

## Three Skills for Effective Multi-Tasking

by Peggy L. McNamara, author and professional speaker

Whether you like it or not, multi-tasking is a way of life these days. The ability to deal with multiple tasks going on at the same time is a needed skill for getting through your workday and personal/family demands.

Here are three skills that will help you be more effective:

1. **Constant Prioritizations.** All the distractions, chaos and choices you have can get in the way of accomplishing what you need to on any given day. Multi-tasking is consistently making sure that you are staying on track with the highest and best use of your time and energy. What are your most urgent and pressing priorities today? Are you working on or towards them?

The ability to figure out your priorities and follow through on them is crucial. Understand what is required for you to consider it a successful day and, with all your might, follow through on those tasks. Don't allow yourself to get sidetracked. If something pressing shows up that you weren't planning on, deal with it and get back to task.

The toughest part with this skill is figuring what your priorities are; once you have that figured out, the rest is easy.

2. **Deal with things as they come along.** Take a deep breath. Don't make more out of the situation than there really is. Figure out the solution(s) versus who's to blame. Think through your options and be decisive. Rehashing decisions, or being indecisive, are two big factors that can waste your time and get in the way of effectiveness. Trust yourself to do what is right and take whatever steps are needed to get through the situation.

3. **Look at each "juggling act" as an opportunity.**

Multi-tasking is like juggling a bunch of plates and keeping them all up in the air. Don't allow yourself to get stressed out by simply thinking about all that has to be done. Many people overwhelm themselves, to the point of a migraine, just by their thoughts. Please clarify, how does that help?

It takes mental discipline, that only comes from experience, to keep a smile on your face while being pulled in lots of different directions. Look at each day as an opportunity to improve your skills, understand those around you better, and make the choice to find the good in whatever comes along. When you make the decision to look at your day

as a training ground for better things in the future, it helps to see the opportunity.

Many people are busy. The ability to multi-task effectively is not necessarily "being busy;" it is the skill of getting things done without getting mentally undone.

*Peggy L. McNamara is an effectiveness expert that works with organizations that want to Stimulate Some Action™ and with association executives that want inspiring, practical value from their events.*



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Official Newsletter of the Sports Turf Managers Association

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Volume XXI Number 3

May/June 2003

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# President's Message

by Bob Campbell, CSFM

It is hard to believe that, by the time you see this, half of my first year as president of STMA will have been completed.

The issues dominating most discussions at our annual conference were the Bylaws and Code of Ethics of STMA. A committee completely independent of the board and headquarters was formed under the leadership of Ken Mrock of the Chicago Bears. This committee has already begun the task of reviewing our current bylaws and will make recommendations to the membership on any changes or additions they believe would make STMA a stronger organization.

If you have any suggestions or concerns, please contact Ken or any committee member. However, you must hurry because time is running out if they are going to complete their work in time for the members to vote before this year's conference. This is a very important issue because the committee will be making recommendations for procedures and a code of ethics, one which all of us will abide by.

The other major issue was the marketing audit conducted by Akermann Public Relations of Knoxville. We have received the audit and the marketing committee plan for the association with the following major components. 1.) To build awareness of the profession. 2.) To develop an image campaign to battle current perceptions, and 3.) To show value of membership to all members.

If you have taken time to read the marketing plan on our website, I'm sure you will agree that it is quite an ambitious plan. It will take time, but we have already taken the first steps. As an organization, we must be committed to seeing this plan through so this association can reach its potential and provide valuable services to all of us.

Improving the image of this profession is paramount. I cannot think of a greater member service than that. It will be a long battle in which all of us as sports field professionals must be committed each day.

Hopefully you have already

noticed some of the initiatives such as the improvements of the website and the e-mail turf blasts, thanks to the time given by



Boyd Montgomery, CSFM. This is a vital effort to keep you informed on a more timely basis so you will have the opportunity to be more involved in the governance of this association.

Because of publication requirements, this article, as well as others, was written six weeks before you see it. I would call that old news and, hopefully, a lot has happened between the time I began this message and the time you see it.

Through Boyd's efforts, we are starting to work through this problem so you will be able to stay current with what is happening. For it to work, we need your current e-mail address. If you have not received any of these messages, please send your current address to headquarters. As the marketing committee works through the other initiatives, such as a logo redesign, they will attempt to keep you informed and, if you have any suggestions, let them know.

These are exciting times for STMA. The Board of Directors takes their responsibility seriously and has spent much time on the task at hand. However, we have only begun and will continue to work on ways to make this association even stronger with your help and support.

One final thought is to remind you that it is not too early to start making plans to attend the next annual conference. It is in San Diego January 21-25, 2004. The program is almost completed and promises to have many useful educational opportunities as well as the opportunity to revisit old friends and make new ones. For those who have not had the opportunity to visit this great city, please don't miss this chance.

Hope to see you there!

*Bob*

# Aerification Principles for Sports Turf

Gil Landry, The University of Georgia

**A**erification is a mechanical cultivation practice that selectively tills the soil and/or thatch without destroying the turf. Aerification is commonly recognized to: relieve soil compaction; aid in thatch control; improve soil air exchange, enhance water and nutrient penetration into the soil, disrupt undesired soil layers, aid in modifying soil with top-dressing, enhance water and nutrient uptake and pesticide effectiveness, reduce runoff and puddling, reduce effects of localized dry spots, reduce surface hardness, stimulate new growth by cutting stolons and rhizomes, and improve heat and drought tolerance.

