



GCSAA AFFILIATE

# Turf Times

Quarterly  
Oct., 1993  
Vol. 22, No. 12

The newsletter from the Northern Michigan Turf Managers Association

## NMTMA EXECUTIVE COMMITTEE

President  
Jeffrey Holmes

Vice-President  
Michael Morris

Executive Secretary  
Thomas J. Reed  
3733 Apollo Dr.  
Traverse City, MI 49684  
Phone 616-943-8343

Directors  
Kathy Antaya  
Jeff Dorrell  
Tom Heid  
Brian Holmes  
Kimberly Olson  
David Little, CGCS  
Jon Maddern, CGCS  
Michael Meindertsma  
David Pretznaw

Past Presidents  
Ed Karcheski  
C.E. "Tuck" Tate, CGCS  
David Longfield, CGCS  
Jonathon Scott, CGCS  
Tom Brogger

MTF Liaison  
Jon Maddern

GCSAA Liaison  
Jon Maddern

Newsletter Editor  
Michael Morris  
P.O. Box 1575  
Frankfort, MI 49635

## President's Message . . . A Fond Look Back



President Jeffrey Holmes

It has been a quick six years to serve on the Board of Directors for the Northern Michigan Turf Managers Association. I have truly enjoyed the challenge and can't believe that the time has passed this quickly. I'm not sure if it's "the older I get the quicker time flies" or "the busier I get the quicker time flies." Nonetheless, it has gone by.

My time as a board member, and as president, has been nothing but rewarding. Being an active member of the association has opened several doors to new opportunities. The goals and opportunities are as broad as your imagination and commitment to accomplishing the task. Obviously, this is a non-paying job monetarily,

but there are fringe benefits if you look at it properly. What I mean by fringe benefits are your learning experiences, contacts that you make with other people, and many other situations that you expose yourself to.

I have certainly had the pleasure of working with many active and creative board members. These people have been dedicated to accomplishing goals and help to drive one another toward completion of the task at hand. All members can't serve on the board of directors at one time. However, you can be an active member and a strong part of the association by attending as many meetings as possible. It is beneficial to all of us when we have more member participation in the monthly meetings. When more people are present it makes for more sharing of information. When we have a guest speaker addressing our group, then there are more of us to leave with the information that we need to be better educated and up to date.

Thanks again to all of you for being a professional group. It has been a pleasure being the President of this association and working with the board to keep our group active and focused.

*Jeffrey Holmes, President*

## Inside This Issue:

	Page
Assistant's Perspective .....	2
Mechanic's Corner .....	3
NMTMA/MMTMA Christmas Party .....	4
New Edition of a Classic Turf Book.....	4
GCSAA Seminar Announcement .....	4
The Superintendent's Importance During Construction .....	5
GCSAA Delegates Meeting Report.....	6
Thoughts on the GCSAA.....	7
A Stress Reduction Plan.....	8
GCSAA News Releases.....	9-10
Pesticide Applicator Training Seminars.....	10
Welcome to New Members.....	11
Illinois Turfgrass Foundation announces Educational programs .....	12
Fertilization - Fall & Late Fall Style .....	13
Audubon Coop. Sanctuary Program.....	15
Maximizing Snow Mold Control.....	18
Calendar of Events.....	20



RECYCLED PAPER

# Yamahaulalotastuff.

**The only utility vehicle tough enough to carry the Yamaha name.** If you're looking for a utility vehicle you can truly utilize, look to us. The convertible bed gives you the flexibility you want, while the heavy duty construction and the O.H.V. four-stroke engine give you the dependability you need. Give us a call for more information. We'll get you better acquainted with the utility vehicle whose name says it all.



**Boylan Sales, Inc.**  
P.O. Box 358  
Plainwell, MI 49080  
(616) 685-6828

**Burlington Golf Car Distributors**  
149 N. Perry Street  
Pontiac, MI 48058  
(313) 338-0425

## *Assistant's Perspective – Reflections*

*By Kevin Kehoe, Assistant Superintendent, Elk Ridge Golf Course*

Assistants as well as Superintendents play very diverse roles in their professions. I find myself dealing not with CEC's, percolation rates, and resistant dollar spot, but instead playing the nurse, good boss, bad boss, psychotherapist, confidant, mother and brother. I don't remember taking these courses in the turf program. Dealing with personnel is the single greatest challenge facing us in this business. People have come to me and asked to go home because they THINK their girlfriend is getting ready to break up with them. I usually tell them gently and soothingly to get their behinds back on the golf course or we are DEFINITELY breaking up our relationship. After all, we all have personal problems but I also have greens to mow, bunkers to rake, leaves to rake and elk tracks to repair away on #12 green. Get a grip! Life is brutal!

As an Assistant, another problem I face is the heat my boss takes from other Superintendents regarding my fairly liberal work schedule. See, my boss and I had been alternating weekends, and some of his peers figure any assistant who doesn't work 185 hours a week is not worth his weight in Milorganite. You guys, and you know who you are, had better lighten up on Jon or I'll call your assistants and tell them what a raw deal they've been getting. I'm even tempted to start a new organization, the G.C.A.S.A.A.! Or maybe a union. I've been contacted by the Teamsters and they would love to take us on. Can't you see it? Assistant Superintendents Local 169!

During my construction days I often found amusement

getting in the middle of that love triangle between the architect, the contractor, and the Superintendent. To keep everybody happy is truly a lesson in diplomacy. Usually it's the old adage "what they don't know won't hurt them." In one instance we had completely prepared a greens complex and were ready to pound in the seed, after weeks of perfecting to the architect's standards. The architect shows up and says, "This is great, but can we tweak this a little more and saddle that out a little less?" The Super. says "Yeah, sure we can. We'll get right on it." And in the same breath turns to me and whispers "Seed it!" I seeded.

On another green we were having trouble eliminating an unacceptable 6% slope. After a whole day of working on it with a backblade, we still had it at no less than 5% slope. Well naturally the architect comes up and says "This looks great. Are we under three percent?" Somehow "yes" came out of my mouth and the superintendent says nothing. After the architect left I pleaded with the superintendent that that was the end of my career, he would surely know when people started putting their ball off the face of the earth! "Don't worry," the sup. says, "we'll mow this one at a quarter of an inch."

Then there is the divotless tee story, but I don't have time right now. Someone just ran their Cushman into a tree and needs an ambulance. And this other lady's brother's wife's stepmother's niece is having a baby so she needs a week off so she can watch the dog. I wouldn't trade this job for all the tea in China - especially up here in God's Country!

## Mechanic's Corner

By Roger Smith, Equipment Technician, The Meadows Golf Club

Being new to the field of golf course maintenance, I am fascinated by the complexity, precision and variety of specialized machines. The rough ground conditions of our new course takes its toll on all equipment, and constantly changing cutting heights (H.O.C.) complicates matters. Sometimes it's a challenge just to get all the equipment ready at start time! One thing I've found that helps control the morning chaos is tagging all equipment. Most people already use "Do Not Operate" tags for broken equipment, but now I tag equipment after it has been serviced. The tag says ready and states H.O.C. for mowers. It may also have "Check Fuel" if I'm too busy to fuel equipment in the morning. These tags are removed by the operator and reused the next day. The tags leave little room for error and seem to minimize those all-too-frequent questions, "Hey, is this my mower?" and "Is this machine ready?"

## Letters to the Editor

You can communicate directly with the NMTMA and your fellow members by writing to:

### Turf Times

c/o Mike Morris • P.O. Box 1575 • Frankfort, MI 49635

Share your thoughts and feelings about our organization or the industry in general.

When It Comes to Turf Management ...

NOBODY KNOWS  
LIKE YOUR  
WILBUR-ELLIS PRO



Your one-stop shop for all turf management needs. Ask about our complete line of chemicals, fertilizers and seed.

Wilbur-Ellis... dedicated to quality, customer service and environmental stewardship.

Brian Anderson  
1 (800) 873-5599



Their Approach  
To Boosting Potash.



Our Approach  
To Boosting Potash.



Improved disease tolerance. Enhanced drought resistance. And a complete, balanced feeding. In a homogeneous mixture to ensure uniform nutrient distribution. Country Club 8-4-24 simply outdistances the competition.

