

white mums are planted each year at the north end of Ryan Field. We strive to have these in full bloom for the annual Homecoming game. This all combines to gain the field its recent nickname of "The Wrigley Field of College Football," says Adkins.

Adkins reports a unique feature of the field conversion was lowering the field level by 6 feet when the existing artificial turf field and running track materials were removed. The field installation began in April 1997. Turf Grids were incorporated into the 16-inch sand-based soil profile. This was placed over the subsurface gravity drainage system that is in a herringbone pattern on 15-foot centers. A sideline drainage system was installed to handle excess water from the stands. Both systems are channeled into the storm sewer system.

Grass berms were added on three sides of the field to soften the transition from the playing field to the seating areas. The sideline bench areas were developed using a section of asphalt covered with artificial turf. This extends from the 25-yard line to the 25-yard line and right up to the 6-foot border. Adkins notes this addition has been a tremendous laborsaving device.

#### Irrigation zones

The irrigation system has 11 zones and the capacity to operate four of the zones at the same time. Zones 1 through 7 are on the field, starting with zone 1 at the end zone, zone 2 at the 17-yard line, 3 at the 35, 4 at the 50, 5 at the opposite 35, 6 at the 17, and 7 at the end zone. Zones 8 to 11 are on the sidelines, with one covering the perimeter goal post to the 50-yard line and one the 50-yard line to the opposite goal on each side of the field.

Adkins says, "Ryan Field underwent a partial renovation in 1999. Tests showed the sand particles were too spherical to provide the stability and footing we wanted to achieve. After numerous tests, we determined the best approach was to amend the existing profile with a combination of Profile soil amendment and a more angular sand within the same USGA size specification as the original.

"We had the old sod stripped off and removed. We flagged the irrigation heads and placed drain tile

around them for protection. Then 15 truck loads of the angular sand and 88 tons of Profile were spread over the field surface and tilled in to a depth of 6 inches. This thoroughly incorporated the new material into the original soil profile and Turf Grids, resulting in a soil profile for the top 6 inches of the field of 80 per-

cent sand, 15 percent Profile and 5 percent Dakota Reed Sedge Peat. This combination was retested and approved.

"The field was then laser graded and the 1 percent slope re-established by Van's Enterprises, Ltd. Dr. Dave Minner of Iowa State University (see "Q&A, p. 46) served



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# Northwestern University Ryan Field Maintenance Program

**FERTILIZATION:** (Adjusted according to soil test results and turf performance)

**April:**

**Second Week:** Micronutrient combination.

**Third Week:** (Following Spring Game) Organic Product 10-2-8 at 1 lb. of N per thousand sq. ft. and 20 bags of Gypsum.

**A Week later:** 0-0-58 at 2 lbs. of K per thousand sq. ft.

**May:**

**Second Week:** Root growth hormone.

**Mid-month:** Organic Product 10-2-8 at 3/4 lb. of N per thousand sq. ft.

**June:**

**First week:** Slow release 12-2-6 at 7 pound of N per thousand sq. ft.

**Second week:** Root growth hormone.

**Last week:** Organic Product 10-2-8 at 1 pound of N per thousand sq. ft. And 3-3-3 Dry Roots at 5 lbs. per thousand sq. ft.

**July:**

**Second week:** Root growth hormone.

**Third week:** 3-3-3 Dry Roots at 5 lbs. per thousand sq. ft.

**August:**

**First week:** Faster release product 21-0-22 at 1 lb. of N per thousand sq. ft.

And 0-0-58 at 2 lbs. of K per thousand sq. ft.

**Second week:** Root growth hormone.

**Third week:** 3-3-3 Dry Roots at 5 lbs. per thousand sq. ft.

**September:**

**First week:** Faster release product 21-0-22 at 1 lb. of N per thousand sq. ft.

**Second week:** Root growth hormone.

**Third week:** Faster release product 21-0-22 at 1 lb. of N per thousand sq. ft.

**Fourth week:** Root growth hormone

And 3-3-3 Dry Roots at 5 lbs. per thousand sq. ft.

