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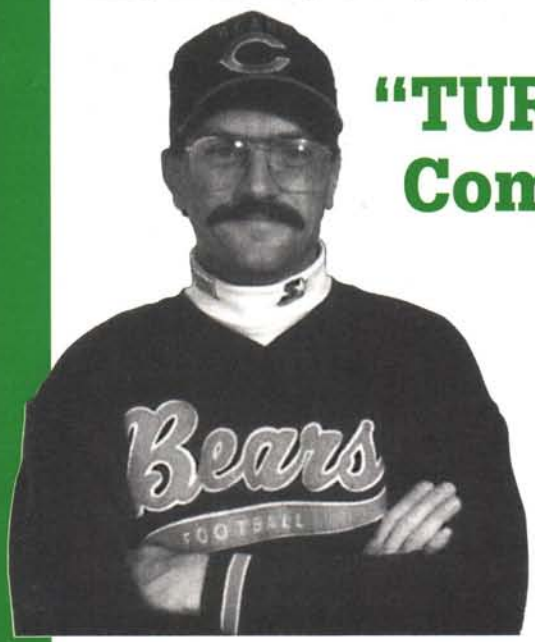
Presents:

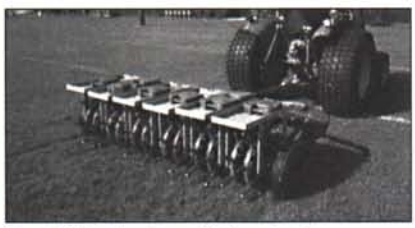
Ken Mrock's 6 Easy Steps To A Winning Field



"TURFACE Prevents Torn Up, Compacted Muddy Fields!"

Follow Ken's 6 Easy Steps

Ken concentrates most of his efforts between the hash marks where the field gets the most abuse. These steps are easy and inexpensive and can be used by any program with even the smallest budget. Follow this program in Fall and Spring and work with your local distributor for the best choice of seeds and fertilizers in your geographic region.



Step 1: You don't need a tractor to core aerify. Rent an aerifier from a local store. Core aerify between the hash marks in two directions – diagonally, creating an X pattern. Allow plugs to dry. Avoid aerification in high heat (80 degrees +).

Step 2: You need TURFACE at a rate of 250 Lbs per thousand to topdress between the hash marks (approx. 16,000 sq. ft.) You can use a drop spreader open full to accomplish this.

Step 3: After topdressing with TURFACE *MVP*, seeding is important to help strengthen the turf. Contact a local extension agent for the recommended seed blend needed for your turf.

Step 4: Slowly drag the entire turf areas with a mat drag to force all materials into the aerification holes. This is the most effective way to incorporate the TURFACE, nutrients and seed into the soil.

Step 5: The next step is fertilization. Again, it is important to contact a local extension agent to test your soil to determine proper types and amounts of fertilizer needed.

Step 6: Irrigation should follow. To water, wet the entire field, but do not soak. Any puddling will cause inconsistent growth from the new seed.

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sportsTURF PROGRAM

VOLUME THIRTEEN, NUMBER TEN OCTOBER 1997

MAIN EVENTS

LINE-UP

On the Cover:

The Tennessee (nee Houston) Oilers dig into a Trinity University football field. Photo by Mike Schweitzer, director of grounds maintenance, Trinity University.

Sports Turf Managers Association

THE OFFICIAL PUBLICATION OF THE SPORTS TURF MANAGERS ASSOCIATION

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STMA MESSAGE

Just What We Hoped For

By Dick Ericson

When I first started in this business, you had to learn it all by yourself. There were few resources in print or in educational systems to tap even the basics, let alone such specifics as maintenance of baseball's infield clay.

Back in the late 1970s and early 1980s, sports turf managers would hear about new developments and techniques from players who had seen them on other fields. Lots of established groundskeepers who were "in the know" guarded as secrets the field-care techniques they had learned through their own trial-and-error and hard work.

But a few of us, including George Toma and Harry Gill, wanted to share those techniques and ideas. We'd talk by phone three or four times a year to discuss problems and the ways to solve those problems. We found that, no matter which end of the conversation you were on, you ended up learning something you could put to work on your own field. We also discovered that we each were getting lots of calls from others in the business looking for the same kinds of information we were already sharing. At the same time, public concerns about field quality were growing as sports events became more popular on television.

So, in 1981, at the end of a turfgrass conference with Dr. Bill Daniel's group at Purdue University, about 35 of us got together to start an organization — the Sports Turf Managers Association (STMA) — to make the job easier for everyone by promoting sports-turf-specific education and the sharing of information. I had the honor of being named the first president.

