The dark square under the soccer line is actually a rubber mat. The story is not the mat; it is the fact that the mat is hiding a steel storm drain that lies directly down the path of the sideline. The area around the storm drain is also graded very low to allow the storm drain to work properly when rain events occur, causing a second hazard.

When the field is laid out for football, this storm drain is not a hazard, however when the field is lined for soccer, the steel grate of the drain not only runs through the sideline, but a portion of it is also on the playing surface. A rubber mat has been placed on top of the drain to give some added cushion, however the mat is a tripping hazard as well. The improper design on an athletic field like this is not only dangerous, it is a potential liability hazard. Proper consideration for all sports should be considered when designing a sports field because we are in the business of providing safe playing surfaces for our athletes. When schools hire designers or contractors who are not qualified, this type of safety hazard often results.

If you would like to submit a photograph for John Mascaro's Photo Quiz please send it to Turf-Tec International, John Mascaro, 1471 Capital Circle NW, Suite #13, Tallahassee, FL 32303 or email to john@turf-tec.com. If your photograph is selected, you will receive full credit. All photos submitted become property of SportsTurf Magazine.
Distributor’s diary: renovation in New York

By John A. Halloran

Clifton Park (NY) Baseball hosted last year’s Babe Ruth League World Series.
February 6, 2006: Jerry Francis, Eastern New York Commissioner of Babe Ruth Baseball, calls to say that Clifton Park Baseball had been awarded the 13-15 Year Old Babe Ruth World Series to be held August 18-25. Jerry tells me that plans exist to replace sod on their entire infield after their regular season ends in mid-July. I thought this was a bad idea since it would be risky with high temperatures and killer July dew points. Jerry said he would pass the advice along.

June 5: Joe Harris, head groundskeeper at Doubleday Field in Cooperstown, calls to say that he spoke with a Clifton Park coach who had a game there and was admiring the conditions. He asked Joe for some help with their field project for the World Series and he offered that I was the person to talk to.

I followed up with the coach and he said he would pass the information along to Bruce Cramer, president of Clifton Park Baseball. I did not hear anything back from them so I wasn’t sure the message got passed along. Meanwhile I was working on a utility vehicle deal with an old contact that was still involved with Clifton Park.

August 2, 10 AM: Received the call I had been expecting since February. Clifton Park Baseball was having some issues regarding the field rehabilitation and asked if I would meet...
The author's homemade tool that helps in getting a 1-inch drop per foot when completing the front of a new mound.

With high temperatures having been in the nineties and dew points in the mid-seventies I fear the worst for their sod.

I thought it would be a good idea to take a look at conditions before the meeting. The sod was, much to my surprise, in great shape. There was a little unevenness one side, but overall a very good effort. Since my contact had led me to believe I was being called about the turf, not the skinned area, I was beginning to wonder why I was being called!

August 2, 7 PM: Met with Bruce Cramer. I said they did a very nice job on the sod replacement and the only potential issue he may have was bringing more infield material in to seal his new sod edges. Also, the entire infield skin needed to be raised about 2".

Then Bruce showed me some fairly coarse brick chips that he wanted to use for the infield surface. I said everyone would love the way it looked but it would play horribly. The coarseness would create bad hops and tear the kids up when they slid.
I suggested incorporating Soilmaster Select Infield Conditioner into his existing, locally blended infield mix. Also, the pitchers mound would have to be completely re-built. I offered to supply the infield conditioner and mound clay bricks and assist them with the project. (I own a home made tool that helps in getting the one inch drop per foot when completing the front of a new pitcher's mound.)

**August 7:** Confirmed with Bruce Cramer delivery of products and commencement of work for the following evening. Bruce informs me that his son, Bruce Jr., wants my job! An architecture major, Bruce and his father spent time with legendary groundskeeper George Toma in Fort Myers last spring so both are excited about field maintenance. Thank you, Reverend Toma!

**August 8, 8 AM:** Delivered 13 tons of Pro's Choice product, which was moved onto the infield skin by forklift. Ten skids were spaced from first to third. We are using 3/4" plywood to protect the newly installed bluegrass turf sod (from Saratoga Sod Company in Stillwater, NY).

**August 8, 6 PM:** Soilmaster was spaced on infield surface and bags were cut open and emptied by parents and players. Soilmaster was blended into existing local infield mix by using two Toro Infield Pros with Rahn groomers. I had them water the infield skin area heavily. I plan on stopping in the morning to see what it looks like.

I told Bruce Jr. to pick out a stripe pattern for the infield turf that we would stick with for the entire tournament. It was almost like I gave him homework! I told keep it simple but I wanted a decision by tomorrow evening. I plan on leaving a Greensmaster 1600 to use for the entire tournament in order to give a professional look to this new diamond that is shaping up very nicely.

**August 9, 9 AM:** Met with Town of Clifton Park Buildings and Grounds Maintenance Director Mike Handrehan. Mike was impressed by how much we had accomplished the previous night. I also updated Jerry Francis, Eastern New York State Babe Ruth & Cal Ripken Commissioner, on the progress made on the fields at Clifton Park. Jerry was working the Cal Ripken World Series at the Ripken Complex in Aberdeen, MD. Jerry asked if I could e-mail some pictures of the progress we are making so he could show them to the Babe Ruth officials who were with him there.

