

Volume <u>17</u> No. <u>6</u>

After twelve years, it is our pleasure to return to the above listed country club for another meeting of this Association. At that time this was a 9 hole golf course manicured by Mike Glover, as Superintendent. Today the Super is Frank Tryban and the Golf Professional, Ed Kelbel, Jr. Much hard work, time and material have changed this into a beautiful 18 holes, that will be a delight for you to play. Something else which we remember about our dinner there, which is unique. Steak will be the entree and you will cook your own steak, just to your liking. Since it is important for them to order these beautiful steaks, one week in advance, we must tell them of the number that will be present that far in advance. So, please do not procrastinate with the enclosed postcard, fill it out and get it in the mail immediately. To get there, coming from the north, south or west, I-75 to C-66 East, follow C-66 until the first road left after the airport (Slade Road). Take Slade Road until it end and at Old Mackinaw Road, turn left and club is only mile down. Anyone coming north on US-23, go north thru Cheboygan until you come to Old Mackinaw Road, turn left.



Starting times will be blocked out for our group from 1:00 to 2:00 P.M. Lunch is available at the club. Price of the package will be \$23.00 including cart, dinner and golf. Those coming for the dinner only, dinner will be at 6:30 P.M. Any questions, please call the Pro Shop at 616/627-4264. Get that postcard in the mail immediately.....

SEPTEMBER 1st, will be M.S.U. Field Day, further details elsewhere in this letter. Try to include this as a must see, project.



# NORTHERN MICHIGAN TURF MANAGERS ASSOCIATION 3733 APOLLO DRIVE • TRAVERSE CITY, MICHIGAN 49684 • 616-943-8343

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# BEHIIND THE GREENS

# A Monthly Message From The Board by Tom Brogger, President

Spring has sprung, Fall has fell, Summer is here and it's hotter than hello everyone and welcome to another edition of Turf Times. Yes, it is hot and now we're getting some humidity as well. As tough as we had it through the middle of July with humidity levels at about 40% - 45%, we really were fairly safe as far as most diseases go. Now it becomes a whole other ballgame. While our localized dry spots clear up, we start looking for anthracnose, algae, brown patch and many other turf related problems. Personally, my number one concern during higher humidity (60% - 100%) becomes irrigation distribution. Often times, limited air movement, sunlight and poor drainage are built-in problems. Timely watering can be the determining factor, especially when the final element of humidity gets involved. High humidity = low evapotranspiration. I see the same area taking three and four times longer to dry out than they did when we were dry. The old rule of thumb of watering deep and infrequent is certainly something to remember, especially while we're humid.

Boy, what a great meeting we had with the Mid Michigan Turfgrass Association at West Branch Country Club on July 12th. The turnout by both associations was high as we were all treated to superb playing conditions and fine hospitality from host Bob Steinhurst, C.G.C.S. and the entire West Branch staff. By hosting this month's meeting, we forced Bob into playing his first nine holes of the year. I don't know how he can resist playing such a beautiful course, even with his so-called "sore back". There are a lot of "good guys" in the Mid Michigan Association and a strong possibility of having a joint meeting again next year at one of their member's clubs. Here's an idea. Why not make our meeting with Mid Michigan some sort of tournament between the two associations. It could be a lot of fun and would probably get us to know them a little better that way. I can see us playing for some kind of traveling trophy and making it an annual thing, much like many Northern Michigan golf clubs do. Well. something to think about.

As you know from the T. Times, our next meeting is at Cheboygan Country Club. I believe this is the first meeting ever in Cheboygan or at least in a long, long time. Since 1964, I have played there periodically and seen this course develop from a nine hole course with no watered fairways, to a plush eighteen hole layout with many interesting characteristics. You will not want to miss the challenge of playing Cheboygan Country Club. See you there!

# **A Revival of Hand Raking?**

## by JAMES T. SNOW

Director, Northeastern Region, USGA Green Section



Careless use of the riding sand rake can eventually force sand over the bunker lip, requiring relocation of the sand and renovation of the lip.