Country Club  
8-4-24 

Distributed By  
**Tri-Turf**  
Traverse City, MI  
(616) 943-8343

Product Sales Manager  
**Randy Rogers**  
Michigan  
(313) 673-7146

• FLORIDA • GEORGIA • ILLINOIS • INDIANA • KENTUCKY • MICHIGAN • WISCONSIN •

## GOLF'S IRRIGATION PROFESSIONALS

How CRA Helps Superintendents:

- ✓ Complete stock of Irrigation supplies
- ✓ Water conservation analysis & troubleshooting
- ✓ Assistance in pumping improvement and pumping cost efficiency
- ✓ Drainage solutions
- ✓ Fountains • Aerators • Pump Management
- ✓ Improvements of energy-usage cost
- ✓ Technical Assistance

**CENTURY RAIN AID**

FREE CATALOG!  
1-800-347-4272

Ann Arbor, MI 48104 2461 S. Industrial Hwy. (313) 668-1020 Fax (313) 668-7143	Grand Rapids, MI 49512 4620 40th St., S.E. (616) 954-0660 Fax (616) 954-0664	Madison Heights, MI 48071 31691 Dequindre (313) 588-2990 Fax (313) 588-3528	Southfield, MI 48034 22159 Telegraph (313) 358-2994 Fax (313) 358-1022
--	---	--	---

• FLORIDA • GEORGIA • ILLINOIS • INDIANA • KENTUCKY • MICHIGAN • WISCONSIN •

• FLORIDA • GEORGIA • ILLINOIS • INDIANA • KENTUCKY • MICHIGAN • WISCONSIN •

# NMTMA/MMTMA Christmas Party. . .

**MARK** your calendars, the annual NMTMA/MMTMA Christmas Party will be Saturday, December fourth at Garland Resort in Lewiston. Our hosts are Dave and Carrie Longfield.

This is the last official association event of the year, and it is a great way to start the festive holiday season. Invitations will be coming out soon.

Garland will be decorated for the holiday season like few resorts can. The charm and atmosphere is like no other. Other activities available at Garland (weather permitting) are: indoor pool, outdoor hot-tub, cross-country ski trails, ice skating, curling, ice fishing and sleigh rides.

Great rates on lodging for this event have been given. So please make plans to attend this gala holiday event.

## GCSAA Seminar Announcement. . .

### *Developing and Maintaining Effective Management/Employee Relationships*

**DATE:**

November 16-18, 1993

**LOCATION:**

Lansing, Michigan

**FACILITY:**

Sheraton Lansing Hotel

Telephone registrations by credit card are welcome.

For more information or to register, call:

**(913) 832-4444**

**FAX: (913) 832-4449**

## *New edition of a classic turf book, Management of Turfgrass Diseases, now available*

Completely revised and updated, *Management of Turfgrass Diseases, 2nd Edition*, by Dr. Joe Vargas, Jr., Michigan State University, is now off the press. An international lecturer, instructor and consultant, Vargas provides the latest information on maintaining healthy turf and identifying turf diseases.

*Management of Turfgrass Diseases, 2nd Edition* covers cultural, genetic, biological and chemical approaches to turf management, and also provides practical solutions to everyday problems. Fungal, bacterial and viral diseases, black layer disease, and diseases caused by nematodes are addressed for all major grasses. The book covers cool and warm season grasses, growing conditions, new diseases and symptoms. In addition, the book covers identification and integrated disease management techniques.

Utilizing over 70 4-color photographs and more than 100 black & white photographs, *Management of Turfgrass Diseases, 2nd Edition* provides valuable tips on irrigation, fertilization and grass culture. The book uses both standard and metric units throughout, and contains an extensive glossary.

The book is a valuable reference for golf course superintendents, lawn care managers, lawn spray applicators and landscape managers, as well as serving as a textbook for all turf programs.

*Management of Turfgrass Diseases, 2nd Edition* is available for \$59.95 from Lewis Publishers, 121 South Main Street, P.O. Box 519, Chelsea, MI 48118, (800) 272-7737 (within the continental U.S.) or (407) 994-0555 (outside the continental U.S.).

# The Superintendent's Importance During Construction

With the boom of golf in Northern Michigan I am amazed at the courses that are built without one important step. Now my next statement may be looked at as one-sided or trying to promote my profession, but this important step is the hiring of a golf course superintendent, and having him/her on board during the entire project. See, I told you, but please read on as I justify this statement.

A superintendent is a very important part of the course and should be able to save a developer or owner enough money to more than cover his salary. He should be overseeing all construction and giving input on key construction issues that come up, ie. soil mix, bunker sand, drainage, irrigation, mounding, bunkering, cart paths, etc. All of these are easier to do in construction stage versus coming back after it is grown in and open to golfers. Examples: greens with undulations too severe to mow or clean up rings too sharp where mowers wear turf out. Do you want collars? If so, how wide? Irrigation: is entire area you want green covered or is installer just going off print? Drainage: have you run into an area that was not seen on topo. map? Greens and tees that do not receive enough sunlight or air movement, yes you can grow grass on them until you take height down or put traffic on them. Who maintains the turf once seeded, who fertilizes it, determines when to cut and how high, who topdresses greens to smooth them for play, and who puts it to bed for winter?

All of the above are responsibilities that a superintendent is responsible for and inherits when he/she is hired. As we all know, the cost to do it a second time is far more than doing it right the first time. Now, by no means am I suggesting that a superintendent is god. If he/she is good he/she is a team player and understands his/her role. The superintendent should express his/her opinions and concerns and be able to give facts and answer questions from a maintenance point of

view. But a superintendent is someone who is hired to maintain the property after it is done and who has to live with it day and night forever. The architect and contractor are gone to another project and using what they learned from your job. The superintendent is there to see first hand how things were done and to make notes on important items. He can be responsible for seeding greens and tees once the contractor has them finished.

I know the statement "It's expensive to build a course" and to hire a superintendent this early - it's not cost effective. Well, consider that building a golf course is like starting a sports team - you can't have an arena without players, can you? What does he do in the winter? Get things ready for spring or opening the course. This includes education, developing a budget, staff requirements, policy book, forecasting inventories, designing a maintenance facility, putting on blueprints notes of things seen or done during construction for an as built drawing. They can also help out during golf shows, promoting the golf course, handing out literature and talking to potential golfers.

The last item I will bring up is the personal satisfaction a superintendent gets from being involved from the beginning, working with everyone and working on the construction himself when the seed comes up and it matures each day and each day they can see more and more fruits of their labor and the pride that they can take in that. It's more than you can imagine and more than you get once it's open to golfers who can tear it up in a day. I write this article having come into a project after it was started. Did the owner make a wrong decision? Did he have this information to make a decision? The answer to both is NO. These facts need to get out and I hope this helps.

By Jon Maddern



(517) 864-3549

- Quality Sod
- Shade Mix
- Bluegrass Blend
- Northern Mix

- GOLF GREENS MIX
- SHADE TREES
- BULK HORTICULTURAL PEAT MOSS

## Tee Time® Quality Turf Care Products



- Greens Grade Fertilizers with Nutralene
- Fairway Fertilizers with Nutralene
- Quality Sulfur Coated Area Fertilizers
- Combination Products
- Granular Insecticides
- Granular Fungicides

Distributed by :



TURFGRASS, INC.  
P.O. Box T  
28064 Pontiac Trail  
S. Lyons, MI 48178

Call Toll Free:  
1-800-521-8873 or  
(313) 437-1427  
(Call Collect)

# A report on the GCSAA Delegates Meeting.

By Jon Maddern

Many of you are not aware that in May a letter was received from Randy Nichols, President of the GCSAA. It asked each chapter to send a representative to a special meeting at GCSAA headquarters to discuss several key membership issues related to possible future directions for the association. I was asked to attend, and the meeting took place September 25-26.

The meeting started with 66 of 113 chapters represented. We were welcomed by President Nichols, who updated us on GCSAA, including the resignations. He explained his reasons for hiring Arthur Anderson to study the staff at headquarters. He stated that because of 3 new board members and no information from previous administrations, they didn't know what was going on. The board had also been threatened with a lawsuit to know the salaries of top management. So they hired the Anderson Company to do a high level review of GCSAA business processes, complete a salary survey, identify underlying reasons for personnel turnover, and to assess the GCSAA organizational structure. The Anderson Company interviewed 25 staff members for 2 1/2 hours and all other staff members were given a questionnaire to fill out. They were not signed and no one, including Randy Nichols, was to know the matters covered in interviews or saw results of individual questionnaires. The cost of this study was \$24,000.