**October:**

**First week:** Faster release product 21-0-22 at 1 lb. of N per thousand sq. ft.

**November:**

**First week:** Faster release product 21-0-22 at 1 lb. of N per thousand sq. ft.

## MOWING:

**Frequency:** Three to five times per week.

**Height of Cut:** 1-7/8-in., consistent height maintained throughout growing season.

## AERATION:

**Third week in April:** Core aerate on 2 X 2 spacing. Remove cores, overseed with 200 lbs. of bluegrass blend and topdress with 1/8 to 1/4-in. of soil profile material.

**Third week in May:** Core aerate on 2 X 2 spacing. Remove cores and topdress with 1/8 to 1/4-in. of soil profile material.

**Third week in June:** Core aerate on 2 X 2 spacing. Remove cores and topdress with 1/8 to 1/4-in. of soil profile material.

**Third week in November:** Core aerate on 2 X 2 spacing. Remove cores, overseed with bluegrass blend and topdress with 1/8 to 1/4-in. of soil profile material.

## SLICING:

Second week of July, August and September: Slice in two directions.

## OVERSEEDING:

**April and November:** Overseed in combination with core aeration and topdressing.

**Second week of September, Second and Third weeks of October and First week of November:** Overseed with bluegrass blend between games.

## IRRIGATION:

Irrigation on an as needed basis based on evapotranspiration rates. Try to dry field down before games to reduce compaction. Will stop irrigation on Wednesday or Thursday for a Saturday game.

## TARPING:

Before spring game, generally from March 15 to April 15. Tarp removed for mowing and pre-game painting. Field covered in case of pre-game rain.

## PEST CONTROL:

**Weed control:** None needed.

**Disease control:** IPM practices followed. Preventive controls applied for brown patch in the summer as conditions warrant precautions, for pythium before graduation ceremonies, at other times if conditions warrant precautions.

Insect control: None needed.

## PAINTING:

Painting for game days.



as our consultant on this project and he helped us locate the bluegrass sod. It was a Scott's blend of Abbey, Covington, Nottingham, and Ascot grown on a sandy soil by Newman's Sod Farm of Iowa City. They delivered and installed the sod."

Adkins coordinated the project, making the purchases, setting the target dates and overseeing the on-site details. Ever conscience of the time factor, he had an installation completion goal of April 30. Even with a few weather delays the sod was down on May 12, just a few days behind his projections.

Adkins adds, "Dave Minner had recommended we specify that the sod fertilization be restricted so the turf wouldn't be 'over-pumped' when it arrived. This gave me a hungry sod that was very responsive to an aggressive fertilization program. In effect, during the grow in, I could do the pushing to make the turf better instead of trying to bring a lush turf back up to that level after the shock of the sodding process. This produced



From left to right: Rich Moffit, STMA President; Eric Adkins, CSFM, Agronomist; Randy Stoneberg, Maintenance Forman

a stronger field. The turf stood up well to graduation on June 18 and was responding like an established field by our first football game in September."

Field performance has been excellent following the '99 renovation

according to Adkins. He notes, "I was working with the softball and baseball fields during the 2001 spring football game, but walked the field after the game and there was no damage and no divots. Prior to this renovation, we were putting down 2,000 to 3,000

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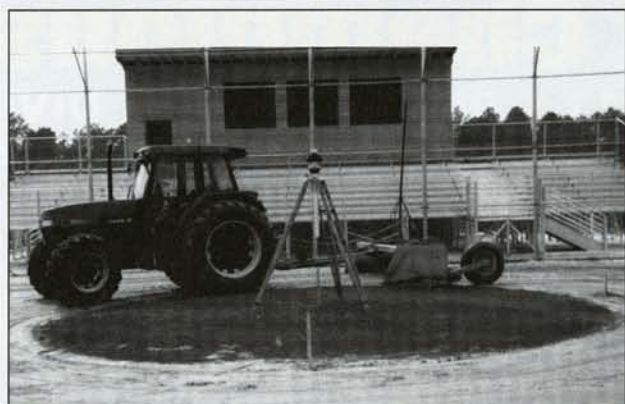
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*While Ryan Field is painted only for games, the athletic field staff strives to keep the turf game-ready throughout the growing season as an incentive to attract prime athletes to the university.*

pounds of perennial ryegrass each year to keep turf cover on the field. In 1999 and 2000, we needed only 50 to 100 pounds of our bluegrass blend between games. We also overseeded with it in the spring before putting our grow cover down.

