

0.2 °C differences are biologically significant. The significance is reflected both in temperature thresholds for certain biochemical

reactions and for degree-day accumulations. It is a good practice to monitor soil temperatures closely and use the information for

irrigation as well as pest control.

To prevent overheating at the surfaces of artificial turfs, either frequent watering or using soil amendments to make the surface less hydrophobic maybe necessary.

In addition to irrigation, selection of soil textures (relative amount of sand, silt, clay, and organic matter) and managing soil structures and thatch levels (aeration, fertilization, topdressing, and mowing) are also useful tools to regulate soil temperatures.

Thermal properties can be tested by a soil physical laboratory for different soil types at different moisture levels. Such test is also useful if soil heating and cooling system is to be installed in the sport fields.

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Making a seeding vs. sodding decision

By Mike Whelehan

t" was in the planning stages for more than 2 years. "It" was greatly needed. "It" was now becoming a reality... quickly. "It" had the full attention of a group of dedicated community members. "It" was being partially funded by an anonymous donor.

"It" would soon become dedicated as



"Nietopski Field" in honor of long time coach and educator Ed Nietopski of suburban Rochester, NY. "It", as we affectionately referred to often, would be the only regulation size baseball field in the ever-expanding Sweden Town Park in Brockport, NY that already included seven Little League size fields, four soccer fields, a disc golf course, and a skate park covering 156 acres of land donated by the Staying informed just got easier



local university.

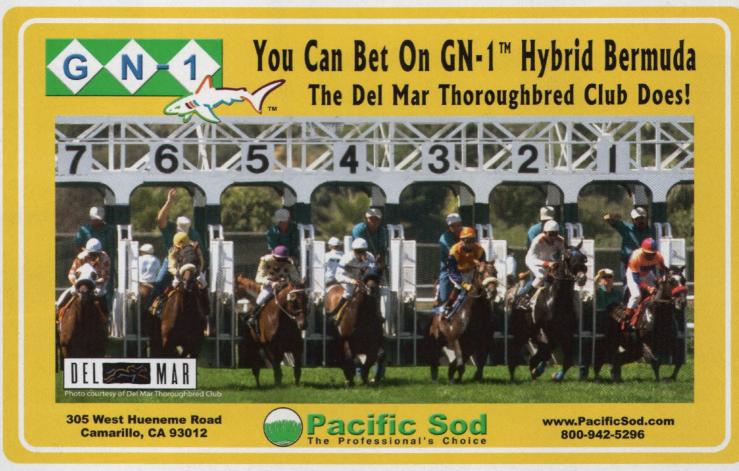
"It" was just about complete when the thoughts by those in charge turned to how could this new field be used in early this spring as per the plan some 2 years prior. With the cold and wet weather moving into this beautiful college town in mid-October Nat Lester, Sweden town supervisor and Jack Milner, chairman of the foundation overseeing the project, were looking for answers to when they could hear the words, "Play Ball!"



By late September, under the guidance of Fred Perrine, town highway superintendent, this 3-acre plot of land had been cleared, the native soil stripped and screened for re-use during the final grade, a "Multi-Flow" drainage system installed by Paul Fox of RM Landscape Inc. and irrigation installed through out the whole field was completed. Yet to be completed was the installation of the mound, setting infield material to proper grade, and the seeding of the native topsoil that would make up the turf portion of the playing field.

With the days becoming cooler in early October, discussion on seeding the field was a top priority as town employees finished up the final grade and the

outline of the infield was finalized. The original specifications called for seeding the field with a blend of Kentucky bluegrass and perennial rye by drilling, covered with paper mulch blown on with a hydro-seeder.



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As the placing of infield material in the skinned portions of the field began, a period of wet weather slowed progress for a number of days. It was eventually completed and showed some strong characteristics of the field so sorely needed but pushing the date into late October. Discussion again turned to a confirmed date to seed the field for the best chance of good germination yet in the fall to make play in May 2008 a reality.

In our part of the country it is best to seed in late spring or early fall. Irrigation was installed and ready to work so getting water to the establishment of the seeded turf should have a 9 to 12 month growin period before any heavy activity took place on the turf. During this grow-in period it was also important to formulate a maintenance schedule allowing for periodic feedings, overseedings, mowing, applications of weed control, and repairs to eroded or settled areas.

Low confidence

While all those options were part of the original plan for the field construction, none of them made the committee members confident



new seeds would not be a problem what ever the season. With the option to seed in late October we determined that we were into a fall date that would allow for minimal or no growth of the new seedlings, with hopes for increased turf establishment once the warm weather took hold in mid-May. If needed a spring overseeding to combat any winter lose would be done when the weather permitted.

Another option was to wait for the first substantial frost and apply a dormant seeding. Lastly, waiting until spring when the soil temperature was more conducive to positive germination was a very good option. It was also pointed out that for the best results of any of these options in the Northeast's limited growing season that the

that the field would be playable in May. As the date moved into late October, installing big roll sod was proposed for the infield and sideline portions of the field. Installing sod would give the infield immediate established turf that would allow for heavy traffic come spring and also eliminate the time-consuming hassle and cost of establishing the seedlings.