At the May board meeting, the results were presented to the full board. The main results of this were the reorganization of the office and employees. It recommended hiring a Chief Executive Officer and a Chief Financial Officer, each of whom would report to the board. It also recommended eliminating the staff attorney and to hire a human services director. Bill Roberts expressed his disapproval of this recommendation and said lawsuits would probably result if this was done. He also said it was not proper nor needed, and raised some questions that were not answered. The board voted 8-1 to move forward with this. Bill resigned from the board shortly afterwards. The executive committee met with John Schilling a week later to discuss this study and start implementation.

In early June, Robert Ochs was released from his duties. Also at that time, Diana Green was offered the Deputy Chief Executive Officer's position with conditions. She was given time to think it over. At the PGA tournament John Schilling asked to meet with officers and informed them of his resignation. Diana resigned a week later and has left. John will stay on through conference until January.

The board is in the process of looking for a new CEO as well as a CFO. Both will be in charge of hiring their deputies. I brought up the question of legal counsel, to which Randy replied that he had hired an attorney in Atlanta, because he knew he would be having many discussions and wanted an attorney nearby. The executive committee is interviewing other law firms. The advantage of having a law firm is that there are attorneys who deal in specific issues, ie. taxes, personnel, etc.

The international office and show were discussed. Many rumors were around. The office is not being closed, however it is being scaled back as the person who is running the

office is coming back to the states. The reason given was that it is too expensive to live there. We are negotiating with Con-Ex to merge the office and shows. This would please vendors as this would eliminate two shows within a week of each other. A question about the number of members was brought up. There are at least 360 Class A members and most new applications are from foreign countries. We were asked if we knew that *Golf Course Management* is printed in Japanese and is about to be printed in Spanish. The costs for this are covered in their dues and advertising. An idea of setting up a separate division for international members so we could see how their costs are being covered was brought up.

We then went on to discuss various proposed bylaw changes. Most of these were language changes. One change was adding Class C members, which would be Assistant Superintendent, but with voting privileges. Another was adding Class D1 through D6, which would be the following: D1 - Golf Turf Manager; D2 - Equipment Manager; D3 - Foreman; D4 - Irrigation Technician; D5 - Spray Technician; and D6 - Maintenance Staff Member. Another important change was to change the Articles of Incorporation, Article VI, Section 3 to add something along the lines of : D - Anything that will cause the indebtedness of future Boards of Directors must be passed by a two-thirds majority of the Board of Directors.

A seed was planted on Saturday by President Nichols to have chapters pay dues. On Sunday this issue led off. Many ideas and comments were aired, some good, some bad, some right, some wrong, but nothing concrete enough to report on. We were asked to survey our chapters and find out what GCSAA can do for us and to get this information in ASAP (our information has been given).

From that we went into the future initiative/direction of GCSAA. They asked us for our ideas for the future, which caught most of us off-guard as we were expecting to be told the board's ideas for the future. The overseas office was brought up again. Also discussed was improving our image, advertising on major tournaments, improving member services, ie. credit unions and other services. The board was told that making money is important to run the association but that services to members were more important.

Discussion was given about a future bylaws change that would limit the President's powers. With that we were thanked for coming. The board said they hoped these meetings continue so they can know the feelings of members without the pressure of conference time.

I would like to thank this association for their support in having me attend this meeting. I think it was important to show our presence and not just sit back. I also think the letter will be a big help also. If anyone has any further questions or comments please feel free to contact me. I will try to answer them.

Jon Maddern

# Thoughts on the GCSAA

By Michael Morris

*Editor's Note: The following letter was recently presented at GCSAA HQ during a GCSAA Chapter Delegates Meeting.*

At an open round table discussion last March, several NMTMA members voiced their thoughts about GCSAA. Here is a brief synopsis of that discussion.

## GCSAA CERTIFICATION:

Though the owners of a golf club or course perceive certification as something valuable, we feel that there is nothing tangible to be gained by being certified, for the superintendent or the club. Certification is a costly commitment for any person or club, an expensive way of insuring continued education. Certification doesn't really help a superintendent in his current position; rather it only hurts a superintendent who is not certified and looking for a job. There is no real substance to "Certification"; someone who isn't certified may be more professional and qualified than many who are certified.

## SINGAPORE:

Why? We feel that there has been little communication to the members who help support this venture regarding its conception and intended benefits for the membership. Members were not considered in the decision to embark on this venture. What is the return to GCSAA members? Could this money be better spent for continuing education programs at home?

## REGIONAL OUTREACH AND COOPERATION

The GCSAA too often repeats efforts already being done in the industry; ie. publications, "Turf Tips" at the national conference (which the USGA already does).

The thought of regional directors for the GCSAA would be great for visitation and outreach to local chapters. However, there is already a regional program for golf courses through the USGA Turf Advisory Service. We encourage you to work with the existing outreach programs, adding to the superintendent's resources rather than competing and watering down the market.

At all costs avoid spending money on duplicating research projects, and promoting projects that involve a conflict of interest.

## MECHANIC'S GROUP:

Your attempts at putting together a mechanic's program at last year's conference was unadulterated salesmanship. Almost no useful information was presented for the mechanics, rather most of the time was spent trying to organize a national group requiring mechanics to meet in one location - at the course's expense - and to become "certified". This type of centralization is a waste of time, energy and money. Many courses sent their mechanics to your program and got nothing except a sales pitch.

## NATIONAL PROMOTION OF G.C. SUPERINTENDENTS

GCSAA efforts in this area have been weak at best. Our television ads are not shown enough, nor do they educate the listener about our job; all fluff. Compared to what the PGA does, we appear to be the second rate professional on the course. More needs to be done in this department. How about a national golf tournament-an open-which raises money for research and at the same time publicize our profession?

The  
*Spirit*  
of Competition

**TORO**

**YOUR COMPLETE LINE OF IRRIGATION  
PRODUCTS AND SERVICES**

THE LEADER THAT WORKS  
FOR YOU

90% OF ALL AUTOMATIC GOLF COURSE SYSTEMS  
IN WESTERN AND NORTHERN MICHIGAN ARE

**"TORO"**

THE **RIGHT** CHOICE!

**Spartan Distributors, Inc.**

487 W. DIVISION ST. • P.O. BOX 246 • SPARTA, MICHIGAN 49345

**616-887-7301**

*Are your needs as a Superintendent  
supported by your board/owner/manager?*

*Do you have a clear financially-defined vision  
of where you and your facility will be in five years?*

Financial analysis  
operating budget  
5 year capital improvement plan  
10 year capital equipment plan  
environmental compliance  
turfgrass management  
renovation

*Advice that supports the long-term goals  
of the Golf Course Superintendent.*

**Tom Mead Inc.**

Golf Course Consulting

10783 S. Dalzell Road, Traverse City, Michigan 49684  
616-929-1213

# A Stress Reduction Plan



Kathy Antaya

After reading a brief article on job stress, I had no trouble believing that the stress level for a golf course superintendent ranks among the top six professions. These include police officers, fire fighters, emergency room personnel, prison guards and air traffic controllers. While our jobs don't normally involve life and death situations, superintendents are constantly bombarded with

numerous problems that require our attention. These small (and not so small) problems add up over time and can create the Atlas Syndrome - a feeling of carrying the world on your shoulders.

Stress build-up starts first thing in the morning when a staff member calls in sick, equipment won't run properly and you spill coffee on yourself. It continues during the day with equipment breakdowns, jobs taking longer than expected and unpleasant meetings with greens committees, general managers, golf pros or the DNR! Later in the day you find disease outbreaks, wilted turf, cart damage from careless golfers and hand tools forgotten at job sites. Arriving home after work you find that the cat barfed on your carpet, the newspaper landed in a puddle, your lawn is infested with weeds and bills need to be paid. What a day (In actuality, this would be a low stress day for me)!