The potential negative effects of aerification include: turf injury increasing potential for turf loss during stress; disruption of the turf surface; increased weed and insect problems; increased dessication and/or winter injury; reduced soil strength, and the creation of a localized soil compaction zone.

Soil compaction is the most common reason for aerification and results from the compression of soil particles closer together. Compaction results in reduced soil pore space, increased bulk density, surface runoff, carbon dioxide concentrations, and small pore space.

Possibly the two most important principles of aerification are identifying the problem correctly and then determining the most effective means of alleviating the problem. Common problems relate to the following:

- a compaction layer from player usage which usually occurs in the top three inches of the profile,
- high clay and silt content soils that impede infiltration, percolation, air exchange and rooting, and these problems are increased by traffic,
- presence of layers that impede water and air movement, layers may be a distinct change in soil texture or a buried organic layer,
- compaction deeper in the profile due to repeated cultivation to the same depth,
- compaction deeper in the profile caused by heavy equipment during construction,
- the presence of 'hard' sands generally caused by coarser or angular-shaped sands,
- improper mixing of sand into a soil profile creating a 'mortar' mix layer, and
- salt affected layers where high levels of sodium accumulate and destroy soil structure.

Soil compaction is measured in the lab as bulk density, which is the mass of soil per unit of dry soil volume, including solids and pore space. Sandy soils generally have a higher bulk density than finer textured soils because the sand tends to have few small pore spaces and sandy soils contain particles of different sizes that become tightly packed together. These types of soils generally have bulk densities of 1.3 to 1.8 g/cm<sup>3</sup>. Finer textured soils have more tiny pore spaces and generally clay and silt loam soils have

bulk densities of 1.0 to 1.5 g/cm<sup>3</sup>. Depending on soil type, the upper ends of these ranges may inhibit root penetration. For example, the USGA recommends a bulk density for putting greens mix of 1.2 to 1.6 g/cm<sup>3</sup>.

Soil penetrometer resistance is another means of measuring soil compaction. The penetrometer measures the pressure needed to push a rod through the soil. Finally, saturated hydraulic conductivity is another means of assessing soil compaction. This is typically measured with a double-ring infiltrometer which consists of two metal rings one placed inside the other. The rings are driven into the soil and then filled with water. Upon saturation, hydraulic conductivity is measured by the drop in water in the smaller ring over time and measured in inches per hour.

Sports field soil compaction tends to be more of a problem in the upper four inches of the profile. Because rooting depth is limited, water use efficiency is decreased leading to more frequent irrigation, which in turn increases the probability that the surface is wet during field use resulting in increased compaction. Also under such conditions the com-

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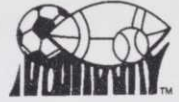


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## Chapter Events



### **The Greater LA Basin Chapter of the Sports Turf Managers Association:**

The Chapter will meet at 11:00 AM on June 4 at Big League Dreams in Chino Hills for a mini field day, facilities tour, general meeting, softball challenge and lunch. Next on the calendar is a General Meeting and Nominations for 2004 Board members to be held on September 11 at 2:00 PM at Mt. San Antonio College. The speaker for this event will be announced soon.

For information on the Chapter or pending events, call Steve Dugas, California State University - Fullerton, at 714-278-3929 or email [sdugas@fullerton.edu](mailto:sdugas@fullerton.edu).

### **Ohio Sports Turf Managers Association (OSTMA):**

The Ohio Chapter will hold a Summer Field Day in conjunction with the Kentucky Chapter at the Cincinnati Reds Great American Ballpark in Cincinnati on June 10. Speakers will include: Lynda Wightman from Hunter Industries, STMA President Bob Campbell, CSFM, from the University of Tennessee, Doug Gallant from the Reds, and Pam Sherratt from OSU. Afternoon events will include a tour of the Great American Ballpark and of Paul Brown Stadium, home of the Cincinnati Bengals.

The Chapter's Golf Outing will be held July 22 at Apple Valley Golf Club in collaboration with the OLCA.

For information on the OSTMA Chapter, or upcoming events, call OSTMA Headquarters at 888-824-9805 or 419-824-9805 or Boyd Montgomery, CSFM, at 419-885-1982; or visit the chapter's website at [www.ostma.org](http://www.ostma.org).

### **Kentucky Sports Turf Managers Association:**

The Kentucky Chapter will join in a joint meeting with the Ohio Chapter on June 10 at the Great American Ballpark in Cincinnati, Ohio, home of the Cincinnati Reds. For information on the chapter or upcoming events, contact Tom Nielsen at [TNielsen@batsbaseball.com](mailto:TNielsen@batsbaseball.com) or Aaron Boggs at [AVBoggs@netscape.net](mailto:AVBoggs@netscape.net).

### **Gateway Chapter Sports Turf Managers Association:**

The Gateway and Mo-Kan Chapters of the STMA, in association with the University of Missouri, will present the first ever MU SportsTurf Field Day on June 11 at the MU Turfgrass Research Center in Columbia, MO. Please see the Mo-Kan Chapter block for additional details. For information on the Gateway Chapter, or upcoming events, call Mike Krone, Missouri Baptist College, 314-392-2328 or email [krone@mobap.edu](mailto:krone@mobap.edu).