**August 9, 6 PM:** Installed Pro Mound bricks around home plate with members of the 15-year-old Clifton Park All-Star team. J asked for a four way pitching rubber that I will fill with concrete since I don't like pitching rubbers to move around. I've always done it and had very good luck.

I blended the Soilmaster in the first base line as well as around the home plate area. Both first and third baselines and the home plate area have been made smaller for hand tool maintenance. No infield drag is narrow enough to groom these areas; they were designed intentionally to be maintained by hand tools only.
How many youth league volunteers does it take to start a 3/4-ton walk behind vibratory roller? The correct answer is four! One to rev the truck up that the jumper cables are attached to. One to spray starting fluid into the intake of the engine. One to jump the starter solenoid with a screwdriver and one (me) to tap the starter with a hammer to entice the starter to engage the flywheel! After about 30 minutes we got the roller started and rolling on the infield skin and boy is everyone happy with the results. This field is really starting to shape up very nicely.

**August 10, 6 PM:** An abbreviated work night due to rain. We were able to bring most of the base material for the mound over the plywood protected new sod before it began to rain. I was also able to fill the inside of the pitching rubber with concrete. This will be ready to install Friday evening when I return to assist them. In the mean time they should keep adding base material to the mound area and compact with a tamper.
Bruce Sr. & Jr. and I decided the mound height will be 10 inches though we might start a little bit higher to take settling into consideration. Bruce Jr. is set on mowing the infield turf at 1.25". I told him this would be possible only if we are able to roll the new sod, now one month old, in order to make it smoother. After the tournament we would aerate the sod to alleviate any compaction caused by the roller and play.

When work is completed we will treat his turf with granular wetting agent and use Milorganite organic fertilizer with 4% iron content to give them the color that they are looking for.

**August 11**: We discovered the dimensions of the diamond were off. We had 90'5" home to first and 127'8" to second base. Mysteriously, home to third was a perfect 90 feet! Base anchor movement went better and quicker than expected. Bruce Jr., a few young lads and I were able to set home plate and clay brick the pitchers mound achieving the desired 1" drop per foot with my homemade mound gauge.

Bruce Jr. was unable to mow the straight line in the turf, which we had discussed earlier in the week. I had some fun with that! He hasn’t yet shared his preferred mowing pattern with me.

Most of my work is done at this point. I will return later to apply granular wetting agent and organic fertilizer as soon as the game field is mowed down to 1.25". Not bad, a full 7 days to go before the tournament and the field could be made playable by morning.

**August 13**: Intended to stop, take a few pictures and make a quick getaway. Instead I spent about 4 hours helping to roll the infield turf and foul ground with the vibratory roller. Even though the sod was installed a little more than a month ago I felt a little nervous about rolling the turf but it was a trade off we had to make. It’s the old athletic field dilemma: playability versus turf welfare! The unevenness of the newly installed turf necessitated the rolling.

Bruce Jr. will mow this evening at 1.5" with a rotary mower in two directions and then run a good watering since we started to see a little wilt in the afternoon. He confided in me that he was a little nervous about establishing a pattern and use of the walk behind greensmower overall. It seems as though just like professional sports can look somewhat easy on TV, professional grounds keeping can look easier than it is as well. At least until you try to do it!

**August 14**: Arrived at Clifton Commons to meet Bruce Jr. and establish a stripe pattern with the Greensmaster 1600, at a mowing height of 1.25". Applied Milorganite at the rate of 1 pound of nitrogen per 1,000 square feet. Applied wetting agent at the rate of 3.5 pounds per 1,000 square feet. The wetting agent application was applied just in time as some localized dry spots were starting to form.

**August 15**: Blended some of their local infield mixture with the Soilmaster in some of the areas that needed tightening. We mowed the infield and foul ground areas at 1.25" twice. Painted outfield lines and chalked infield foul lines and batters boxes. At this point there was only one thing to say: "Play Ball!"

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John Halloran is the commercial salesman for golf and grounds accounts in the Capital District Area for Grassland Equipment and Irrigation Corp., Latham, NY. He has been an STMA member for 10 years and has been a long-time volunteer for area youth baseball leagues.
Sod webworms are the larvae of several species of small moths. Cutworms and armyworms are considered to be medium-sized caterpillars, usually reaching 1.5 to 2-inches long and nearly 1/4-inch wide. Sod webworms are rarely more than an inch long and only about 1/8-inch wide. They are also typified by having their bodies covered by rows of squarish-shaped spots on a background of pale cream, tan, or light olive-green.

Sod webworms rarely damage turf since the larvae are primarily leaf and stem eaters, so in higher-cut turf or turf that is rapidly growing, their damage is not visible. However, in non-irrigated, slow growing turf during summer heat and drought stress, sod webworm larvae can substantially thin the turf that is not replenishing its foliage.