So what can one do to eliminate these situations? We can't get rid of all the problems, but we can change our *reactions* and do things that we enjoy to eliminate the stressed-out feelings.

Begin your stress reduction plan by removing obstacles. Personnel problems? Gather your staff together for a meeting and let 'em have it. Clarify your policies, give real examples of problem behaviors/attitudes, set your standards and expectations and define the consequences (i.e. work or get fired). Be certain to end the meeting praising them for the good work they have done.

Step two of your plan involves reducing the problems that reach you. Delegate responsibility wherever possible. For example, when installing drain tile, I delegate a "chief" to lead the crew. The crew chief organizes equipment and supplies needed, assigns tasks and approves each step of the project. He/she also gives you feedback concerning reasonable completion deadlines and unexpected problems. There are three very important aspects to delegation of specific tasks: 1) thorough definition of the job, including why they were chosen as chief, what you are trying to accomplish and how to know when it's done, 2) give the crew chief authority to make field changes and to run the crew, and 3) allowing the crew chief to make mistakes (but then fix them). Delegating authority takes some practice before it significantly reduces your stress. With the possible exception of your assistant, no staff member is as

educated, experienced, or dedicated as you. Allowances must be made for these factors. I am a perfectionist, but if I were to hold my staff to this goal, they would be miserable from continuous criticism and unable to complete any task in a timely manner.

Your third step is mental adjustment. Don't expect everything to be done perfectly every time. Setting high standards is good, but life gives you imperfect conditions/people/equipment/supplies and you must be realistic. Don't let the small problems build up. Say something before you explode. Another mental adjustment involves your "to do" list. Don't expect to finish every item every day. Remember, the world keeps turning even when you don't place that order or make that phone call! One of my favorite mental adjustments involves our internal tape recorder. Every day we repeat to ourselves certain messages. We've done it for so long we no longer consciously hear it. Usually these messages are negative: "I have too much work and not enough time," "The golf course looks terrible," "I'll probably hit this ball into the water." We need to replace the negative with positive and do it regularly and consciously: "One person can only do so much," "The fairways look great now that we overseeded them," "I know that if I relax and swing easy I can reach the green." In other words, pat yourself on the back; you are a valuable and worthwhile human being. My final suggestion for mental adjustment is laughter. Research has determined that laughter can reduce blood pressure, heart rate and stress levels. I listen to my staff at break times - their conversations never fail to crack me up. Laugh at the funny mistakes your staff makes. Tell funny stories about your own mistakes - the crew appreciates hearing about your errors and you will learn to forgive yourself for not being perfect. Don't take yourself or your job too seriously and you'll find plenty of opportunities to laugh.

My final stress reduction suggestion is to do more of what you like. Frustrated with the paperwork that university employment requires, I'll grab a shovel and dig trenches or spread sand with my staff. I enjoy physical labor and sometimes wish I was still on the crew (wouldn't that be great? No responsibilities, just do what you're told). Schedule time off for yourself during the summer. I've found it useless to try to leave early unless I've put it on my calendar. Take a long lunch and visit another course. You could play golf or just ride around with the superintendent. Of course you must make some time for non work related activities. Schedule more time for family & friends; play your favorite sports; go boating or fishing; the list is as diverse as we are. What you do doesn't matter; what's important is that you enjoy it.

Our lives are filled with stressful situations. Excessive stress can affect our health, damage our relationships and make us miserable. You must eliminate some stressful situations, reduce the problems that reach you, change your reactions and attitudes and make time for enjoyable activities. These techniques worked for me. I feel more enthusiastic and have more energy than I've had in years.



# GCSAA News Releases

## ***New fund helps GCSAA members in need***

A new fund created by the GCSAA S&R Foundation will offer emergency financial assistance to members who are suffering personal losses resulting from natural disasters like the recent Midwest floods.

"This is a significant new benefit for our members," said GCSAA President Randy Nichols, CGCS. "Superintendents have always banded together to help when disaster strikes. This fund will allow us to offer help to our colleagues."

The GCSAA Emergency Assistance Fund is designed to provide an immediate grant of up to \$250 to GCSAA members who need short-term financial help to compensate for personal losses resulting from a disaster. "It's setup with floods, hurricanes, earthquakes and tornadoes in mind," said Nichols. "We want to help GCSAA members and their families cope with the personal challenges created by these human tragedies."

The board of directors voted unanimously to establish the fund with a \$5,000 "seed" gift and a number of chapters are planning gifts to supplement the fund. In the meantime, the GCSAA S&R Foundation is urging individuals and companies to make "one-time" gifts to build the fund. "Our goal is to raise about \$20,000 for this to make it a permanent fund that carries over from year to year," said Nichols.

To apply for emergency funds, members should contact their chapter presidents or call GCSAA Scholarship & Research at (800) 472-7878.

## ***New GCSAA members to receive free conference registration***

LAWRENCE, KS, August 27, 1993 - The board of directors of the GCSAA has announced a plan to offer new GCSAA members complimentary conference registration during their first year of membership.

"This complimentary registration program allows current members and chapters a very easy way to promote GCSAA membership," said GCSAA President Randy Nichols, CGCS. "What better way to promote membership and association programs than through our conference and show?"

The complimentary registration program is available only to first-time GCSAA members. Prospective members have until December 31, 1993 to sign up for GCSAA membership and receive one complimentary registration. Reinstated members are not eligible for the complimentary offer. The program is good only for GCSAA's International Golf Course Conference and Show.

GCSAA's 1994 International Golf Course Conference and Show will be held January 31 - February 7 in Dallas, Texas.

For further details, call GCSAA's membership department at (913) 832-4480.

## ***'94 GCSAA Golf Championship heads to Austin***

The GCSAA has announced the lineup of golf courses for the 1994 GCSAA Golf Championship.

Four challenging and adventurous golf courses will test a field of approximately 480 during the 44th annual championship.

The host courses for GCSAA's championship are Austin Country Club, Barton Creek's Crenshaw/Coore Course, Circle C Golf Club and the Hills of Lakeway.

Austin Country Club, a course that features two contrasting styles, was designed by Pete Dye. The front nine resembles a links-style course, while the back nine is routed through heavily wooded hillsides. Bill Hanna is the Golf Course Superintendent at Austin Country Club.

Austin Country Club is also the home of legendary golf teacher Harvey Penick.

Barton Creek Conference Resort and Country Club has three courses. GCSAA competitors will play the course designed by Ben Crenshaw and Bill Coore. Dale Miller is director of golf course maintenance at Barton Creek.

Circle C Golf Club, which opened in 1992, was designed by Jay Morrish. Although Circle C does not feature elevation changes as drastic as some courses in the area, it is rapidly earning respect for its challenge and design. Matt Linscott is the golf course superintendent at Circle C.

The Hills of Lakeway was designed by Jack Nicklaus, who was heard to say on his first visit to the site that it was "One of the finest pieces of land on which to build a golf course that I have ever seen." Greg Hinton is the superintendent of golf course maintenance operations at The Hills of Lakeway.

A more thorough look at the 1994 GCSAA Championship courses is included in the September 1993 issue of *Golf Course Management Magazine*.

The tournament will precede GCSAA's 65th International Golf Course Conference and Show in Dallas. Details about entering the tournament were included in GCSAA's Dallas conference and show Early Bird Brochure, which was mailed to GCSAA members on August 1.

## ***"Members' Mailbag" column in GCSAA's Newslines***

As you are probably aware, GCSAA recently launched a column in *Newslines*, our members-only newsletter, to provide a forum for members to ask questions and voice their comments about GCSAA programs and activities. GCSAA's board of directors initiated this "Members' Mailbag" column in response to numerous requests from members.

However, to-date we have received only two letters: one about cart restriction policies at GCSAA's annual golf tournament and one about our merchandise prices.

I feel certain that our members have many more questions and comments on their minds, especially during these times of serious decision making about the future we each envision for our association, our profession and our industry.

That is why I'd like to ask your help in channeling these important questions, concerns and opinions to this nationwide - indeed international - forum for GCSAA members.