### **MO-KAN Sports Turf Managers Association:**

Mo-Kan/Gateway Chapters Field Day - The Mo-Kan and Gateway Chapters of the STMA, in association with the University of Missouri, will present the first ever MU SportsTurf Field Day on June 11 at the MU Turfgrass Research Center in Columbia, MO. Registration begins at 8:30, with sessions from 9:00 am to 3:00 pm. The Field Day will concentrate only on sports turf related research activities at the MU Turfgrass Research Center including: skinned infield materials, preliminary results of the bermudagrass overseeding and transition trials and more. You will have the opportunity to share ideas with Sports Turf Managers from St. Louis and surrounding areas as we tour a number of MU athletic facilities in the afternoon. Arrangements are being made for optional Motorcoach transportation from Kansas City to Columbia.

The Chapter's Fall Field Day will focus on strategies for High Use, Low Budget Fields. It will be held on September 10 at Kansas City, Kansas, Parks and Recreation. More details will be announced soon.

For information on the MO-KAN STMA Chapter, or upcoming events, call Jody Gill at 913-239-4121 or [JGill2@bv229.k12.ks.us](mailto:JGill2@bv229.k12.ks.us).

### **Colorado Sports Turf Managers Association:**

The Chapter will hold a Seminar on June 19 at Sky Sox Stadium in Colorado Springs. Attendees will have the

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## Aerification Principles for Sports Turf

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pacted soils remain wet and may cause increased hydration of crown tissue leading to winter injury.

During the spring and summer growing season compacted soils lack oxygen, slowing turf growth but not affecting weeds such as goosegrass and knotweed which have a competitive advantage over the turf.

The ultimate effect of soil compaction is decreased root, shoot, rhizome, and stolon growth. Problems that develop from this may include high and low temperature injury, dry or wet wilt, intracellular freezing and winter dessication.

### Aerification methods:

**Coring:** This is the industry standard in which soil cores are removed by hollow tines, screw devices or spoons. The cores may be drag-matted back into the turf as a topdressing or removed. The soil should be moist or at field capacity for coring. Core diameters are generally one-half to one inch in diameter, the depth of coring is 3-10 inches, and core hole spacings are from 2 -10 inches.

With every cultivation program it is important to know what is the impact of the practice. The USGA has recently suggested that perhaps on golf greens 20% of the surface area should be affected annually. To determine impact on the surface area determine the core area surface and hole spacing. For example, one-half inch tines spaced 2x2 inches apart will impact 4.91% of the surface area.

$$\begin{aligned}\text{Area of a core hole} &= \text{pie } (r)^2 \\ \text{pie } (r)^2 &= 3.141 (.25)^2 \\ &= 0.196 \text{ in}^2\end{aligned}$$

$$\text{Surface area affected} = 0.196/4 = 0.049 \text{ in}^2 \text{ or } 4.9\%.$$

Another aspect of core aeration is that once the surface seals, air and water exchange essentially stops. Thus, the smaller the diameter tine probably the shorter the impact of the practice. And obviously, topdressing to fill coring holes should extend core hole effectiveness.

All this theory provided, it still boils down to being able to measure the period of impact of any cultural practice.

**Solid tine devices:** Solid tines are used instead of hollow tines. The objective is to cause soil shattering which is best done when the soil is drier than field capacity. This method minimizes surface disturbance but is more likely to develop a "cultivation

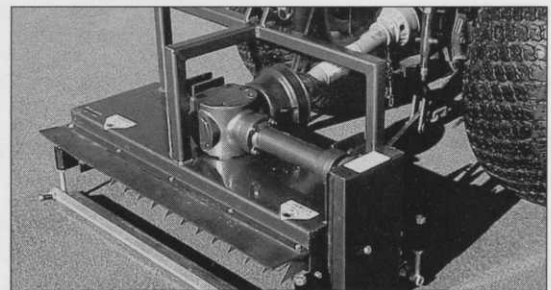
pan" just below the depth of penetration. Some units penetrate at such an angle that lifting and shattering occurs.

**Deep tine devices:** The more common use on sports fields of equipment that penetrates from 8 to 12 inches provides an opportunity to address both surface and subsurface problems. Most of these units operate under the same principles as their shallower penetrating counterpart. However, some units produce a heaving action by forcing tines to move laterally at the deepest point of penetration. If the soil is dry enough, the heaving causes additional cracks for air and water movement into the soil.

**Deep drilling:** This equipment uses, as is implied, drill bits that may be up to one inch in diameter and penetrate more than 12 inches. The soil removed is granular rather than cores thus easier to drag back into the surface. These units also come with the capacity to "drill and fill" where a soil amendment can be incorporated into the holes as the holes are drilled. This may create an excellent drainage channel through the soil profile. These units tend to be slower than other deep tine units and do bring material to the surface which must be handled.

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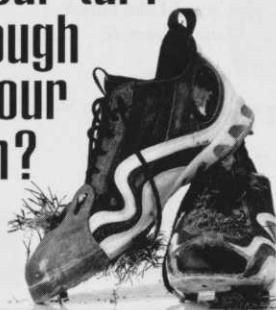
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# DOC'S DUGOUT - An Inning From Our Past

By Dr. Kent Kurtz - STMA Historian

## Dr. Glenn Burton, "The Father of Hybrid Bermudagrass", Part II

### The 1950's

Once the first controlled hybrid (Tiflawn) was released in 1952, Dr. Burton felt it would make an excellent parent to produce a better hybrid for golf courses. So he crossed a small fine-leafed, 18 chromosome *Cynodon transvaalensis* (African bermudagrass) with the coarser and more vigorous parent - Tiflawn. From this hybrid cross came a hybrid known as Tifton 127, later named Tiffine. It was a sterile hybrid with 27 chromosomes and since the seed was not viable Tiffine had to be planted vegetatively. However, before the Tiffine could gain impetus and popularity on golf courses, Dr. Burton replaced the Tiffine with one of his other selections he called Tifton 328, known today as Tifgreen (*Cynodon dactylon* x *C. transvaalensis*). Dedicated plant breeders are never satisfied with their creations and therefore, continually search for better and superior plants that are better adapted to the environment and to the particular use intended for the plant.