Only on the extremely short cut turf of golf course greens and tees or occasionally on bowling greens or turf tennis courts does sod webworm damage become a factor even when the turf is growing well. In these cases, the webworm larvae construct silk-lined burrows into the soil profile from which they extend these tunnels across the surface, just below the mowing level. These tunnels show up as short,
irregular yellow to brown marks on the surface, which are commonly probed by foraging birds. This bird pecking can cause major damage to the playability of the turf surface.

Sod webworms are divided, taxonomically, into two groups, the crambid or cool-season or (true) webworms and pyralid or tropical sod webworms. The adults of the crambid webworms roll their wings around their bodies and the heads possess prominent forward-projecting mouthparts, the palps. The palps look like furry snouts. The rolled wings and palps are used by the adults in a kind of camouflage. When the adults land on a grass stem, they immediately turn head down, press their palps along the grass blade and extend their wings and abdomen outward at a 45-degree angle. This makes them look like a dead grass blade and they can be really difficult to see in tall turf. The tropical webworm adults have shorter snouts and elongate, triangular wings, which are held flat over the body. This gives these adults a sleek, jet airplane shape. The larvae of both webworm groups are nearly identical in shape and form and only an expert can tell them apart.

Cool-season sod webworms are most common in the transition and cool-season turf zones, but they are also found in true warm-season turf. About a dozen species are common turf inhabitants in North America. Some species have only one generation per year while others can have two to three generations each season. The tropical sod webworms can not withstand freezing temperatures, so they are restricted to true warm-season turf zones. Tropical sod webworms can have up to five generations in a season.

**Damage**

As stated before, visible sod webworm damage to most sport turf is relatively rare, especially in irrigated, high-maintenance fields. In non-irrigated fields, moderate to large sod webworm populations can add to thinning of the turf canopy during periods of slow growth, especially during summer heat and/or drought. Fortunately, this won’t kill the turf nor significantly affect its ability to hold up to traffic. The adult moths can sometimes become distracting. As players move across the field, many of these buff-colored moths can fly up, dart away a few feet and land again in the turf. Insect-eating birds often frequent turf infested with moderate larvae. If green pellets are found, the larvae are still feeding and can be controlled. If no frass or other signs of larvae are present, but birds are persistent, try using a soap disclosing solution. Use about two tablespoons of a dishwashing detergent in a bucket containing two gallons of water. Flood an approximate one square yard area of turf with this soap solution and flag the area. Come back in about 20 minutes and look for any of the tiny sod webworm larvae that will have crawled to the tops of grass blades in order to dry out. Joy, Dawn and Ivory detergents generally do not cause turf burn but other detergents may cause turf yellowing or burn-back. If uncertain of a detergent, try it on an inconspicuous area before using it more extensively.

**Management**

In general, sod webworms are rarely controlled in higher cut turfgrasses, but if they are causing thinning of slow growing turf, attracting birds or causing other nuisances, curative con-

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*Dr. David Shetlar, aka “The BugDoc” is an urban landscape entomologist at Ohio State.*

www.sportsturfmanager.org
Toro opens used equipment website

www.toroused.com is a one-stop website for pre-owned Toro turf equipment located at Toro distributors. The site includes off-lease inventory through the Toro Financing program, trade-in equipment and demo equipment.

The website has been designed to be intuitive for the customer and easy to navigate. The customer is in the driver’s seat, choosing the method of search by: product category, local distributor equipment inventory, or national equipment inventory. When looking for a particular piece of equipment, the customer can request a notification. As equipment fitting the request becomes available from inventory, a Toro associate will contact the customer directly.

New ZMaster diesel mowers

New Toro Z Master Z595-D zero-turn riding mowers 25-hp Kubota liquid-cooled diesel engines that burn fuel slower, produce more power from a given amount of fuel, and are less expensive to purchase after taking into account off-road diesel credits. With 12-gal. fuel capacity and 11.2 mph ground speed, these machines can help operators stay in the field and productive all day.

The Toro Company

For information, fill in 054 on reader service form or see http://www.oners.hotims.com/12051-054

Cat skid steer loaders

The new Caterpillar B-Series Skid Steer Loader line offer increased capacity and significantly more power than the previous models that enable the machines to do more work in less time. All four B-Series loaders employ the anti-stall system and pilot hydraulic joystick controls that are easy to operate.

Caterpillar

For information, fill in 055 on reader service form or see http://www.oners.hotims.com/12051-055

New Kubota tractor loader

Kubota has introduced a new B-series Tractor Loader Backhoe (TLB) compact tractor with added horsepower, loader-lifting capacity, and backhoe digging power and depth. Whether the job calls for a tractor with three-point implements, backhoe or loader applications, the B26 can take on all three applications.

Kubota Tractor

For information, fill in 056 on reader service form or see http://www.oners.hotims.com/12051-056

Bobcat’s loader

The Bobcat T190 compact track loader allows you to work more productively in soft ground conditions and minimize ground disturbance. Compact track loaders have greater pushing force and can lift larger loads than skid-steer loaders of the same size. The tracked undercarriage design distributes the weight of the machine over a large area, providing increased flotation and low ground pressure.

Bobcat Company

For information, fill in 065 on reader service form or see http://www.oners.hotims.com/12051-065