"The top 6 inches of the soil profile drain at between 10 and 14 inches per hour. The bottom 10 inches probably drain at 3 to 4 inches per hour. That means we're holding water at the 6-inch level where it's accessible to the turf roots. We did complete a drill and fill procedure down the middle of the field this May. We drilled to a 12-inch depth and filled with Profile. This will open up deep aeration and water percolation channels in the most heavily used section of the field. The only addition to the field we're making in 2001 is the installation of new goal posts donated by a local company."

Ryan Field is just one of Northwestern University's nine natural turf fields. The two football practice fields, one baseball and one softball field, a soccer field, a field hockey field and two six-acre multiple use fields total 25 acres of athletic turf and facilities. These are used as practice fields, and for camps, for intramurals and for Club sports in lacrosse, rugby, cricket, soccer, softball, baseball, and football. These eight fields are always in use from late March or early April through November or December, when weather permits. There's also an artificial turf field hockey field and an artificial turf indoor practice facility. The football team generally uses the



indoor facility for one day's practice before playing an away game on an artificial turf field.

Ryan Field hosts six football home games in the fall, the intra-squad football game the third week of April and graduation ceremonies in mid-June. The football team uses the practice fields for all their practice sessions. The band does not practice on the game field.

Adkins says, "Though play and events on Ryan Field are limited and closely controlled, we strive to keep it in excellent condition at all times. The overall turf quality provides the best possible playing surface for the athletes. The aesthetics enhance the experience of a college football Saturday. The stadium also is used as a major recruiting mechanism for all sports, not only football. We never know when that star recruit may walk into the stadium and see the field for the first time, so we always strive to make a good first impression."

That involves some detailed manipulation. For example, before

the 2001 graduation ceremonies, irrigation was limited for several days to dry down the field and make it less susceptible to compaction. A preventive fungicide application was made to ward off pythium. The field was covered with terraplas from 15-yard line to 15-yard line and to the opposite hash mark. The stage and on-field chairs were put in place.

### A busy man

Graduation was completed by 8:00 p.m. By 2:00 am the next day, the stage and chairs had been removed and the field was uncovered.

The multi-field University setting was a change for Adkins, but obviously one he has handled very well. From August 1994 until September 1997, he had served as Assistant Groundskeeper at Chicago's Soldier Field. There was just one field to focus on, but it served triple duty for football, soccer, and concerts. Before that he served as Assistant Director of Golf for the Chicago Park District,

overseeing the maintenance of six golf courses and two driving ranges. He's a graduate of Michigan State University's 2-year Turfgrass Management Program and achieved Certified Sports Field Manager status February 1, 2000.

With nine fields and 20 coaches' practice schedules to accommodate, there's seldom any downtime. Adkins says, "My direct supervisor, Assistant Athletic Director of Facilities Jack Freeman, really understands the needs of the athletic field program and is very supportive of it. Maintenance Foreman Randy Stoneberg, and Groundskeepers Rich Thorn and Joe Berube do a great job. I think they're the best. They work with a seasonal staff of four and add six or seven student workers during June, July, and August. I develop the maintenance program and do the scheduling; they handle all the mowing, fertilization, and spraying. It's their dedication to excellence that earned Ryan Field STMA Field of the Year honors."

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# Safety and liability—protecting yourself from lawsuits

by Greg Petry

**M**y views on liability are from my perspective as executive director of a park district with a thorough and comprehensive safety program. Waukegan Park District is self-insured through the Park District Risk Management Agency (PDRMA) pool composed of more than 100 Illinois park districts. This isn't liability insurance in the traditional sense, such as the auto or workman's compensation insurance Waukegan Park District used to purchase through insurance companies. It is a comprehensive risk management program that focuses on preventive measures to reduce risks and liability with an insurance component.

Several years ago there was a liability crisis in the Chicago area following a series of playground accidents. Park districts were looking at removing playground equipment and limiting programs, but that was contrary to our mission and purpose.

A group of Illinois park districts determined that we should be able to manage this risk. And there is risk inherent in everything—sports, driving a car, swimming, using playground equipment, etc. The districts determined the best way to manage our risk and to provide these services safely to the public was to develop a comprehensive, monitored, and accredited self insurance program. Through the program's comprehensive review process Waukegan Park District has attained (and maintains) the highest level of accreditation.