Back in the '70s, when a baseball "took a bad hop" it could fly so high it actually jumped over a player's head. Today's players expect to put a glove down and have the ball head right into it — and it usually does. Safety is, and has always been, the driving force behind field care. Aesthetics also are important now. Groundskeepers soon learned that everyone expects a field to play as good as it looks, and good-looking fields draw fewer complaints. While expectations are higher now, so is the ability to meet those expectations.

Those of us fortunate enough to have been there in the beginning have had the opportunity to see STMA grow. To me, it's almost unbelievable the progress that has been made, in STMA and in the whole sports turf industry. Technology is moving so fast there's more reason than ever to have STMA as a conduit for information. The sports turf education offered through various colleges and universities, this magazine, and STMA's newsletter (*Sports Turf Manager*) and the great opportunities for networking at chapter functions and the annual conference are exactly what we were hoping for when STMA first started.

Dick Ericson was STMA's first president, is an Honorary Life Member and continues as one of STMA's strong supporters. Ericson retired from his position as stadium superintendent of the Minneapolis Metrodome two years ago.

TIP O' THE MONTH

Irrigating Mistakes

By Dave Minner

The following are three common irrigation mistakes on athletic fields:

1. Overwatering — too much, too often, too shallow. As a general rule, turf should be allowed to wilt slightly before irrigation. At this stage of wilting, soils are well-aerated because air has replaced the water removed from soil pore spaces by roots. Roots need water to grow, but they also need air-filled pore space. Excessively wet soils become anaerobic and have a distinct sulfur odor of rotten eggs. Root growth is poor in anaerobic conditions.

Allow the turf to wilt slightly and then apply about an inch of water. Wait until the turf just begins to wilt before watering again. About 1.0 to 1.5 inches of water per week is sufficient for soil-based fields. Sand-based fields may require more frequent watering.

2. Mid-day watering of grass. This increases humidity and free moisture near the plant that results in increased disease.

3. No plan for watering the skin on baseball/softball fields. Don't forget to install separate heads and valves for watering just the infield dirt. Don't place the heads so they water both the dirt and the grass. Watering the skin portion of an infield is just as important as watering the grass. A separate station is needed for watering the skin infield because it is managed differently from grass. ❑

David Minner, Ph.D., is extension turfgrass specialist at Iowa State University, Horticulture Department. The above comes from the July 1997 issue of Iowa Sports Turf Managers Association Newsletter.

If you have a tip to share, send it to sportsTURF, *68860 Perez Rd., Cathedral City, CA 92234.*

Photo courtesy: The Toro Co., Irrigation Division.

These questions came straight from the customers of lawn care operators, pest control operators and other professional pesticide applicators across the country—and probably reflect the concerns of your customers. The more your customers know about the products you use, how you use them and how much is used, the more confident they will be in you and your service.

"Are the pesticides you use safe?"

"Are the pesticides that professionals use stronger and more toxic?"

"When is it safe for my children and pets to return to an area after a pesticide application?"

Communicate With Your Customers

Your customers expect you and your employees to be credible and knowledgeable sources of information about your products. Take time to talk with them about your safe and responsible use of pesticides.

Studies show that most people don't know that pesticide products are among the most highly tested products sold. The U.S. Environmental Protection Agency (EPA) registers only those uses of pesticide products that pose minimal risks.

- Emphasize that pesticide products must undergo stringent government-monitored testing before they can be sold. It is a long and costly process. For example:
  - It takes a chemical manufacturer eight to 10 years to test and register a product, at an average cost of $30 million to $50 million.
  - As many as 120 tests or more are performed, many specific to health, safety and the environment.
  - Only one potential pesticide in 20,000 makes it from the research lab to the market.
- Explain Integrated Pest Management (IPM) to your customers. Most do not fully understand the concept. Point out that a successful IPM program stresses prevention, pest identification and selection of the best method of pest control, which may require the use of pesticides. Tell how you incorporate IPM into your pest management practices.
- Identify the specific pesticides you use and the pests they control.
- Indicate that professionals use an array of products, many the same as those used by homeowners.
- Assure customers of the benefits pesticides provide for turf, trees and ornamentals, and in the home. For example:
  - Termites cause over $1 billion in structural damage each year.
  - One large, pest- and disease-free tree has the same cooling effect as 15 room-size air conditioners.
  - A well-maintained lawn and landscape adds as much as 15 percent to a home's value.
- Discuss your safe and responsible use of pesticides as a professional applicator. Note the many steps you take to ensure that the pesticides you use are used properly.
- Advise your customers that you closely follow label instructions. The label contains instructions for only those uses approved by EPA.
- Outline the extensive training that is mandatory for professional applicators in order to apply specialty pesticides. Applicators are required by law to undergo training, certification and licensing, as well as to keep records of each job performed.
- Explain what happens to pesticide containers once a job has been completed. Note that containers are disposed of properly.

What Else Can You Do?