GCSAA's board of directors would appreciate your bringing this subject up in your next chapter meeting and encouraging members to jot down their comments and questions and sending them to "Members' Mailbag" at GCSAA Head-

*Continued on next page*

## ***Pesticide Applicator Training Seminar - Become an "approved t***

The Michigan Pest Control Act (Act 171) has been amended with Regulation 636 and was effective on January 1, 1992. A major portion of this regulation is the creation of a new class of pesticide applicators called "Registered Technicians". It specifies that all commercial pesticide applications must be performed by either a certified applicator or a registered technician. It also includes procedures for certified applicators to become "Approved Trainers" of registered technicians. This seminar is designed to comply with Regulation 636 and upon completion eligible persons will receive their "Approved Trainer" credentials.

### **COURSE PROGRAM**

This course was developed by the MSU Pesticide Education Program in cooperation with the Michigan Department of Agriculture (MDA). Speakers include personnel from the MSU Pesticide Education Office, Ag & Extension Education Department, and specialists from the MDA. Some of the topics covered in the seminar include the following:

- Laws and regulations concerning training and certification.

- MDA training program requirements.
- Procedures for record keeping
- Introduction to training material
- Adult teaching techniques
- How to teach the core training manual

### **ELIGIBILITY**

In addition to attending this seminar, you need to compile two years of experience and be a certified pesticide applicator to become an "Approved Trainer". The MDA will issue certificates at the end of the seminar to those who are eligible, or will forward the certificate when all requirements are satisfied. If you would like additional information on the legal requirements for trainers of registered technicians or have questions concerning eligibility, call the Michigan Department of Agriculture at (517) 373-1087.

### **REGISTRATION**

Please register in advance as attendance is limited to the first 50 people at each location. The registration fee of \$50 includes training materials, a *Commercial and Private Pesticide Applicator Core Manual*, a course certificate from

## ***GCSAA News Releases . . .***

*Continued from previous page*

quarters. And if you receive a letter that would be appropriate for the membership to know about, we would be grateful if you would forward it to "Members' Mailbag".

Please remind your members that we can accept letters or faxes, but we can't publish anything received by phone. We will withhold names upon request, but letters have to be signed to be considered for publication. We do this to ensure that the question/comment is from a member rather than an outsider and that it is reported exactly as received.

Each of us on the current board of directors also feels strongly that our greatest strength lies in the participation of our members in determining our direction for the future. We seek your assistance in engendering greater participation.

On behalf of GCSAA's board of directors, I thank you for putting your professional leadership to work in this important endeavor.

### ***Toro to sponsor GCSAA fellowships named for Dr. Jim Watson***

LAWRENCE, KS, October 8, 1993 - The most outstanding scientists and educators of tomorrow will receive encouragement and recognition through a new fellowship program named for a green industry legend.

The Toro Company has agreed to fully underwrite the Dr. James R. Watson Fellowships, a new GCSAA S&R program designed to identify the best and brightest new researchers and instructors related to golf course management. The Minneapolis-based equipment manufacturer has agreed to a

minimum of \$100,000 in support over the next four years, and senior company officials say they hope to make the commitment ongoing.

Ken B. Melrose, chairman and CEO of the Toro Company, said, "We are delighted to be a part of a program that will help build a stronger future for the golf industry and be able to pay tribute to the contributions Jim Watson has made to this company. It's a great way for us to reinvest in something that is very important to our professional customers and recognize a man who is very important to us."

The fellowship program is named for Dr. James Watson, longtime Toro executive and a giant figure in the history of the golf course and turf industries. Watson, who is semi-retired after 40 years with the company, will serve as chairman of the fellowship selection committee.

The agreement allows GCSAA's S&R Foundation to expand and upgrade the GCSAA Graduate Student Grants Program announced earlier this year. With Toro's sponsorship, the number of \$5,000 fellowships has been doubled, from two to four.

The sponsorship is one of the largest single contributions in GCSAA S&R history and, according to GCSAA President Randy Nichols, it is one of the most satisfying, "I can't think of a more appropriate sponsor for these fellowships. Toro and Dr. Watson have been so important to us for so many years. We are genuinely pleased to have them behind this great new program," he said.

For more information, contact the GCSAA development department, (913) 841-2240

## ainer" of registered technicians

MDA that verifies your certification, lunch and break refreshments.

Dates and locations are as follows:

**Wednesday, October 27, 1993**

Kellog Center, East Lansing

**Wednesday, December 15, 1993**

Novi Hilton, Novi

**Thursday, February 17, 1994**

Kellog Community College, Battle Creek

**Thursday, April 21, 1994**

Novi Hilton, Novi

**Thursday, May 26, 1994**

Kellog Center, East Lansing

For more information or to register, call or write:

**Kay Bongard**

Michigan State University  
Room 11, Agriculture Hall  
East Lansing, MI 48824-1039  
(517) 355-0117.

## Turf Times Welcomes New NMTMA Members

Name	Club/Vendor	Bus. Phone
Joe Hancock	The Rose G.C.	(616) 768-5060
Andrew Lambdin	Devil's Knob G.C.	(517) 539-9742
Norman Reed	Fairview Hills G.C.	(517) 848-5810
Mark Krick	MSU	(517) 353-3952
Mark Showalter	Eagle Glen G.C.	(517) 588-6599
Micheal Showalter	Eagle Glen G.C.	(517) 588-6599
John F. Gray	Grand Hotel	(906) 847-3331
Rick Quinn	Charlevoix Munic.	(616) 547-3269
Keith Hietanen	County Highlands	(616) 864-3817
Randy Techman	Mistwood G.C.	(616) 275-5999
Jeffrey Chandler	Crystal Mountain	(616) 378-2000

Please add these new members to your Membership Directory in the place provided.

# HUGGETT

## SOD FARM, INC.

• TOP QUALITY SOD •

**NUGGET + II (BLUEGRASS BLEND)**

Grade A or commercial on peat  
or top soil base

**SHADE MIX (BLUEGRASS, FESCUE MIX)**

Good on sandy soils or in shade.

**PENNCROSS BENT**

Grown on washed mason sand or loam soil.

• DELIVERY •

Michigan • Ohio • Indiana

• SHADE & ORNAMENTAL TREES •

• BULK SPAGNUM PEAT •

**(800) 432-2763**

(517) 635-7482

4114 East Marlette Rd. • Marlette, MI 48453

# Cover-up.

Underneath some beautifully conditioned, championship golf courses are mountains of trash, the scars left by years of garbage replaced by a beautiful, invaluable green belt. And, landfill covers are only one way today's professionally managed golf courses are helping make our world a better place.

Who's in charge of keeping these amazing ecosystems in harmony with nature? Today's golf course superintendents. They're part troubleshooter, part business manager, part scientist and all environmentalist — dedicated to making our world a greener place.

WE KEEP GOLF GREEN.



# Illinois Turfgrass Foundation announces educational programs & exhibition to be held at Fall North Central Turfgrass Exhibition

CHICAGO - Over 40 turf specialists, 16 idea-filled workshops and 150 exhibits of new turf products and services will be featured when the Illinois Turfgrass Foundation holds the Tenth Anniversary North Central Turfgrass Exposition (NCTE), set for November 29 through December 1 at the Pheasant Run Resort in St. Charles, IL.

"This year's exposition will have something for everyone," says ITF President and NCTE Chairman James D. Ashby. "The exposition will address the needs of seasoned turfgrass professionals and will include four sessions of a "Back to Basics" program being given as part of a comprehensive educational program being developed by the ITF. The program is part of what ITF hopes will become a vehicle for accreditation in the area of turfgrass management."

In addition to the "Back to Basics" sessions, the NCTE will feature sessions addressing the needs of golf course mechanics and superintendents, sports and non-sporting turfgrass managers, landscape contractors and designers and lawn care professionals.

On Tuesday, November 30, association President James Ashby will present the winner of the 1993 ITF Distinguished Service Award during a special ceremony to be held during the afternoon NCTE General Session.

The Distinguished Service Award is presented annually to a current active member of the ITF and is based on a stringent set of professional guidelines. Candidates for the award are reviewed by a Distinguished Service Award Committee

and are then forwarded to the Board of Directors for a final vote. Past award recipients include Carl Hoppman, Evanston Golf Club, 1991 winner, and Peter VanderCook, Illinois Lawn Equipment, 1992 winner.