S THE HAND RAKING of sand bunkers and the elimination of the mechanical rake the coming trend among golf courses? Perhaps not for most courses, but many golf course superintendents are taking a close look at some of the dubious benefits of the mechanical sand rake and deciding that a little more hand raking and a little less mechanical raking might actually save some time, money, and disruption in the long run.

Not so long ago, mowing greens and tees with walk-behind units and raking sand bunkers by hand was standard procedure. Large maintenance crews were necessary for such work, and costs grew as the cost of labor increased. The advent of triplex greensmowers, mechanical sand rakes, and huge fairway mowers ushered in a period of mechanization and labor savings in the 1960s and 1970s, and some predicted that by the 1980s golf course maintenance would be completely mechanized, resulting in smaller crews.

As we all know, the prediction has not yet materialized. Many clubs have gone back to walk-behind mowers on greens and tees, and the monster fairway mowers have been abandoned in favor of lightweight units. Though these programs are more labor intensive and costly day-to-day, savings can result from reduced pesticide and water use, and less overseeding and renovation work. The improvements in playability and consistency are additional benefits of these programs, which are important but difficult to value in dollar terms.

The mechanical sand rake has enjoyed the greatest success and longevity among those tools that once seemed destined to transform labor-intensive golf courses into masterpieces of labor efficiency. In addition to the obvious benefit of being able to maintain well-groomed sand with a minimum of time and labor, compared to hand raking, the use of a mechanical rake offers the added advantage of controlling most weeds in bunkers without having to rely on hand labor or herbicides. Also, the mechanical rake does an excellent job of grooming and scarifying, allowing hard, contaminated sand to be kept in reasonably good playing condition for many years more than one might expect.

While there is no denying the advantages of using this machine, the mechanical rake is not without its detractors. In fact, superintendents and golfers alike have recognized for many years that the appearance and playability of many bunkers is being compromised by the use and misuse of the mechanical rake. Only recently, however, has the long-term cost of using this machine been determined to be great enough to consider limiting its use and returning at least to a certain extent to hand raking.

MANY OF THE negatives concerning the mechanical rake are inherent in its use, while others can best be attributed to its misuse.

The rake does an excellent job of grooming hard sand to keep it in good playing condition, but on the other hand, it can actually keep new sand too soft, and encourage fried-egg lies. Complaints from golfers are especially common after a course has just replaced its old contaminated sand with new material. One course of action in this instance is to keep the mechanical rake out of the bunkers as much as possible, or at least remove its scarifying teeth to prevent deep cultivation. This helps Continued on page 4 MAYJUNE 1988

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to improve playability while the sand has an opportunity to settle in the months ahead.

The mechanical rake has other drawbacks in new or soft sand. It creates ridges of sand as it makes its turns. A golfer unfortunate enough to find his ball on the wrong side of one of these ridges may have a tricky shot, to say the least. The problem is most severe when the operator is going too fast, but even a good operator will have difficulty avoiding ridges when the sand is quite soft. The only way to deal with this problem is to slow down the operator and have him touch up the ridges with a hand rake.

By the nature of the turning action of mechanical rakes in sand bunkers, sand is constantly being moved around. As the machine makes its turns, a lateral, downward force is exerted, which pushes the sand outward — a process that occurs more quickly with operators who go too fast.

Over a period of weeks and months, a bunker that may have started out with a uniform six-inch layer of sand may be found to have pockets with only a two-inch layer, and other areas with from eight to 10 inches. When the machine passes through the shallow areas, the scarifying teeth or blades often dig into the sub-base and contaminate the sand with soil and stones. In bunkers where plastic or geotextile liners are used, the teeth sometimes catch and rip the liner, often leading to its removal. Though it is a time-consuming solution, some clubs combat this problem by routinely monitoring the depth of sand in various locations within their bunkers, and sending out crews to reestablish a uniform sand depth. Nevertheless, inconsistent playing conditions and an increased rate of sand contamination is almost assured.