Tifgreen was released in 1956 and is a low-growing, rapidly spreading, disease resistant hybrid which can make a dense, weed-free turf when properly managed. Its fine-textured, soft, forest green leaves and very few seed-heads are the reason it has been a successful grass for golf and lawn bowling greens in many areas. Further, it tolerates a mowing height of 1/4 inch and tolerates overseeding with cool season grasses very well. Even today Tifgreen is considered one of the best hybrids for golf greens and is continually selected by sports turf managers for baseball infields and outfields and is recommended for use on lawn tennis and bowling greens. The search for a better, more durable grass for football and soccer fields and golf tees and fairways continued and the fourth product of Burton's turf breeding project resulted in the release of Tifway in 1960.

Tifway, after three years of testing as 419, is another 27-chromosome *Cynodon transvaalensis* x *C. dactylon* hybrid. According to many sources, Tifway is darker green, requires less nitrogen, greens up sooner in the spring, makes a weed-free sod and is more tolerant of traffic than many of the earlier releases. Many sports turf managers continue to prefer Tifway for their sports fields because of its wear tolerance and aggressive growth characteristics.

Tifdwarf is another of the fine grasses researched and developed by Burton which was released from Tifton in 1965. Evidence suggests that Tifdwarf is a vegetative mutant that occurred in Tifgreen at Tifton before the first planting stock was sent out for early testing. This is a dwarf type with shorter leaves, stems, and internodes. It also has a dark green color, high shoot density and a low, slow growth



Dr. Glenn Burton

habit. It tolerates a mowing height of 3/16 inch, and requires less fertilizer for comparable color than Tifgreen. However, Tifdwarf has been found to be susceptible to smog on the west coast and has a tendency to turn purple when subjected to cooler weather. It was these two latter characteristics that influenced the late Dr. Victor Youngner (University of California - Riverside) to release Santa Ana hybrid bermudagrass in 1966. Santa Ana was selected from Royal Cape in 1956 because it exhibited smog tolerance, early spring and late fall deep blue-green color and resistance to wear and salinity.

### The Later Years

During the winter of 1970 Dr. Burton, with the assistance of Dr. Jerrel Powell, initiated research designed to create mutants in their best triploids, namely, Tifgreen, Tifway and Tifdwarf. Dormant sprigs (stolons and rhizomes) were washed

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## Southern Athletic Fields

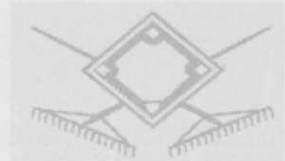
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## Chapter Events

*continued from page 4*

option of taking in a ballgame following the seminar. An August event is in the works at Hughes Stadium of Colorado State University in Ft. Collins.

The World Famous Lawnmower Man Open will be held at Heritage at the Westmore Golf Course on July 22.

For information on the Colorado Chapter, or upcoming activities, visit the Chapter's website--[www.CSTMA.org](http://www.CSTMA.org)--or call the CSTMA Chapter Hotline at 303-346-8954, or contact Chapter President Phil McQuade at 303-237-7188 or [pmcquade@jeffco.k12.co.us](mailto:pmcquade@jeffco.k12.co.us).

### **Iowa Sports Turf Managers Association:**

ISTMA will hold its Iowa Cubs Baseball Workshop at Sec Taylor Stadium in Des Moines on June 24. Observation of Pre-Game preparations starts at 10:00 AM. Game time is 12:05, with post-game observation to follow.

For information on the Iowa Chapter, or upcoming activities, contact Jeff Wendel of The Turf Office at tel. 515-232-8222, or fax 515-232-8228, or e-mail: [Jeff@iowaturfgrass.org](mailto:Jeff@iowaturfgrass.org).

### **Keystone Athletic Field Managers Organization (KAFMO/STMA):**

The KAFMO Sports Turf Managers' School will be held June 23 - 25 at Lebanon Valley College in Annville, PA. The School will provide classroom and hands-on sessions about baseball infield maintenance and renovation, turf management, aeration techniques, overseeding, soil biology and fertility, and much more.

For information on the KAFMO/STMA Chapter or upcoming events, contact Dan Douglas, Reading Phillies Baseball Club, at tel. 610-375-8469, ext. 212; or e-mail to: [kafmo@aol.com](mailto:kafmo@aol.com).

### **Michigan Sports Turf Managers Association (MiSTMA):**

The Chapter will hold its Annual Meeting and Field Day on June 26 at Birmingham Public Schools. Rob Carson, Sports Turf Manager, will host this event. This year's theme is the five fundamental cultural practices: mowing, fertilization, irrigation, aeration and topdressing. There also will be a tour of the facilities including Groves and Seaholm High School Fields and Stadiums.

For information on the Chapter or pending events, contact MiSTMA Headquarters at 517-712-3407, or email Amy Fouty, University of Michigan, at [fouty@umich.edu](mailto:fouty@umich.edu), or go to [www.mistma.org](http://www.mistma.org) to visit the chapter's website.