With seeding, the expected early high traffic that the infield would endure would only bring destruction and the probability of starting over, prolonging the completion of the project. Sod installation would also help control erosion that would surely develop over the winter season, causing additional maintenance and repair to the field once good weather arrived.

The feeling was that by installing sod we could also control weed problems since the sod was cultivated using high quality certified seed and was under a management program at the growers (CY Farms Inc/Batavia Turf) which eliminates weeds from their sod fields. With seeding, the grow-in period would no doubt go through a session where the weed seed in the soil would develop and take over, creating another maintenance issue with possible applications of chemicals to eliminate the weed problem until the seedlings became established. While the sodded infield would be less maintenance initially, it was emphasized that a strong PM program be established to insure frequent mowing and watering as well as a schedule for fertilizations, aerations and overseeding to keep the sod in a healthy state.

Since better than 80% of the game takes place in the infield it was decided to install the sod in the infield/sideline portion of the field and manage the outfield area as best as possible for its use this spring. The weather was still appropriate for establishment of the sod and its use come spring. The sod installation process took less than 6 hours including the trimming and blending in with the skinned areas.

At the sight of the instant, almost usable, dark green sodded infield grass, the committee members began to think that this long-awaited project needed to be completed now and guarantee that play could begin this May. With that sentiment and strong indications that the outfield would not be playable due to the lack of established seedlings, it was determined that the outfield area must be sodded as well.

The time frame was approaching mid-November when the decision was finally made to sod the outfield area of the field. The elements proved tough, but through wet and blustery weather the installation process was completed a week before Thanksgiving and most importantly, the first pitch is scheduled for May 10.

Mike Whelehan is president of RM Landscape Inc., Hilton, NY.

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John Mascaro's Photo Quiz

Can you identify this sports turf problem?

Problem:

Hot mound

Turfgrass Area:

Baseball field

Location: Withheld by request

Grass Variety: Ryegrass/bluegrass mix

Answer to John Mascaro's Photo Quiz on page 37

John Mascaro is President of Turf-Tec International



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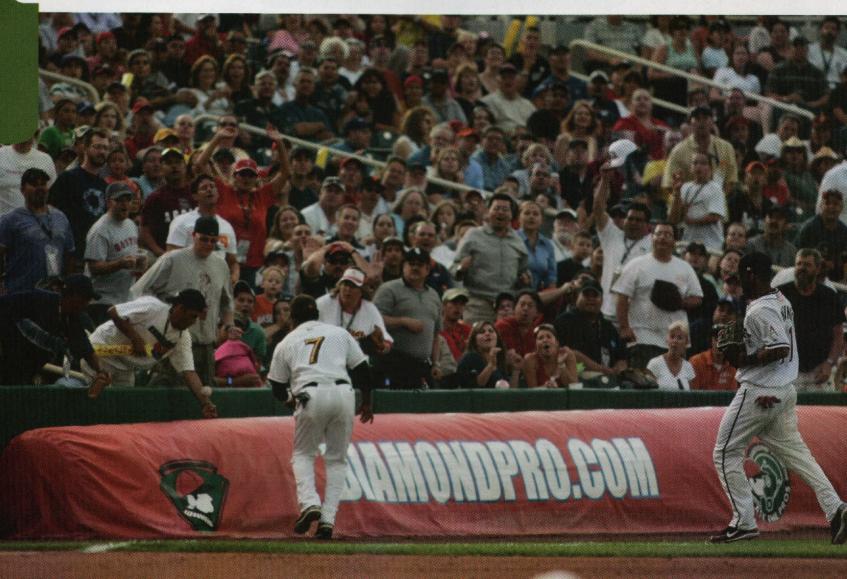
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Saving your field

By Bill Nolde, MS, CPAg

nvironmental stresses (heat, wind, cold, mowing, aerification, irrigation, fertilization, and pesticide application) coupled with on-going physiochemical reactions within the soil of sports fields will continually change the soil condition. More often than not these changes are not beneficial. If they were there would be no turf loss and no need to renovate or rebuild a sports field.

Heat, wind, and cold obviously cannot be controlled by the sports turf manager. But the turf manager must be knowledgeable enough about the damage that can be caused by these stresses to be able to reduce or repair the damage they cause. At the very least the turf should be healthy enough to be able to repair itself quickly after it has been damaged.

Mowing (height, duration, mower condition) and aerification (frequency, type of tines) are definitely causes of stress to turfgrass and should be reduced to help prevent adding to turf stress during times of high heat, high wind, and intense cold. Aerification that is commonly recommended to relieve soil compaction can also cause subsurface compaction (i.e., cultivator pan) and damage to rootzones. The benefit of most aerification processes is relatively short-lived