Human nature being what it is, most would agree that if a person had a choice of riding a machine or doing the work by hand, he would choose to ride. Therein lies the biggest problem with the mechanical sand rake; many operators spend too much time on it, and try to do too much with it. For example, trying to rake the sand on a steep slope or face with the machine leads to nothing but problems. Sand is pulled down the slope, leaving a very thin layer on the face, and the machine ultimately digs into the sub-base and hastens the contamination of the bunker with soil and stones. Also, operators often rake too close to the edge of the bunker trying to avoid having to touch up the perimeter by hand. In the process, contamination occurs as the machine catches the lip, and excess sand is pushed closer and closer to the edge, until the lip is lost in a wash of sand. At this point, when good bunker definition is lost, the appearance and playing qualities of the bunker are greatly diminished. Many clubs try to compensate for the deterioration of the lips by edging the bunkers more often, but this only results in the loss of their original size and shape.

NE OF THE most blatant attacks on the integrity of sand bunkers is in the area where the mechanical rake enters and exits. Due to habit or sometimes to design considerations, many operators always enter and leave a bunker at the same location, causing a gradual deterioration and loss of definition of the lip in that area. Worse still, due to haste and a loathing for getting off the machine, operators tend to drag some sand out over the edge of the lip as they leave. Over a period of weeks and months, many bunkers grow appendages that ultimately become integral parts of the hazard. It is not surprising, then, that mechanical sand rakes are the bane of golf course architects, who take pride in the bunkers they create.

Thus, it is apparent how the longterm costs of relying completely on the mechanical sand rake can add up:

• Soil and stone contamination can occur significantly faster with a mechani-

USGA GREEN SECTION RECORD

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(Opposite page) Hand raking is making a comeback at some courses that find the mechanical rake causes as many problems as it solves.

(Left) An appendage often grows at the entrance/exit site of the mechanical rake.

# (Continued from page 4)

cal rake than with hand rakes. All things being equal, the sand will have to be replaced more frequently. An alternative is to place several inches more sand in the bunkers to reduce the chances that the mechanical rake's scarifying teeth will dig into the soil. Regular sand depth monitoring and sand redistribution work is another possibility. The use of geotextile liners to minimize contamination is a calculated risk, and more often than not is unsuccessful. All of these accommodations of the mechanical rake are costly.

• Bunker lip deterioration occurs much more quickly with the use of the mechanical rake, requiring more frequent edging to maintain good definition. The design of the bunker is then compromised, calling for the redesign and rebuilding of the bunker lips. Much of the extensive bunker renovation work going on at hundreds of golf courses now and in recent years is in good part due to the effects of the mechanical rake.

So what's the solution? Some would argue that the mechanical rake should be abandoned and that hand raking be reinstituted. Certain courses, such as those with small bunkers and limited numbers of bunkers, would be wise to consider such a move. Courses with many large bunkers, however, would be hard pressed to give up the time saving, weed control, and grooming benefits of the mechanical rake.

Perhaps the best way to enjoy the advantages of the mechanical rake while minimizing its long-term negative impact is to develop a strong program of training the operators to use the machine properly. Unless the design of the bunker limits its accessibility, operators should be directed to alter their entrance and exit points regularly to avoid excessive wear on the lips in any single location. The speed of the machine should be kept at a reasonably slow pace while raking the sand and should be allowed to move no closer than 12 to 18 inches from the bunker lip. The rake should be limited to the flat or mildly sloping ground within the bunker, avoiding the faces at all costs. To prevent sand from being dragged over the lip when leaving the bunker, the scarifying bar should be raised well ahead of time, preferably 12 to 18 inches before reaching the lip. Finally, the inside perimeter of the bunker and any unraked faces should be touched up with a hand rake, and weeds in this perimeter area should be pulled by hand or periodically treated with a non-selective herbicide.