The same principles of safety and liability, and of protecting your facility and yourself from lawsuits, apply whether self-insured or insured through traditional channels.

## Set the tone

As executive director of the park district, my involvement in setting

the tone on safety is vital. To keep the highest safety record and avoid lawsuits, you must set the philosophy and practices you administer at the top level and have all levels of management and each individual within the organization "buy into it." You have to hire people that are right for the organization and make sure the organization is right for them. If each individual you have working in your organization does not totally agree with the philosophy on safety and follow the safety practices, managing risk will be a problem.

## Provide the tools

Put people in a spot where they know what is expected of them, provide them with the proper orientations and the right materials and equipment.

Federal, state, city, or other governmental agencies require some safety training programs. For example, OSHA requires communicable disease training. This is district-wide training we offer once a year dealing with interaction with bodily fluids, how to clean them up, where the gloves and antiseptic surface cleaner are kept, and all other pertinent details. Because park user groups (including athletes) come from diverse areas and backgrounds, a reminder course on this training might be repeated within a department several times during the year.

The right to know training is also mandated. A Material Safety Data Sheet (MSDS) form must be filed and cataloged in a book accessible to employees. The organization must report to the state what is contained in this book. All employees must then be trained on how to read the sheets and how to perform the procedures recommended for such action as a material spill.

Our all-employee fire training pro-

gram is conducted in conjunction with the city fire department. It covers our policies and procedures on what to do in case of a fire, the different types of fire extinguishers, and the characteristics of different types of fires. The fire department even sets up some fires in bins on our property and has everyone try using the extinguishers. Each of our facilities has a map of the building posted at the entrance with both fire and tornado procedures noted.

Every other year we provide first aid and CPR training for all full time employees so that everyone becomes certified. Sports-related and certain other part-time employees receive this training every year.

Training specific to job responsibilities is conducted by each department. For mowing the turf, an individual needs to know precisely what he or she is to do, which equipment is to be used, and the practices and procedures for proper and safe operation of that equipment. Without this basic training, he could not only produce unacceptable results, but also could do a lot of damage to himself, other people, the equipment, the facility's property, or other property.

Participation in each training session is documented in our general files and in each individual's personnel file. This includes a statement, signed by the employee, that he or she has taken part in the training and understands it.

## Inspect and document

Good communication with employees is essential to the safety and liability program. They must understand why it is important and they must recognize hazards and potentially unsafe conditions and understand how to handle these situations.

In park system and athletic field maintenance positions, employees



will interact with the public. Individuals will tell them things. The employee must listen to what they have to say and react accordingly. For example, it may be something as simple as the report of a broken bottle. The employee should thank the individual for the information, then immediately properly dispose of the broken bottle.

Other reports from the public may require inspection and documentation, with action to occur as necessary to rectify the problem. Waukegan Park District also has developed specific forms to facilitate and document scheduled inspections. Whether externally reported or noticed during a regular inspection, the employee needs to document that the problem has been discovered. If possible the condition should be corrected right away. If that is not possible, the employee needs to identify the hazard and note it and close down the area to protect the public. On a ballfield, the hazard area might be surrounded with snow fencing and a sign posted

to warn the public to keep off because of "dangerous conditions."

Employees must be able to look at the big picture as well as the small details while visually inspecting a site. The softball/baseball field inspection form (see p.18) serves as a reminder to check all the areas noted. If, for example, a piece of fence was broken at one field and could not be immediately fixed by the crew, the employee would note it on the form and call his or her supervisor to report it. The supervisor would assign someone to make the repair and document that the repair was made at a specific date and time, and by whom.

This all combines to form a reasonable, prudent, and consistent safety program. The records will state your case effectively during legal action. An individual broke his ankle while playing on one of our ballfields and filed a lawsuit charging the park district with negligence. We brought in all of our inspection records to show how the field was

maintained when this accident occurred. The judge reviewed the records, noting that the field was maintained regularly, holes had been filled in the past, baseball mix had been brought in to topdress, etc. Because our program was documented to be reasonable, prudent, and consistent, he dismissed the suit.

### Report and document

We have developed both incident and accident report forms. Copies of these are kept in all the offices and in all park district vehicles. The procedures for properly filling out these forms have been explained to all employees and are listed on the back of each form.