### **Wisconsin Sports Turf Managers Association:**

The Wisconsin Chapter is planning a major event for July 11. Morning sessions will be held at St. Norbert College. The afternoon events will be held at the legendary Lambeau Field.

For more information on the Wisconsin Chapter, or other pending events, contact Chris Brindley at 715-346-3622 or [cbrindle@uwsp.edu](mailto:cbrindle@uwsp.edu).

### **Minnesota Chapter STMA:**

The Minnesota and Iowa Chapters will hold their annual Chapter Clash on July 11 and 12. This year the events will take place in Minnesota. The MN Chapter's annual Tour on Wheels will be held on August 13 and will again incorporate a St. Paul Saints game.


For information on the Minnesota Chapter, or upcoming events, contact Jeff Hintz, Bethel College & Seminary, St. Paul, Minnesota at tel. 651-638-6075 or e-mail: [j-hintz@bethel.edu](mailto:j-hintz@bethel.edu).

### **Virginia Sports Turf Managers Association:**

The Virginia Chapter will meet July 15 and 16 at the University of Virginia. Join the "Tailgate Reception" on July 15 from 6:00 to 9:00 PM for a tour of UV's Scott Stadium and Harrison Field and the Harrison Field reconstruction presentation. Registration for the July 16 Field Day begins at 7:00 AM at Davenport Field. Educational sessions and demonstrations run from 8:00 AM to 4:00 PM. STMA President, Bob Campbell, CSFM, will be the featured speaker.

For information on the Virginia Chapter, or other upcoming events, contact: Bob Studholme, Fairfax County Park Authority via e-mail: [Robert.Studholme@FairfaxCounty.gov](mailto:Robert.Studholme@FairfaxCounty.gov) or 703/324-8590.

*continued on page 12*

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## Aerification Principles for Sports Turf

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**Grooving:** Grooving is obtained by vertical rotating power driven blades that cut continuous slits through the soil. These units can do considerable dethatching if blade spacing is close and are often used for renovation. Some systems provide opportunity to inject materials into the groove. Generally this practice is most effective with a slightly dry soil.

**Slicing:** Slicing is conducted by vertical rotating knives or discs that are not power driven and rely on equipment weight for penetration. These units do not dethatch but produce minimal disruption to the playing surface and can generally be used throughout the year. The soil should be moist for slicing and some units provide material injection.

**Spiking:** Spiking is accomplished by solid tines or flat, pointed blades that are not power driven and penetrate the turf and soil surface. The depth of penetration is generally shallow (1/2 - 1 inch). This is a mild cultivation practice and the effects may last for a few days and is sometimes used with reseeding. Since this practice produces little disruption it can be done throughout the year and is generally most effective in a moist soil.

**Sub-aerification:** Sub-aerification refers to subsurface cultivation by means of vibrating blades. The unit generally cuts slices into the turf on six to

eight inch spacing. The blades vibrate to shatter compacted layers and thus perform best in moderately drier soil. This equipment generally produces minimal surface disruption and some units have injection capabilities. If surface compaction is the problem, these units are not as effective as many other options.

**High pressure water or air injection:** These units use high pressure to force water or air into the soil displacing soil particles randomly. Like other systems that use vibration as a means of cultivation, these units perform best in a moderately dry soil. Both types of systems offer the potential to inject other materials into the soil, both are relatively slow, and both create a relatively small surface opening.

**Aerification timing:** Very little research has been done regarding cultivation and sports fields. Ideally timing should be based on the level of plant growth limitation, the effect on the playing surface, and scheduling. Timing generally coincides with the beginning of the more active growth periods. For cool season grasses, most cultivation is generally done early to mid spring and late summer to late fall. Warm season grasses are generally cultivated from early spring to mid summer. On severely compacted areas, more frequent cultivation may be needed. The larger the

continued on page 14

### CONGRATULATIONS TO OUR 5 NEWEST CERTIFIED SPORTS FIELD MANAGERS!

*James Sanders, CSFM; Parks Superintendent;  
Vail (CO) Recreation District*

*Richard D. Bold, CSFM; Superintendent/Parks;  
Glencoe (IL) Park District*

*Chris Calcaterra, CSFM; Complex Supervisor;  
City of Peoria (AZ) Sports Complex*

*Alan Siebert, CSFM; Complex Maintenance Supervisor;  
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*Darin Budak, CSFM; Parks & Landscape Supervisor;  
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## DOC'S DUGOUT - An Inning From Our Past

continued from page 7

to remove the soil and then were cut into small pieces and treated with various dosages of gamma rays from a cobalt 60 source. The dormant sprigs were exposed to 7,000 to 9,000 r of gamma rays and produced mutants. From a total of 158 mutants created in this manner and evaluated in the field, one looked promising, a mutant of Tifway and this one was officially released in April of 1981 for further testing and evaluation as Tifway II. Tifway II appeared to be similar to Tifway but possessed increased shoot density and could be used in moderate maintenance situations.