**H**AND RAKING the edges of the bunkers according to these guidelines would greatly reduce the lips' rate of deterioration. It would also minimize or eliminate the need to routinely power edge the bunkers (at least in areas of cool-season grasses), a practice that gradually destroys the original size, shape, and design of the bunker.

Another way to limit injury to bunkers by the mechanical rake is simply to use the machine less often. A club that normally rakes bunkers four times a week with the mechanical rake might instead send a small crew to touch up the bunkers by hand on two or three occasions, for example. If golfers would learn to accept this approach, the longterm appearance and playability of the bunkers would be enhanced in many instances.

It seems straightforward enough that workers can be taught how to operate a mechanical sand rake properly, but this is the exception rather than the rule. Only in recent years, though, have superintendents and course officials begun to recognize the sand replacement and renovation costs involved with the use and misuse of the mechanical sand rake. With this expensive work behind them, perhaps there will now be more emphasis on worker training, along with a renewed respect for and greater utilization of hand raking in the maintenance of sand bunkers.

# PROFESSIONALISM THROUGH PARTICIPATION

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# By Ted Woehrle

What is professionalism? How do we achieve it? How do we improve it? If we sit down and ask ourselves the question "what is professionalism?" some interesting thoughts crop up.

We all have images of people who are generally considered professionals in our eyes (doctors, lawyers, dentists, teachers, and ministers), and people who are not (tradesmen, office workers, farmers, etc.). Next, we ask ourselves "are we professionals?" - we

would like to think so. I think we appear to ourselves as professional, but does the general public consider us professional? Perhaps not.

"What makes one man professional and another a non-professional? In my opinion, it has to be the standards that one projects. Standards on conduct, standards of dress, standards of ethics and standards of behavior. There others to be sure, but in the final analysis, it is a matter of the image that is projected. It is a matter of being viewed in a favorable light. To be sure, there are as many variations of this image as there are people, but throughout the years certain groups or job categories have become known to be professional" and basically it is a matter of "image". And the standards they have met.

Professionalism and image are synonymous and if we project a good image, we are far ahead. How was this image of us formed, and how can we improve it? Who sets the standards? The answer to all these questions is your professional association. There is, to be sure, some governmental involvement, but even the government has to reason with the American Medical Association and the American Bar Association.

So, in the final analysis, it is ones professional association that plays a big role in establishing the image that will prevail, that plays a big role in setting standards which will be acceptable, and that acts as a catalyst for all activities relating to a profession.

There are exceptions to professionalism and that would be the rather rare person that projects a professional image because of special qualifications earned through experience or education.

What has participation in these associations done for the turf management industry and for the professional turf manager? Participation in the collective activities of an association by individual members has taken turf managers out of the shadows and into the sunlight. Participation in the collective activities by individual members has helped to move turf managers from tradesmen to professionals.

All of this has been accomplished by those in the turf industry giving of their time, money and efforts 

and conduct, the purpose of which was focused toward the upgrading of the industry and the professionalism of the turf manager.

Fundraisers such as "Golf Day" are an important part of upgrading the industry. The monies given to research help find answers to the many complex problems facing us today. The need for the superintendent to stay abreast of changes in the field has always been important. But the need is increasing with alarming speed. The superintendent who does not keep abreast of new developments in turf management, of changing technology in science, or of the restrictions and regulations in chemical usage will be about as effective as the man who tries to cut fairways with a hand push mower.

Every professional does not have to have a Ph. D or have spent most of his life as a lawyer or doctor to earn the respect and esteem that comes with knowing his job. It was not too long ago that very few universities offered professional training for golf course superintendents. Today, numerous institutions offer some sort of training for those interested in pursuing a career as a golf course superintendent. The secret is the application of the knowledge gained from education and research.)