The incident report form is to be used when a situation arises that requires park district employee action or intervention, or when a situation occurred and is then reported to a park district employee. For example, a league may have reserved one of the park's baseball fields and been issued a permit for that use.



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When they arrive at the field an unauthorized group has started a game and refuses to leave. The individual who had arranged the permit would then have called the department, which would transfer the call to Superintendent of Parks Mike Trigg, CSFM, or they may have called the park police. If the unauthorized group refused to leave even after being confronted by Trigg, the park police might escort the unruly individual(s) out of the park.

## Review and rectify

Waukegan holds monthly Safety Committee meetings at which a selected individual represents the entire staff from each department: parks, recreation, cultural arts, golf, finance, and administration. These meetings are documented with minutes. One of the standard agenda items is to review all of our incidents and accident claims to assure they are handled correctly, follow through action has been taken, and all of the proper safety controls have been instituted.

All incident and accident report forms are turned into our risk coordinator who compiles them and makes sure they are logged into the computer system. This report is sent to the safety committee, which reviews them, discusses what happened, and how to rectify and prevent such incidents in the future. Any particular trend identified in the Safety Meetings will be noted

and specific training scheduled. For example, if a lot of people were getting things in their eyes, a training session on protective eye measures would be scheduled.

Each representative then has this information to take back to his or her own departmental regular meetings. For example, Mike Trigg will hold Parks Department meetings more frequently than once a month to address such issues as equipment operation, field inspection procedures, severe weather procedures, field use policies and procedures, and personnel health and safety protocols in hot or cold weather.

PDRMA does periodically send inspectors to our site to evaluate our safety programs. They will insure that we are following all government-mandated practices and procedures and will monitor our entire program. For example, they'll compare our reports of accidents in the workplace with our workplace safety procedures and practices.

## Maintain policies

For our athletic fields, safety is the prime objective. Playability comes second. We will cancel games if field conditions are not safe for play.

We have prepared the guidelines for field and facility use for those sports programs operated by the park district. They must follow our guidelines and are under our control. Those sports groups that are affiliated with the park

district, but which run their own programs, request the use of the fields. We communicate to them what our expectations are for safe and proper use. We don't have oversight of the outside sports organizations that rent our facilities, but we do require that they fill out an application so we know which group is using the facility and the contact person responsible for the group. For a long-term rental situation, the group is required to have a certificate of insurance and the park district must be listed as an additional insured.

We also monitor employee scheduling and job assignments to insure our people are not overextended. Tired, stressed people are more likely to make mistakes. There's also that urgency to "get in the game" especially for our long-term field user groups. But there are limits and we must recognize those limits and work within our means. When staffing is limited or weather conditions have restricted maintenance procedures, we'll cancel or postpone games rather than take shortcuts on field maintenance.

Saying no is hard. Though it may seem easier to go along and let them play, you're taking a risk you can't justify. Besides, those who urge field use anyway will quickly disengage themselves if someone gets hurt. They'll say, "You took those shortcuts and told us it was safe to play." That little bit of stress involved in telling groups they can't use the fields this time quickly shrinks into proportion when you consider the injury that could occur and the pain, suffering, worry, and time involved in a lawsuit. The public might not like it, but we must insist on safety first.

## Continuous improvement

Don't stop improving once you've established a reasonable, prudent, and consistent safety program. If something is not working as well as it could, take the steps to make it better. Be open to suggestions to improve your safety program to make your facilities the best you can with the resources available to you.

*Greg Petry is executive director of the Waukegan, IL, Park District. He's a Past President of STMA and the 1996 recipient of STMA's Harry C. Gill Memorial Award.*

SITE		TYPE OF USE	PREPARED (Y/N)	INSPECTED (Y/N)	INSPECTED BY	DATE	TIME	WEATHER	FIELD	PLAYERS	SCORE	INJURY	OTHER	COMMENTS
Benny SE Field 1														
Benny SW Field 2														
Benny NE Field 3														
Benny NW														
Glen Flora S														
Glenwood E														
Glenwood W														
Jefferson NW														
Jefferson SW														
Lyon														
McAree SW														
McAree NE														
McCall NE														
McCall NW														
Webster NE														
Webster SE														
Webster SW														
Weiss														
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SIGNATURE: \_\_\_\_\_ SIGNATURE: \_\_\_\_\_ SIGNATURE: \_\_\_\_\_

Field inspection form