the STMA's 2010 School/Parks Baseball Field of the Year Award.



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From the Sidelines



Eric Schroder
Editor

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Mini-helicopter & camera produce unique photos

ATHLETIC DEPARTMENT MANAGERS and other administrators and turf managers are now able to obtain images that showcase their fields without relying on planes or standing on the top row of bleachers. Traditional aerial shots are usually taken from 1000 feet above the ground.

A company called Aerial Pros uses a small helicopter equipped with a camera that hovers around 100-200 feet above the ground, which makes for good angles for photos.

Managing partner of Aerial Pros, Anthony Salerno, says the results can be instant. "Our clients can be present during photo sessions and can 'direct' our pilot's maneuvers to best showcase the particular angle or view that is desired," he says. "A video downlink provides live images via an LCD screen during the photo shoot. Following the shoot, we provide our customers with a set of edited photographs or video to meet their particular needs. Photos can be cropped and digitally enhanced to improve the final result. This allows us to be very creative with their images.

"Our company is completely mobile and can be driven by van or shipped anywhere in the U.S. Our concentration has been in the Northeast but we are able to service the West Coast as well."



WEST POINT has restricted airspace, lots of red tape to get permission to fly the helicopter there.

Salerno operates the remote-controlled helicopter and a professional photographer takes the photos.

"This customized set up allows us to maneuver into any position and hover as long as necessary to take pictures from all angles," Salerno says. "Our specialty is low altitude, close-in photography and video that cannot be obtained from full size aircraft."

The cost of remote controlled aerial photography varies on each job based on the complexity and scope of the photo shoot. Free quotes are available. See www.aerial-pros.com.

The idea for Aerial Pros was formulated in 2009, born out a successful sports contractor's desire to produce high quality aerial photographs of their finished projects. Frustrated for years by the difficulties encountered when using full-size aircraft and concerned with dangers involved when using man lifts and bucket trucks, the firm searched for a better solution, Salerno says. The answer was found by combining a remote controlled helicopter with a remote controlled high resolution digital camera.

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The benefits of Board service

I AM VERY PLEASED TO REPORT that STMA's regional conference, being held later this month, is shaping up to be a tremendous experience for attendees and exhibitors. If you are able to get to Knoxville, TN I highly encourage that you spend July 15-16 at the Southeast Regional Conference. STMA has lined up 16 speakers, of which six are Ph.D.s. There are excellent facility tours at the University of Tennessee, including all of the major sports venues, and the new Center for Athletic Field Safety. The conference also has concurrent classroom education. Our exhibition has been sold out since the beginning of May, and for the first time at STMA's regional events, some exhibitors are providing field demonstrations of their products. This event is being supported by our host chapter, the Tennessee Valley STMA, and the Georgia, North and South Carolina, Virginia and Kentucky chapters. It will be an excellent networking event, too, and non-STMA members will receive a free chapter membership.

A major effort of your association, and of my job as president, involves the governance of STMA. Much governance is behind-the-scenes and affects processes. One area, however, directly requires your engagement: the annual election of your Board of Directors. Although we send out our ballots in late November, your Nominating Committee is working now to identify qualified candidates for board service. I encourage you to consider board service, or if you know of a chapter member who would be a great board member, persuade them to submit the Board Service Interest Form. That form is in this issue on page 42 and on STMA's website, at www.STMA.org.

I am often asked about the time commitment from those considering service. It is very reasonable. We ask our Board members to attend four board meetings per year (one is at the annual conference). These meetings are usually at an upcoming conference venue, or a location being considered for a future conference. Typically, the board meetings are on a weekend so that time away during the week is very minimal. STMA covers the expenses to attend these meetings. I also ask each board member to chair a committee. Committee chairs work with our staff to set up conference calls or meetings, craft agendas and keep the committee on task. Our committee work flows from the strategic plan initiatives.

STMA has a board handbook that provides more information on expectations and service requirements. If you are considering service and would like to review this handbook, please contact our CEO Kim Heck at 800-323-3875. Our officers do commit more time, but from my perspective, I have received so much more than the service I have given. I have made life-long friendships, become a better listener, have a much broader view of our industry, and gained leadership skills. All of this benefits me personally and professionally. I hope you will consider board service at some point in your career.



>> **Figure 1. ROOTING BOXES** were installed on the day of sod installation.

Alternative sod installation timing to extend the growing season in the Northeast

THE NEED FOR TURFGRASS ESTABLISHMENT can come in many forms; new construction, a playing surface conversion, upgrading to newer cultivars, intense athletic field use, etc. However, the options and opportunities for establishing cool-season turfgrasses on athletic fields are limited. The very short amount of time that is available to prepare a traffic tolerant turfgrass stand before field use, particularly fields that supports spring, summer, and fall sports, can be extremely challenging. Additionally, given the popularity of fall

and spring sports, time periods considered optimal for establishing our cool-season friends are also typically periods of peak field use.