Dr. Glenn Burton turned 93 in May (2003) and continues to stay involved with the breeding work from his laboratory and office in Georgia. His contributions to the turf industry are incredible and, with the help of colleagues and staff in Georgia, two new cultivars were released during the 1990's. One was released for the sports turf profession, TifSport (1997) and the other for the golf course industry, TifEagle (1997). TifSport was released from the USDA and the University of Georgia as an induced gamma irradiated mutant from Midiron bermudagrass. It is reported to have superior cold tolerance, desirable turf texture and good turf density. The color and texture are similar to Tifway and Tifway II. TifEagle on the other hand is an induced mutant created by cobalt radiation of the Tifway II cultivar. This cultivar resembles other dwarfs in that it exhibits extremely fine texture and excellent turf density.

The early work of Dr. Burton is legendary as he was the first to create bermudagrass hybrids using intraspecific hybridization (crosses within the same species) utilizing two common bermudagrass parents, *Cynodon dactylon* x *Cynodon dactylon*. His pioneering work with intraspecific hybridization has influenced present day breeders to create some of the present-day cultivars such as the improved seeded bermudagrasses that are currently available for use by sports turf managers.

However, bermudagrass cultivars exhibiting the highest quality for the sports turf and golf course market continue to be the mutants created by irradiation or the interspecific hybrids, both of which must be planted and established by vegetative propagation (sod, sprigs/stolons, plugs) because they do not produce viable seed heads. The interspecific hybrids are produced by crossing two different species such as *Cynodon dactylon* x *Cynodon transvaalensis* and the new cultivar produced generally results in a superior turf of higher quality than the cultivars produced by intraspecific means. Burton's pioneering efforts in bermudagrass breeding have greatly influenced many of today's well known turfgrass breeders who continue to research and develop the new generation of both seeded and vegetative bermudagrasses for sports turf and golf. We are indeed grateful to Dr. Glenn Burton for his years of dedication and exhaustive work that has significantly contributed so much to our outstanding profession of sports turf. New grasses will come and go as science and technology change, but to understand the present and future, we must investigate the past.



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# Headquarters Report

by Steve Trusty, Executive Director

In the last issue of your newsletter, I noted your Headquarters staff would be making one last round of contacting non-renewed members. This has been completed. As part of the process, each non-renewed member was sent a survey form to give them an opportunity to let us know why they hadn't renewed. Of those who didn't just send in their dues but took the time to fill out the survey, 41% said that they had intended to and just hadn't gotten it done. Of those that were not renewing, 21% said that they were no longer in the industry. Eight of the individuals that responded had some level or item of dissatisfaction with STMA. While your staff and your board strive to provide good customer service and valuable member benefits, we all recognize that sometimes individuals are just not going to be satisfied. That sure doesn't mean that we aren't all going to try harder. In fact, a couple of the items of concern have been addressed and your board is working at providing new member benefits.

The largest percentage of those not renewing is due to budget cuts. 60% of those not renewing said that spending freezes or budget cuts would not allow them to maintain their membership. I know that many of you feel that STMA membership is too important and valuable to let it drop and, no matter what, you'll get your dues paid - even if it means paying them out of your own pocket. It's great that you recognize the value of your association.

For those that have received the cuts, maybe nothing else can be done at this time. For those of you that might be facing such cuts in the future, I have a suggestion. Be sure to continually let those that control the purse strings know what you get out of your STMA membership. Let them know how much you saved with a procedure you learned from contact with another member or at a conference. Let them know how you can use the Members Only section of the website to get answers to challenges.

Show them the new TURFBLAST. If you haven't seen TURFBLAST, you are missing out on another great member resource. So, if you haven't supplied your e-mail address to Headquarters, now is the time to do it!! The TURFBLAST is being sent out every other week. As this column is being written, the first has gone out and I have seen drafts of the next two. There is a lot of valuable information in the TURFBLAST.

Four or more weeks pass between my completion of this column and when you will be able to read it. One of the great things about the TURFBLAST is that it can be changed to be most current almost up to the point of clicking "SEND". If you have news that you feel should be gotten to members quickly, please contact Rich King or Boyd Montgomery, CSFM.

And, if there is anything else you know of that would make your membership even more valuable, let your Board Members or Headquarters know about it.

Another thing that you can do to help your association

become more valuable to you and others is to tell more people about STMA and encourage them to join. See the information elsewhere in this newsletter about the "Referral Bucks" program. This is a true win-win-win situation. You help STMA, a new member and yourself.

As the season moves forward, remember it's not too early to start taking pictures to have available for your Field of the Year entries.

Awards Program Booklets and Membership Directories are the next big publications projects for Headquarters to finalize after this newsletter goes out.

Until next issue, may the athletes that use your facilities feel that they are playing on the best playing surface in the country.



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## Chapter Events

continued from page 8

### Tennessee Valley Sports Turf Managers Association (TVSTMA):

The Chapter will meet at Bellevue Baptist Church in Memphis on July 18. In the planning stages is an August event at the Tennessee Titans Facility in Nashville.

For information on the TVSTMA Chapter, or upcoming events, call Chapter President, Bob Elliott, Tieco, at 800-239-9547 or Glenn Lucas at 800-837-8062; email to Glenn@tvstma.org, or visit the chapter's website: www.tvstma.org.

### Florida Chapter # 1:

The Florida Chapter will meet at the Seminole Indians in Hollywood, Florida on July 22. Education will include: Preparing fields for Year-Round Baseball and Irrigation Design for Sports Turf.

For information on the Florida Chapter, or pending activities, contact John Mascaro at 954-341-3115 or STMA@Turf-Tec.com.