Provide your customers with materials such as newsletters, brochures, fact sheets and bill stuffers that communicate these messages. Be sure that someone at your company, who has a basic knowledge of the products and application methods your company uses, is available to answer questions.

RISE Is A Resource

RISE is the voice for the specialty pesticide industry. Its members include manufacturers, formulators, distributors and other industry leaders.

RISE works in cooperation with your national, state and local user/applicator associations and is an additional source of information regarding issues facing pesticide users. We can help you in your role as a knowledgeable and credible information source to customers and to the public. A brochure on communicating about pesticides with your customers is available. Contact RISE to receive your copy.

We urge you to take an active part in your state and national association(s). We work together to support your business.

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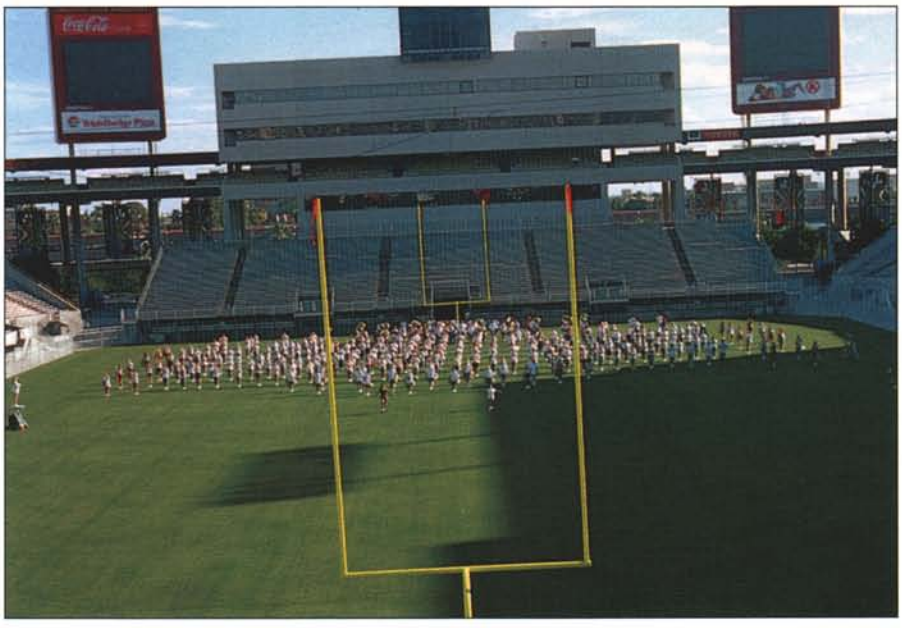
Keeping Football Fields in Top Condition Through Fall Play

By Mike Schiller



Special maintenance may be required when a stadium's design blocks sunlight from a certain area, as at Arizona State University. Photo courtesy: Trusty & Associates.

Although few sports turf managers can end the football season with their fields in the "near-perfect" condition of the first game, there are steps managers can take throughout the playing season to keep fields in the best shape possible.

In sports turf management, player safety and field playability come first. Even basic, sound agronomic practices take a back seat to those two major priorities, and aesthetics must follow that.

Unfortunately, while expectations of field quality have escalated among field users, facility owners and fans, field maintenance budgets too often have remained static or declined. Figures on the budget page may look basically the same from year to year, but adding more field area or expanding the use of existing fields without increasing funds, equipment and labor to handle the extra workload is, in reality, a budget cut. So, doing more with less is the norm, and sports turf managers at all levels must tap every available resource to keep fields in top shape.

Expect Problems

Football fields get their heaviest use during the least favorable periods for turf growth. In the southern regions and southern parts of the transition zone, cooler temperatures slow bermudagrass growth or bring on dormant conditions. The success of overseeding with perennial ryegrass depends greatly on how well the timing of field-use requirements coincide with temperature changes.

In northern regions and the northern parts of the transition zone, erratic weather brings unpredictable turf-growth patterns for cool season grasses and may trigger early dormancy. By mid to late season, turf growth in northern areas is limited to fields with underground heating systems and tarps. Snow removal replaces mowing on the priority list.

Know the Territory

Basic agronomic conditions are different for every field, and often there are differences within an individual field. Invest the time and effort to investigate thoroughly and record the specifics.

Use soil probes (a long, hollow pipe will do) to remove a deep core and examine the soil profile of different sections of each field. Pick spots where turf thrives and drainage is good as well as where turf is thin or weak, soil is bare, or water is slow to drain. Compare the make-up and depth of the various soil types from the different areas.

Make detailed notes or map out the field and mark the various sections, including changes in materials within the soil profile and the depth of any levels and/or layers. Problem areas can be targeted for additional aeration and topdressing, for additions of soil amendments or even for reconstruction.