Establishment of athletic fields in the Northeast United States is further complicated by the slow germination and

development of Kentucky bluegrass. Therefore, many fields are established using sod. Sod provides instantaneous turfgrass cover and minimal weed competition, but obtaining sufficient root development prior to field use is a problem which can result in excessive divoting and

poor playing surface quality, such as poor traction and an uneven playing surface.

ONLY CHOICE SPRING?

Depending on the sport that is played, athletic fields in the Northeast United States are typically used until late Novem-

Late fall installed sod produced similar or higher rooting strength in May of the subsequent growing season compared to rooting strength values in August

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The spring tine rake attachment is equipment with 42 tines that comb through the turf surface, lifting fiber and infill, preparing the turf for exposure.



The two 3' x 3' light banks, housing 16 shatterproof bulbs, provide the UVC energy required to kill dangerous MRSA & HIV.



The unit is powered by generator with an intelligent power regulator for efficient electric power. An optional rechargeable battery bank with inverter is also available.

Patents Pending

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>> **Figure 2. A ROOTING BOX** following extraction from a covered December sodded treatment, April 2007.

ber/early December, leaving the spring as the primary turfgrass establishment time of year. Unfortunately, this is also a time when many athletic field managers are pressured to open fields for use by those participating in spring sports. Early season field use and non-optimal environmental conditions of the early summer months can make turfgrass establishment difficult during this critical period. Success of a conventional sod installation and subsequent root development depends heavily on a number of different factors such as environmental conditions, matching the soil texture on the sod to your site, the condition of the sod (i.e., amount of thatch, time from harvest to installation, soil depth uniformity, etc.), soil nutrient levels, soil pH and time.

Time, the factor that's probably the most predictable, but unfortunately often times is the most difficult to control given the amount of scheduled field use. Assuming good environmental conditions, high quality sod, and proper soil fertility, 6-8 weeks from installation to field use would be a desirable, estimated timeframe for sufficient rooting to produce a quality playing surface. However, a timeframe of that magnitude is very difficult to obtain on a field that is traditionally heavily depended upon to support many athletic activities.

The difficulty remains in identifying low/no use time periods for turfgrass establishment. For those in the Northeast, I think many would agree from December through March could be labeled a low/no use time period. Research was initiated in 2005 at the University of Connecticut Plant Science Research and Education Facility to determine if there were any potential benefits or hazards related to late fall sod establishment in the northern region.

The objective of this research was to quantify the effect of sod installation timing on the rooting strength of Kentucky bluegrass. This study looked at four sodding dates (December 2005, May, June, and July 2006) with anticipated field use in early August 2006, simulating a typical field renovation or new construction that may occur. The May 2006 date served as the control, which would be considered a typical spring establishment date. The December 2005 sodding date had a covered treatment and an uncovered treatment. The covered treatment was covered from 2 December 2005

until 6 April 2006 with green Evergreen turfgrass cover (Covermaster, Inc. Rexdale, ON).

Sod was harvested from a local sod farm and then installed on the sandy loam soil at the research site. Sod rooting strength was determined using rooting boxes that were installed beneath the sod (Fig. 1). The peak force required to extract each rooting box was recorded (Fig. 2). Root pulls were conducted monthly to assess root development over time; May, June, July, August 2006. The study was repeated the following year. During the second year of the study, root pulls were conducted in April, May, June, July, and August 2007.



>> **Figure 3. DECEMBER COVERED TREATMENTS** exhibited higher color ratings through the month of April during 2006 and 2007. Note the uncover December sodded treatment located between two covered December treatments, April 2007.

RESULTS

Sod installed in December consistently increased rooting strength over all other sod installation dates indicating a considerable advantage to late fall sod installation for more extensive root development throughout the subsequent growing season. Additionally, during both years of the study late fall installed sod (December covered and uncovered) produced similar or higher rooting strength in May of the subsequent growing season compared to rooting strength values in August. This suggests that athletic fields established in December may be ready for play in May of the next year. Based on the differences produced using the turfgrass covers, between year 1 and year 2, if spring athletic field use is anticipated and/or maximum root development is desired the newly sodded field should be covered from the sod installation date until shoot growth begins in the spring. The turfgrass covers will also ensure better turfgrass color early in the spring (Fig. 3).

This primarily benefits athletic field managers that have intense field use in the fall coupled with spring and early summer athletic field use the next year. The primary increase in rooting strength in the 2006-2007 study occurred from April to May in both the December and December covered treatments (Fig. 4). These data suggest that if spring installation is imperative, establishing sod as early as possible in the growing season is essential to enable the turfgrass to produce the highest possible rooting strength prior to fall athletic field use. In both years the study was conducted, sod rooting