Additional help for us comes from Universities and industry in the form of research. In many cases we control the direction of research through our requests. Our needs are attended to by those we support. The complexities of todays standards, which are always more demanding, cause us to look for all the help we can get. Some of the most active associations involved in the distribution of monies for research are GCSAA, USGA, O.J. Noer Foundation and Musser Foundation. Additional research is done by individual states. In all cases, the majority of the monies raised is the result of superintendent involvement in fund raising projects. Some states raise \$30-50,000.00 per year - Ohio and Michigan. Certain state legislatures support turf research if all turf interests are satisfied.

Projects presently being worked on include: Grass breeding (drought resistance); transition zone problem; soils; irrigation and drainage; aerification compaction; nutrition; weed killers - selectively (Poa annua eradication); plant growth regulators; disease control; insecticides; development of disease models in conjunction with computers; water shortage problems; new cultural practices; mowing - height of cut - picking up of clippings; cultivating; and sand use - top dressing - sub-soils - bunkers.

Examples of Turf Research include: USGA Green COMMINUED PAGE 7

## TED WOEHRLE, CONT.

Section 1953 - GCSAA S & R Funds 1956 - Midwest Regional Turf Foundation originally provided professional guidance for seven states - Wisconsin; Michigan; Iowa; Illinois; Indiana; Ohio; and Kentucky. As the years went by, all six states outside of Indiana started their own turf grass research programs to solve individual problems. This holds true for all 50 states. Extension programs take care of most problems, but concentrated research must still be conducted in individual states.

Changing our "vocational occupation" to a professional occupation is important - become active. Your professional association is more important than ever, and your participation is necessary to support the programs that are proposed for the successful future of GOLF.

Some of these associations include educational opportunities at conferences, seminars, and through correspondence courses ultimately leading to certification, which most of you know will eventually lead to the equivalent of a college degree. By offering a Continuing Education Program, you will be able to earn a "Certificate of Professional Education". This, coupled with Professional Internship requirement for the apprentice superintendents, will insure quality in the next generation of superintendents.

By the year 2005, the requirement of a Bachelor of Science degree in an applicable major, or its equivalencey, will be necessary for entrance into professional certification. College graduation or equivalency will be required. Completion of the GCSAA Continuing Education Program is considered as equivalent to a B.S. degree.

The association is making your profession more recognizable with a strong public relations program. Their PR program was quite evident during some of the recent television broadcasts of ESPN coverage and on ABC covering the U.S. Open. Allied Golf Associations have recognized our profession and its importance to the well-being of the game of golf.

Your association is the catalyst. The forum for expression of your ideas. The source of your education, your growth.

Certain members in your profession will gravitate to leadership within your association and by representing the will of the other members, will set the standards, the concensus, the image.

I charge you to allow your association to tell your story to the nation in order that your "image" will be established in the public eye. In turf management, professionalism is already here for some, near for others. You and your association are the only ones that can make it happen. Associations large or small, national or local, technical or social, give you an avenue to professionalism through participation. Continue to cherish your membership, continue to give of yourself, continue to participate. You and your profession will be better for it.

> "You can get through life with bad manners, but it's easier with good manners." — LILLIAN GISH

# "A New Tool From Down Under"

by Fred D. Opperman, CGCS Glen Oak C.C.



A year ago when I was visiting Australia and stopped at a golf course, I saw an interesting tool that I thought might have a use here on our putting greens. The machine was a roller that was being used at the time on a bowling green. The bowling green that I watched this machine roll was Penncross cut as low as any of

our golf greens. This machine was/is used daily after each mowing to help "iron" the surface. The bowlers are as fussy as our golfers on the quality of their bowling greens and the speed of their bowls.

After returning to the states, I wrote to the company asking if their machine was used on putting greens and if anyone in the states handled this machine. It wasn't too many days, that one evening I received a long distance phone call from John Ellul of the Golf & Bowling Machinery PTY. LTD. John was enthusiastic over my inquiry and questioned me more on how the machine could or would be used in the states on putting greens. Well, this discussion and interest in this type of a roller led to many more phone calls and letters over the past 8 months.