If you were not involved in the field's construction, find out if construction plans or as-built records are available and compare them to actual field conditions. Map out underground drainage systems, including drainage outlets. Use an irrigation system overlay or draw in the irrigation system specifics.

Note special conditions that have an impact on turf growth and vigor. For example, the design of a stadium may block sunlight from a specific area of the field for much of each day or restrict air movement. Irrigation patterns on open fields may be disrupted by seasonal changes in prevailing winds. You'll need to adjust maintenance procedures in the affected sections of the field to compensate for these conditions.

Check out your turf. Watch for changes in color and density. Pull plugs to examine root development and crown condition. Ask for feedback from mowing crews on changes they observe in turf growth. Slowed growth may signal the early stages of insect or disease activity. Unexpected growth variations

within an area may indicate a problem developing in irrigation or drainage systems.

Allocate Your Resources

When poor conditions can't be changed, plan field-maintenance programs to compensate for them. Because there's never enough time or money to do everything you'd like to do for your fields, allocate your resources where they'll accomplish the most.

Base *fertilization* programs on soil test results. Where budgets permit, add periodic tissue tests to determine how effectively the turf uses available nutrients. You may need to adjust pH to release nutrients tied up in the soil or find you can cut back on phosphorus (P) or potash (K) because existing levels are adequate.

Where possible, plan an aggressive *cultivation* program to combat compaction. Combine core aeration with spiking, slicing and water injection to meet field needs without disrupting practices and play. If you can't aerate all the fields, concentrate on the most heavily used fields. If necessary, aerate those fields only from 10 yards into the end zone to the 20-yard line at each end of the field, the sidelines sections where players and coaches gather, and between the hash marks. Even if aeration between the hash marks on the game field is all you can work in, do it.

Explore new or different turf varieties and variations in *seeding* schedules. Talk to the researchers at area seed-testing facilities and to other sports turf managers with conditions similar to your own. Find out what worked, what didn't, and why. Maybe seeding a week earlier, or later, with a different combination of seed varieties will improve your late-season turf density.

Note the most heavily used parts of a field and concentrate aeration on those areas. Photo courtesy: Mike Schweitzer, Trinity University.

Little things can produce excellent results — like spreading seed prior to play and letting the players cleat it in and adding regular or pre-germinated seed to your field repair divot mix.

Experiment with *irrigation* schedules and rates. While you don't want to put turf through unnecessary stress, the wetter the soil, the greater the compaction. Moving your last pre-game irrigation ahead half a day, or even a few hours, may reduce compaction without increasing turf damage. Or, if you can't change the timing of pre-game irrigation, maybe a slightly lower application rate will reduce compaction.

If you've always scheduled field repair and irrigation the morning after a night game, try moving these procedures to the same night, right after the game. Maybe fewer irrigation cycles for longer intervals will increase root depth and improve turf vigor.

Experiment with *mowing* patterns and height of cut, too. Your crews probably alter directions with each mowing already. If they use only two patterns, you may want to add a third or fourth to ensure the mower wheels cover a slightly different area with each mowing. Try moving your height of cut up one notch and monitor the results. You may need to check with the coaches of your field-user groups before you take this step, or try it out on the most heavily used practice field first.

Communicate

Work with administrators and coaches of your field-user groups and, for high school and college fields, with the athletic director, band director and drill-team advisor to develop workable field-use schedules. It's not a situation of you against them. You all want the best possible fields as often as possible and as long into the season as possible.

Examine the soil profile of different sections of each field — not only where turf thrives but where it doesn't. Photo courtesy: Trusty & Associates.

Help them understand the long-term benefits of rotating practices to other fields, or to different areas of the same field. Explain the need for specific maintenance procedures and the positive results they produce. Ask for their cooperation in staying off the fields or restricting the length of field use during adverse conditions.

Listen to their concerns and be as flexible as possible.

Seek Funding

Document your results. If you can show that focused maintenance procedures on heavily used fields produced such significant results as maintaining playability longer into the season or allowing a key game to be played when other area fields were unplayable, you improve your chances for increased funding in next year's budget.

Be creative. Use positive results as an incentive to improve field conditions as you explore alternate sources of funding. Make sure the parents support group or team booster club is aware of your efforts and ask for their help. Maybe they can't contribute funds, but can assist with pre-game field lining or painting or with post-game repairs or clean-up. Every hour saved gives your crews an hour for more technical tasks. ❑

Mike Schiller is superintendent of parks for the Rolling Meadows Park District, Rolling Meadows, Ill., and president of the national Sports Turf Managers Association.

Sports Turf Managers Association

Sports Turf Managers Association

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STMA provides members with a variety of benefits, including: education through regional institutes and conferences; support for sports turf research; facilities tours; a national awards program; access to the STMA National Conference and Exhibition; complimentary subscriptions to *Sports Turf Manager* and *sportsTURF Magazine*; and much more.

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