The NCTE trade show exhibit hours are set for Monday, November 29 from 4 p.m. to 6:30 p.m. (which includes the opening reception); Tuesday, November 30 from 8:30 a.m. to 5:30 p.m.; and Wednesday, December 1 from 9:00 a.m. to 3:00 p.m.

Pheasant Run Resort is located in St. Charles, IL, 30 miles west of Chicago. The resort will offer special NCTE room rates of \$75 standard and \$85 deluxe per night for those attending the exposition.

The North Central Turfgrass Exposition is sponsored by 10 allied turfgrass organizations comprised of the Central Illinois Golf Course Superintendents Association, Chicagoland Golf Course Mechanics Association, Illinois Landscape Contractors Association, Illinois Turfgrass Foundation, Midwest Association of Golf Course Superintendents, Northwest Illinois Golf Course Superintendents Association, Sod Growers Association of America, Sport's Turf Manager's Association, - Midwest Chapter, United States Golf Association - Green Section, Midwest Region and the University of Illinois, Cooperative Extension Service. Proceeds from the show benefit university-level turf research in Illinois.

For more information, contact Nancy Jones or Jack Lagehausen at (312) 616-0800 - FAX (312) 616-0223.

## EVEN WHEN IT'S EMPTY, IT'S LOADED.

Even in its most basic form Carryall by Club Car offers more standard features than the competition. Each model is strong and versatile, with plenty of performance options to choose from. There's no better way to load up on quality, dependability and lasting value.



Call your nearby authorized Club Car representative for details on how Carryall can do it all for you.

**CLUB CAR, INC.**  
MICHIGAN BRANCH  
33025 Industrial Road • Livonia, Michigan 48150  
(800) 482-8830  
Contact Dave Nelson, Northern Michigan Sales Manager



# Fertilization - Fall and Late Fall Style

By Paul E. Rieke, Crop and Soil Sciences, Michigan State University

One of the very important turf management practices during the fall is fertilization. This time of year there are many other activities which require time and attention, but fertilization must also be given priority. For many reasons, turf management practices done in the fall will have a major effect on the quality of turf the following spring. Fertilization is one of the most important.

## Phosphorus and potassium in the fall

The key nutrient in fall fertilization is nitrogen. Some have suggested phosphorus and potassium are the key nutrients in fall fertilization. Certainly, these nutrients should be available to turf in adequate quantities. For example, when potassium is limiting, there is a reduction in stress tolerance. Considering the potential for low temperature injury to turf during the winter, if potassium could have an impact on reducing low temperature injury, turf managers should be sure adequate potassium is available to the turf. There is also some evidence to suggest there is an increase in susceptibility to snowmold when potassium is limiting.

To be sure there is adequate potash in the soil, use a soil test for medium and fine-textured soils. If tests suggest potash is needed, appropriate rates should be applied based on recommendation and common sense. For turfs on sands, soil tests for potassium are usually low in spite of a potash fertilization program. Regular, light applications of potash at frequent intervals (spoon feeding) should be made on sandy soils, particularly on sand greens.

When late fall fertilization is practiced, some potash should also be applied along with the nitrogen. On sands, use equal quantities of nitrogen and potash. If needed based on soil test recommendations, phosphorus can be applied in the fall fertility program as well, normally in a complete fertilizer. Seldom is phosphorus limiting on turf. An exception is when no phosphorus has been applied and clippings are routinely removed. Another potential exception is on sand greens. Sands have little capacity to hold phosphate. We have seen several cases of phosphorus deficiency on sand greens, more commonly on new greens, but also on older greens where no phosphorus has been applied for some time. Soil tests must be used to determine need for phosphorus.

---

***When late fall fertilization is practiced, some potash should also be applied along with the nitrogen.***

---

## Fall Nitrogen

For cool season grasses, both fall and late fall fertilization should be considered. Fall fertilization is best done during September, preferably early in the month. With the weather changes in late summer, the shorter days, cooler nights and more rainfall cause the turf plant to grow less rapid vertically than occurs in the spring. More lateral growth results in improvement in turf density after the rigors of the summer. So fertilization in the fall deserves top priority. Carbohydrates manufactured at this time of year will be more likely to be stored, building up the plant for next year.

Appropriate rates of nitrogen applied during the fall

period depend on a number of variables, ranging from 1/2 to 1 lb. N per 1000 sq. ft. On occasion a higher rate may be justified; examples include newly established turf which needs pushing for rapid establishment or a turf which has suffered serious thinning over the summer due to injury from disease, insects, traffic or moisture stress or where an extensive weed population has been controlled, leaving open areas. On general turfs (lawns, grounds, etc.) all the nitrogen can be applied in one application. For greens and other high maintenance turfs, one can split this into two applications if the higher rate of nitrogen is needed. An alternative is to use a fertilizer which contains more slow release nitrogen. Or a spoon feeding program with weekly applications of soluble sources can be used, particularly on greens.

Normally, it is best to withhold applications of nitrogen during October to permit the turf to "harden off". This permits the turf to accumulate carbohydrates and reduces the potential for frost-injury should the turf become very succulent before a major freeze. Avoiding nitrogen during October may reduce susceptibility to snow mold as well.

## Late Fall Nitrogen

There are a number of opinions as to how and when to use late fall nitrogen applications. This occurs partly because of differences in climatic zones and variations from season to season. Perhaps a more important reason for variations in late fall fertilization is the objective for this practice.

From my perspective, the objective is to *supply nitrogen to the turf after growth has ceased*. The root system is still active since the soil is warmer than the air. Nitrate nitrogen can still be taken up and utilized by the plant. If proper nitrogen fertilization has been practiced during the fall (September) period, the turf should still be green and physiologically active. This permits the plant to continue photosynthesis whenever modest temperatures and some sunlight conditions occur. Carbohydrates manufactured during this time are not "burned off" with growth and clippings, but are stored. This builds up the plant for next spring.

Rate of application of nitrogen will again vary with turf conditions and the philosophy of the manager. For greens, 1/2 lb. N per 1000 sq. ft. may be sufficient. If tees are still thin from traffic, especially on par 3 tees, 3/4 to 1 lb. N per 1000 sq. ft. may be needed. Fairways could receive 1/2 to 3/4 lb.. Lawns & general grounds can receive 3/4 to 1 lb. N.

Some turfs may perform better without the late fall nitrogen. Some lawn care companies cannot justify the cost of late fall nitrogen to customers who may not continue with their services next year. However, the quality of the turf the next spring should be excellent when spring sales begin.

Snowmold was severe on many turfs over the winter of 1992-93. Late fall nitrogen applications contributed to greater snowmold in some cases.. If turfs are hard hit by snowmold nearly every year and no snowmold preventive program is followed, it may be best to avoid late fall nitrogen.

However, based on plot research done by Dr. Joe Vargas and observations in the field, it is clear that while in most years the late fall nitrogen may increase the amount of

*Continued on next page*



## JOINING TOGETHER TO BETTER SERVE OUR CUSTOMERS

### WE NOW OFFER

- Over 70 years of combined water industry experience
- The largest selection of pump station models and options
- Vertical Turbine - Centrifugal - Submersible
- Constant speed hydraulic or electronic butterfly valve pressure regulation
- Pump manager software
- Smart pump controls
- Variable speed VFD stations
- Combined national service organization
- Existing station retro-fit upgrades
- Deep well consulting services

To find out more about how we can help solve your water pumping requirements. Call now!

Watertronics Pumping Systems Commercial Pump Services, Inc.  
Hartland, Wisconsin Swanton, Ohio  
**800-356-3386 800-426-0370**

## Late Fall Fertilization. . .

*Continued from previous page*

snowmold, there is much quicker recovery from any injury caused. The snowmold damage may be more superficial with the late fall nitrogen and/or the recovery is quicker. Either way the next spring the turf returns to a better quality condition sooner with late fall nitrogen.

For the Great Lakes region, we suggest applying the nitrogen after growth has ceased for all practical purposes. This does not mean there will be no need for further mowing, but regular mowing will not be needed. An additional mowing or two may be needed before growth ceases entirely. This occurs anywhere from the last week of October to the second week of November.