### Nebraska Sports Turf Managers Association:

The Nebraska Chapter will participate in the UNL Field Day on July 22 beginning a 9:00 AM. Activities will include a tour of the UNL facilities and Haymarket Park and educational sessions with UNL speakers. Lunch will be served at the Memorial Stadium SkyBox. Pre-registration is required.

For information on the Nebraska Chapter, or upcoming events, call Loren Humphrey at: 402-461-2324 or email to lhumphrey@cityofhastings.org.

### Pacific Northwest Sports Turf Managers Association:

The Chapter will hold its second Annual Safeco Field Day on August 19. Rotating stations will instruct participants in turf management, infield maintenance and facility management. More details will be announced soon.

For information on the chapter or upcoming events, contact in Washington, Jay Warnick at JayW@Seahawks.com or in Oregon, Mike Wagner at MWagner@Oregon.UOregon.edu.

### Sports Turf Managers Association of Arizona:

For information on the chapter, or upcoming events, contact Chris Calcaterra at e-mail: chris@peoriaaz.com or tel. 623-412-4231 or Bill Murphy, at e-mail: bmurphy@ci.scottsdale.az.us or tel. 480-312-7956.

### Northern California Chapter of the Sports Turf Managers Association:

The Chapters' Annual Seminar on Wheels will be held in late August. Please email Emory Hunter at emhunter@usa.net if you have questions or suggestions about this program.

For information on the Nor-Cal Chapter, or pending events, call Janet Gift at 530-758-4200.

### Southern California Chapter:

For information on the Southern California Chapter, or pending activities, call Michael Tarantino at 858-679-2526 or MTarantino@powayusd.com.

### Georgia Sports Turf Managers Association:

For information on the chapter or upcoming events, contact Lori Turek at 770-509-3663 or gastma@earthlink.net.

### Indiana Chapter:

For information on the Indiana Chapter, or pending activities, contact Stan Moscrip, Indiana University, at 812-856-2256 or smoscrip@indiana.edu.

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## Welcome New STMA Members

*continued from page 5*

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**Don Robertson**  
Harpeth Youth SA  
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Gregory Parkes  
Buffalo, NY

**Jeffrey Sistek**  
PACE School  
Pittsburgh, PA

**Rick Stipcak**  
Student  
Josephine, PA

**Robert Trebilcock**  
Student/Michigan State University  
Muskegon, MI

**William Vulpis**  
City of Hollywood  
Hollywood, FL

**Bill Zuckerman**  
Harpeth Youth SA  
Nashville, TN

**Omaha City Parks**  
Omaha, NE

**Bob Pulskamp**  
Anderson Park District  
Cincinnati, OH

**Larry Robinson**  
Hamlin Turf Equipment, Inc.  
Osgoode, ON

**David C. Shaw**  
Marquette University  
Milwaukee, WI

**David L. Smith**  
Roberts Wesleyan College  
Rochester, NY

**Drew Sullivan**  
Dickens Turf & Landscape Supply  
Nashville, TN

**Ricky Triest**  
Tulpehocken Area School District  
Bernville, PA

**Norm Wills**  
Western Equipment  
Kent, WA

**Donald Patillo**  
Duraturf Service Corp.  
Richmond, VA

**Melissa K. Reynolds**  
Duraturf Service Corp.  
Richmond, VA

**Robert B. Schulte**  
Cedar Rapids Baseball Club  
Andover, MA

**Robert Shubert**  
Putnam Valley Central Schools  
Putnam Valley, NY

**Tom Stafford**  
West Coast Turf  
Palm Desert, CA

**Gary Taylor**  
School Board/St. Lucie County  
Port St. Lucie, FL

**Christopher Untiedt**  
University of Minnesota  
Duluth, MN

**Jeremy Wilt**  
Student/CalPoly University  
Los Osos, CA

**Pedro Perdomo**  
Rutgers University  
Perth Amboy, NJ

**Scott Roberts**  
University of Florida Athletics  
Gainesville, FL

**Nicole Schwehr**  
Bismarck Public Schools  
Baldwin, ND

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### CASH IN ON STMA REFERRAL BUCKS!

*From now through October 1st, every time your name is listed in the "referred by" line of a membership application, you will receive a coupon worth \$10 towards the purchase of STMA merchandise, reference materials, clothing, conference registration - or even your own membership dues!*

*Help YOUR Association GROW and reward yourself as well!*

## Chapter Events

*continued from page 8*

### Mid-Atlantic Athletic Field Managers Organization (MAFMO Chapter STMA):

For information on the MAFMO Chapter, or other pending activities, call the Hotline at 866-818-8873 or email Nick Gammill, CSFM, at [ngammill@american.edu](mailto:ngammill@american.edu).

### Midwest Chapter STMA:

For information on the Midwest Chapter, or pending activities, visit the Chapter's website-<http://mcstma.org>--or call Libby Baker at 847-263-7603 or email [Bake60ft6in@aol.com](mailto:Bake60ft6in@aol.com).

### Sports Field Managers Association of New Jersey:

For information on the New Jersey Chapter, or upcoming events, call SFMANJ at 908-730-7770 or Eleanora Murfitt at 908-236-9118; or e-mail to [HQ@sfmanj.org](mailto:HQ@sfmanj.org).

### North Texas Sports Turf Managers Association:

For information on the North Texas Chapter, or pending activities, contact Kathy Cassmeyer at 972-603-2869 or [Katherine.Cassmeyer@lmco.com](mailto:Katherine.Cassmeyer@lmco.com), or visit the website at [www.ntstma.org](http://www.ntstma.org).