In early May a roller was air freighted (cost of \$2,000) to O'Hare and in a week, John Ellul followed up and came here to show the machine to me. I had John talk to Ron Jones, from Chicago Turf & Irrigation who agreed to help demo the unit this coming year and see what kind of response it may have in this area.

I was really surprised and pleased to see how well it did function on rolling our greens. The machine is different in that you sit on it facing one end and it rolls left and right. The speed of the roller is really surprising for it travels at about 4-5 miles per hour with a qualified operator at the controls. It takes about 10-12 minutes to roll a 5,000 square foot green. It would be a perfect machine for rolling the greens in the spring. The machine measures 3 feet by 2 feet and has three 41/2" rollers, with one roller being the drive roller. The machine weighs just over 600 pounds (or about 43 stones, as John would say) with the weight of the operator. This machine was made special for golf putting greens by being only 3 feet long instead of the normal 5 feet used for bowling greens. I foresee the use of this machine for the final rolling of tees and greens just before seeding or sodding. Then using it after the seed is spread or after the sod has knitted and needs rolling before mowing. My main purpose was to be able to roll a green and then not cut it as low as some people are now doing. At the present, I have not had the time to check it with a stimp meter since the deadline of "The Bull Sheet" is a month before you receive it in the mail. By the time you are reading this, I will have some test data and will write another article to bring you up to date.

If anyone is interested in seeing this machine in operation you need to talk to your local sales representative from CT&I. Any other questions you may also call me.

Credit: Bull Sheet

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## FIELD DAY SEPTEMBER 1ST NICHIGAN STATE UNIVERSITY

The Michigan Turfgrass Foundation holds an auction during the afternoon following Field Day plot exhibits. This auction is of used equipment that has been donated for this purpose. If any superintendents from Northern Michigan has workable but not needed equipment that you would like to dispose of and get a tax credit for the deduction, will you please contact either Tom Brogger or Tom Read. All equipment donated will need to be dropped off at Tom Reed's warehouse in Traverse City on or before August 25th. Anyone attending this years Field Day could deliver these pieces themselves. If this happens, please notify us so we can contact the auction committee of Dr. Bruce Branham, Fritz McMullin or Tom Mason.

#### SEPTEMBER 12th, NEXT MEETING

Please mark your calendar and reserve this date to be at Lost Lake Woods Club where Charlie Menefee, Jr. is the Superintendent. Further details will be forthcoming in our next letter.

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#### WEST BRANCH COUNTRY CLUB WINNERS

Tuesday, July 12th, our meeting was held at the West Branch Country Club in a joint meeting with the Mid-Michigan Golf Course Superintendents group. The game of the day was "Peoria" and was won by Gary Frost with a score of 59. Actual gross score winner was Wayne Siegreen with 73. Charlie Menefee, Jr. won "Closest to Pin" on number 17 green. Raffle winner at this meeting was Tuck Tate.

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#### PROSPECTIVE BOARD OF DIRECTOR MEMBERS

Now would possibly be a good time to announce that the Board is looking for candidates for next years Board of Directors. There are three Class "A" and one Class "G" positions opening up and will bevoted on at our Annual Meeting, at Indian River in October. Anyone interested should contact Tom Brogger or any present Board Member so their names will be forwarded to the search committee.

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#### SPEAKER AT CHEBOYGAN

Dr. Paul E. Rieke, Michigan State Turfgrass Specialist and Professor in the Department of Crops & Soil Sciences, will be our Speaker at our August 10th, meeting being held at Cheboygan Golf & Country Club. Dr. Rieke is probably the outstanding authority on turfgrass being the Extension Specialist of this state. He would be able to get answers for you if he could not readily give them to you first hand.

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#### MAIL THAT POSTCARD TODAY

We must tell Cheboygan C.C. of the number of steaks to order 1 week in advance so please help us get this information to them. THANKS.....