Potential problems with late fall nitrogen fertilization include the potential for leaching of applied nitrogen, late fall growth which would require more mowing, affecting snowmold and other winter injury, increase to thatch and other spring growth. In a study at Michigan State being conducted by Eric Miltner and Bruce Branham, which compares late fall nitrogen applications with those emphasizing spring applications, there is no significant leaching of nitrates from either treatment so far. If the nitrogen is applied while the plant is still physiologically active, most of the nitrogen should be used and will not be available for leaching over the winter. There is evidence from Ohio State that late fall nitrogen may increase susceptibility to thatch formation to some degree.

While there may be a small increase in growth during the fall or spring, most turf managers are satisfied that the benefits are far greater than the potential negative effects. There is no evidence for increased susceptibility to low temperatures or crown hydration injury which is caused by late fall nitrogen.

Benefits of late fall nitrogen include good carbohydrate levels in the turf the next spring, good early spring root growth, good fall and spring color and good turf density so there is less potential for establishment of spring weeds. Since root growth of cool season grasses begins before top growth, it is essential that a high level of carbohydrates exist in the plant to initiate that root growth.

The next spring the turf will have a good color. There will likely be a small increase in mowing needed in the spring compared to a turf which receives no nitrogen either in late fall or spring. But the growth will be very limited compared to a turf which receives an early spring fertilization. Avoiding early spring nitrogen has the advantages of reduced carbohydrate loss caused by the excessive growth, less mowing, potential reduction in several diseases and greater moisture stress tolerance during the summer. If we can provide a turf which has good density and fewer weeds, requiring less herbicide as well as greater stress tolerance, why should we not adopt the practice?

With many advantages apparent for late fall nitrogen and few disadvantages, it is clear why so many turf managers have adopted this practice. I have not talked to anyone who has tried late fall nitrogen fertilization who has not continued to utilize the practice for agronomic reasons. This is the best testimonial for late fall fertilization.



## They're known by the greens they keep.

Lush, beautiful greens and tee boxes are well-known to superintendents who use Ringer Greens Products. With five finely-granulated formulations available, you can match our fertilizer to your needs throughout the seasons. Each formulation releases the precise amount of nitrogen needed to eliminate burning and green-up greens evenly. The remaining nitrogen is reserved for slower release to encourage consistent growth. Try Ringer Greens Products. Your greens will be in good company.

# RINGER

Contact your local distributor or Ringer's Golf & Commercial Turf Division at 9999 Valley View Road, Minneapolis, MN 55344. (612) 941-4180 Ringer offers a complete line of fertilizers for greens, fairways and general turf applications.

**Credit: Hole Notes**

# The Audubon Cooperative Sanctuary Program

## Environmental organization applauds golf course superintendents

The Audubon Society of New York State recognizes, supports, and applauds golf course superintendents for their efforts to enhance wildlife habitat through the membership in the Audubon Cooperative Sanctuary System. As land managers of hundreds of thousands of acres of land across the United States, superintendents not only have the potential to be leaders in the environmental movement but major forces in enhancing the distinct beauty of each golf course. Many superintendents are in a unique position to combine the joy and challenge of the game of golf with the satisfaction of providing and managing habitat for wildlife. It is true that sometimes superintendents get caught in the conflict between the visual preferences of club members for weed-free, heavily manicured grounds and the more natural appearance of native habitat. It is also true that some superintendents do not have abundant financial resources, manpower, information, or support to do the kind of job they'd like to do. The Audubon Cooperative Sanctuary Program for Golf Courses offers education, guidance, support, and public recognition for those courses and individuals who are committed to working toward wildlife habitat enhancement and other conservation activities.

The Audubon Cooperative Sanctuary Program for Golf Courses, created and administered by New York Audubon, sponsored by the USGA, and endorsed by the GCSAA and the American Society of Golf Course Architects, has been received enthusiastically by superintendents across the nation. The program currently has over 650 participating golf courses. Together, these organizations, members of the Cooperative Sanctuary Program for Golf Courses, and New York Audubon are working toward:

- Enhancing wildlife habitats on existing golf courses by working with the course superintendent and providing advice for ecologically sound course management.
- Encouraging active participation in conservation programs by golfers, golf course superintendents, golf officials, and the general public.
- Recognizing the people who are actively participating in environmentally responsible projects and who are committed to the value of golf courses as important open spaces.

- Educating the public and golfing community about the benefits of golf courses and the role they play relative to the environment and wildlife.

## Experts speak about the Audubon Cooperative Sanctuary Program for Golf Courses

*"Although the golf course management industry has been involved in conservation industries for years, the Audubon Cooperative Sanctuary Program for Golf Courses has proven successful in educating the public and golf community on the benefits of golf courses as important open spaces and the role they play in the environment and with wildlife."* William R. Roberts, Past President, GCSAA

*"Golf courses are already a good thing for wildlife and for the environment. But the Cooperative Sanctuary Program helps courses promote sound land management and the conservation of our natural resources by encouraging the development of wildlife habitats."* Art Hills, President, Amer. Society of Golf Course Architects

*"In the middle of Skokie (Illinois), we've got 167 acres of land and anything we can do to enhance the wildlife, we want to do. With the Cooperative Sanctuary Program, we can not only comply with Audubon requirements and the needs of nature, we can also supply a natural aesthetic of beauty for the golf course. Everybody wins."* Carl Hopphan, Superintendent, Evanston Golf Club

*"For an industry that has allowed itself to be perceived as an environmental bad guy because it has failed to validate and report its positive contributions, the Audubon Cooperative Sanctuary Program is a brilliant idea and a golden opportunity."* Mark Jarrell, President, Florida Golf Course Superintendents Association.

## Audubon Cooperative Sanctuary Program - How It Works

- 1) To become part of the Audubon Cooperative Sanctuary Program (ACSP), you must first register the course with New York Audubon by filling out a registration form and sending it along with \$100 (annual dues).
- 2) The ACSP will send you a Resource Inventory questionnaire which you will fill out, providing information about the "nature" of your course - its land and water features, known wildlife, plants, trees and shrubs, and other natural resources. You can send additional information such as

*Continued on Page 17*

### **Change of Address, Membership Application info available**

Any member with a change of address should immediately contact

**Thomas J. Reed  
3733 Apollo Drive  
Traverse City, MI 49684.**

He should also be contacted if any person would like to apply for membership in NMTMA.

# Stop Snow Mold

With a Chipco® 26019/Daconil® Combination.



*Call to receive your free video, "Controlling Snow Molds in the 1990's."*

Bob Dugan

**RHONE POULENC AG COMPANY**

P.O. Box 74398, Romulus, Michigan 48174-0398

(313) 782-0323 FAX (313) 782-6344

CHIPCO is a registered trademark of Rhone-Poulenc.

Daconil is a registered trademark of ISK Biotech.



# Audubon Cooperative Sanctuary Program . . .

*Continued from Page 15*

topography maps, slides or photographs, score cards, or any materials you feel will help ACSP to best understand your course.

3) Upon receipt of the Resource Inventory, the ACSP will review the information and provide you with a Conservation Report specific to your course. The report will include a variety of wildlife enhancement and conservation projects that focus on the interests and needs of the individual course or club as well as a variety of informational fact sheets. The choice of which projects to implement remains with the golf course superintendent and club officials.

4) After receiving your report, you will form a resource committee composed of staff members, players, citizens in the area, a cooperative extension consultant, etc. This committee will review the recommendations in the report to determine which projects are financially and logistically feasible. When this is determined, you then send the ACSP the list of your committee members and the committee's environmental plan of action.

5) Courses may work toward certification in several "Achievement Categories", including: Environmental Planning, Public Involvement, Integrated Pest Management, Wildlife Food Enhancement, Wildlife Cover Enhancement, Water Conservation, and Water Enhancement. General guidelines for certification in each area are provided with the conservation report. A Certificate of Achievement for each category will be granted to the course once the category is developed and implemented. The golf course will become a Certified Cooperative Sanctuary once all seven certificates have been achieved.