### South Texas Sports Turf Managers Association:

For information on the South Texas Chapter, or upcoming events, contact Tim Loesch at 210-207-3734 or [TLoesch@alamodome.com](mailto:TLoesch@alamodome.com).

### Chapters on the Grow:

**New York:** For information on the chapter forming in Central New York, contact Kevin Meredith, National Soccer Hall of Fame, at e-mail: [Kevin@wpe.com](mailto:Kevin@wpe.com) or at tel. 607-432-2953.

## Aerification Principles for Sports Turf

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space created by cultivation, obviously the longer the growing period needed for recovery.

Another factor on sandy soil profiles is player stability. On sandy soils it should be recognized that most cultivation procedures will reduce field stability for a period of time. For example, any practice that cuts rhizomes and stolons late in a growing season may not allow for adequate recovery, resulting in an unstable surface.

Research by Murphy et al. (1993) on bentgrass putting greens compared hollow and solid tines and measured saturated hydraulic conductivity, and penetration resistance. They reported that hollow tines were more effective than solid in improving drainage in compacted soils. In non-compacted soils, there was no effect from aerification. Reductions in soil penetrometer resistance were obvious within one week of aerification and the effects lasted nearly three weeks. They concluded that regular aerification was needed to avoid soil compaction and that care is needed to avoid development of a compacted layer at the end of the penetration depth, specially for solid tine aerification. They further suggested that varying aerification depth should reduce the development of a compacted layer.

Research by Guertal and Han (2002) compared results on compacted and non-compacted bermudagrass sports fields

during one year. They used a 3/4" diameter hollow tine that penetrated eight inches once, twice or four times from July through April (once - July; twice - July and October; and four times - July, October, January and April). Using a penetrometer, they observed reduced compaction six inches deep for about three weeks after aerification on the compacted site. On the non-compacted site, one aerification was enough to relieve soil compaction.

Considerable research has shown that a "cultivation pan" will develop from consistent coring to the same depth and this appears to be more of a problem on finer textured soils.

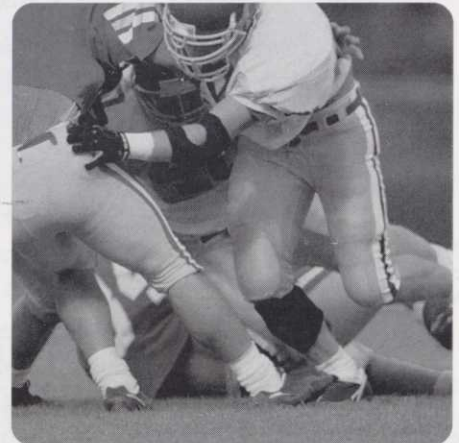
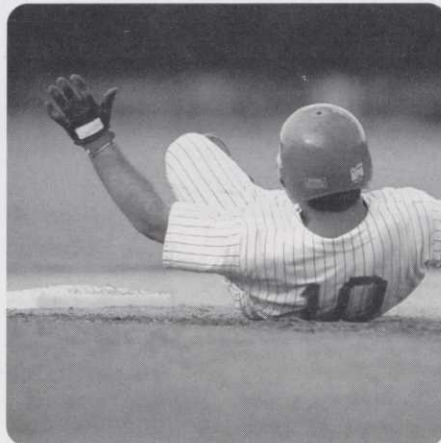
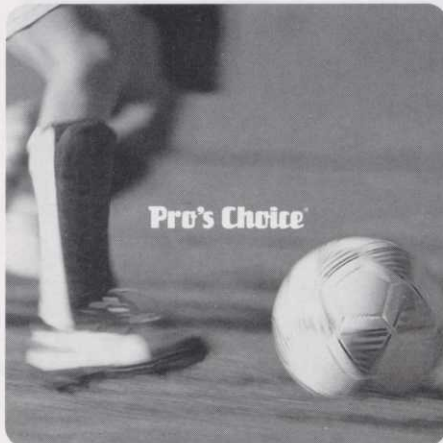
All aerification practices have limitations. It is up to the manager to properly identify the most limiting factor and select the best procedure to reduce the limitation.

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# YOUR BOARD MEETING REPORT

The STMA Board of Directors met at the Town and Country Resort & Convention Center in San Diego, California, on April 4th and 5th. This location was selected to familiarize the current Board Members with the site of the next STMA annual Conference, which will be held January 21 - 25, 2004.

The Board approved the minutes of the January 14th and January 18th Board Meetings and of the January 18th Annual Meeting. The Board reviewed and approved the Preliminary Financial Reports for the period ending March 31, 2003. The Board also reviewed and accepted the Committee Reports as submitted.

The Board reviewed and endorsed the Marketing Plan as presented by Co-Chairs Vickie Wallace and Mike Andresen, CSFM. Also approved were items for immediate marketing

focus: image enhancement, including the logo, tagline, statement and name; trade show exhibit redesign and database acquisition and website technologies. Funding was approved for these initiatives. (See the Marketing page on the STMA website for detailed information.) New initiatives of Chapter support, developed by Dave Rulli, Chair, and Abby McNeal, CSFM, Board Liaison of the Chapter Relations Committee, were reviewed and approved. Additional items of Board review included ongoing initiatives in website enhancement, membership, new-member mentoring, interaction with other green-industry associations, certification, awards, future Conferences and the SAFE Foundation.

The next Board Meeting will be held July 18-19, 2003, in Chicago, Illinois.



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