## About New York Audubon

- New York Audubon is not associated with any national, regional, or local organization, nor do we represent any view or philosophy other than those expressed by New York Audubon.
- Our objective is to provide guidance and education concerning environmental and conservation issues and activities through the Audubon Cooperative Sanctuary System. Our goal is to encourage landowners and land managers to become actively involved in: 1) creating, protecting, and enhancing wildlife habitat, and 2) conserving, protecting, and sustaining natural resources.
- The Audubon Cooperative Sanctuary System is a nationwide membership system divided into four programs for existing facilities: Golf, Schools, Corporate/Business, and Individual. For more information, about our other programs, call or write to the Audubon Society of New York State, 131 Rarick Road, Selkirk, NY 12158, (518) 767-9051.

## Precision Laser Measurement Increases Play

Laser your course properly with the complete laser measurement fairway marking system from

### **FAST PLAY TECHNOLOGY**

*Fairway Management at its' finest*

- Incremental 25 yard markers
- Color-coded posts every 50 yards
- Par 3 tee boxes
- 100 - 150 - 200 yard markers
- Sprinkler heads
- Cart paths labeled
- No maintenance interference
- Professionally installed
- Endorsed by Michigan PGA  
Professional Rodger Jabara

Stop complaints about slow play

*Call or write today for more info:*

### **FAST PLAY TECHNOLOGY**

32102 Howard  
Madison Heights, MI 48071

ph: (313) 583-4851  
fax: (313) 583-3179

# Maximizing Snow Mold Control

By Jim Merrick & Tom Vrabel, Ph.D., CHIPCO® Development Team

With the coming of fall, we again think about winterizing our spray equipment. But even before this is done, it is important to consider whether or not a fungicide application is needed for winter snow mold control.

## GRAY SNOW MOLD

In areas with permanent snow cover, gray snow mold or typhula blight, caused by *Typhula incamata* or *Typhula ishikarensis*, is a very destructive disease of turfgrass. Turfgrass species which are susceptible include bentgrass, annual bluegrass, fescues and perennial ryegrass.

Although having permanent snow cover on the ground for several months is necessary for typhula blight to develop, other conditions that simulate cover, such as leaves, mulch and desiccation "covers", can cause the same effect.

The gray snow mold fungus generally grows and infects turfgrass when temperatures range between 30-50 degrees Fahrenheit. The effects of gray snow mold are worse when snowfall occurs on unfrozen turfgrass which has not yet been "hardened" by frost. When snowfall occurs on frozen ground, the disease does not develop until the following spring, when snow begins to melt.

As this snow melts during spring, the typhula blight virus can be seen with the naked eye as sclerotia. These

spores will eventually dry up and no longer be visible to the naked eye.

The sclerotia, which are the dormant state of this disease, allow the typhula blight fungus to survive over the summer. They are resistant to warm temperatures as well as the fungicides used in summer spray programs. With the coming of cool, wet weather during the fall, these sclerotia will swell, germinate and produce new spores.

## PINK SNOW MOLD

Pink snow mold, (*Microdochlum nivales* - formerly *Fusarium nivale*), is also a devastating turfgrass disease in regions that have long periods of cool wet weather with frequent snow-falls and snow-melts. This disease organism does not need a permanent snow cover to germinate and infect turfgrass. Pink snow mold can be observed in the late fall through early spring if the weather favors germination and growth of the spores.

Fungicide treatments used for snow mold control are longer lasting than similar treatments made to control summer diseases. This is because with snow mold applications, the fungicides are not removed by mowing as the turf grows. In fact, single applications usually provide winter-long control, assuming that permanent snow cover is maintained until spring. Mid-winter thaws can dissipate fungicide efficacy due to exposure to sunlight, wind, and rain. They can also accelerate snow mold growth. If a thaw does occur, a second fungicide application is recommended to maintain turf protection until spring "greenup".

## CULTURAL AND CHEMICAL CONTROL

Cultural management of these diseases should always be considered in any control program. Be particularly aware of conditions that favor disease development during the late fall and winter months, such as poor drainage, excessive thatch, high nitrogen fertility and high relative humidity. Also, keep in mind that both gray and pink snow molds can occur in the same location at the same time.

Chemical control of gray and pink snow mold can be achieved with a tank mix combination of CHIPCO 26019 FLO + Daconil 2787 FLO at 8 + 8 fl. oz./1,000 sq. ft. Alternatively, apply CHIPCO 26019 WP + Daconil 2787 FLO at 4 oz. + 8 fl. oz./1,000 sq. ft. This tank-mix application should be timed close to the first snow cover. A second application should be applied to the turfgrass when a mid-winter thaw occurs.

Both CHIPCO 26019 and Daconil 2787 have activity on gray and pink snow mold. However, a combination of the two products results in increased control of these diseases. In regions of the United States which experience only pink snow mold, CHIPCO 26019 FLO alone at 4-8 oz./1,000 sq. ft., or the wettable powder formulation at 2-4 oz./1,000 sq. ft. will provide very good disease control.



**H&D**  
SINCE 1938  
ROADBUILDINGPLUS

**CONSTRUCTION SERVICES:**  
CLEARING, GRADING, SHAPING, BUNKERS, CART PATHS

**CREATING SPECIALTY SANDS:**  
TOP DRESSING & BUNKER SAND

Golf Course Construction Since 1977

Request for References Encouraged

ROADBUILDINGPLUS Asphalt Paving • Concrete Paving • Excavation • Airports • Golf Courses • Site Development • Tennis Courts • Sand & Gravels • Underground Utilities • Plus, Plus,

H&D INC., 2081 W. CHARLEVOIX AVE., PETOSKEY, MI 49770  
**(616) 347-2547**



## Our Family is Growing

No one can accuse John Deere of standing still. Since January of 1992, we've added six totally new machines to our Golf & Turf Equipment family. All designed and manufactured by John Deere.

First to arrive were the 1800 utility vehicle and 3365 Professional Turf Mower.

The 1800 brought the precision of hydrostatic drive to your work, while the 3365 was the first machine to carry John Deere designed and manufactured cutting units.

New machines for 1993 include the 2653 Professional Utility Mower (pictured above) and 6x4 and 4x2 Gator Utility Vehicles.

The 2653 features the unique combination of hydraulic reel drive and John



The 1800 Utility Vehicle brings benefits of hydrostatic drive to spraying & spreading jobs.



New 6x4 and 4x2 Gator Utility Vehicles are stable, quiet, and carry large payloads.



The 3365 Professional Turf Mower features John Deere designed and manufactured cutting units.

Deere 26-inch cutting units. The Gators are stable, quiet, carry large payloads, and feature wet-disk brakes.

Talk with your John Deere Golf & Turf Equipment distributor today for more information on our growing lineup of machines.

## NOTHING RUNS LIKE A DEER



**KLOOSTER EQUIPMENT, INC.**  
**WORK 'N PLAY SHOP**

9821 U.S. 31  
ELLSWORTH, MI 49729  
(616) 599-2822

# 1993-94 Calendar of Events

Dates Subject to Change  
(\* NMTMA Dates to note)

## OCTOBER

	EVENT	LOCATION
4	*N.M.T.M.A. ANNUAL MEETING / Tuck Tate Classic	Walloon Lake C.C.
4	M.B.C.G.C.S.A. / MTF FUNDRAISER	Franklin Hills C.C. Katke-Cousins C.C. Grosse Isle C.C. Oakland Hills C.C.
14	G.C.S.A.A. seminar "Micro-Biology of Turfgrass Soils"	Holiday Inn - East Lansing

## NOVEMBER

6	W.M.G.C.S.A. FALL DINNER PARTY	C.C. of Jackson
16-18	G.C.S.A.A. Executive Training Seminar - <i>Developing and Maintaining Effective Employee/Management</i>	Holiday Inn - East Lansing

## DECEMBER

4	 *N.M.T.M.A. / M.M.T.M.A. CHRISTMAS PARTY	Garland Resort, Lewiston
---	--	--------------------------

## JANUARY 1994

3-5	WISCONSIN TURFGRASS & GREEN INDUSTRY EXPO	Holiday Inn W., Madison
18-20	MTF 64th ANNUAL TURFGRASS CONFERENCE	Holiday Inn South

## FEBRUARY 1994

1-2	G.C.S.A.A. GOLF CHAMPIONSHIP	Austin Texas
3-7	G.C.S.A.A. ANNUAL CONFERENCE & SHOW	Dallas Texas
23-24	G.C.S.A.A. SEMINAR	Treetops