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FROM THE PRESIDENT'S DESK

Great Turnout At Lake City C.C. April Meeting



The April meeting at Lake City Country Club had a great turn-out with more than 70 members in attendance. Almost two dozen golfers played on mid-season condition greens. Our thanks to Cliff Reynolds and his staff for hosting the meeting. Our appreciation goes to the members and owners who allow the membership of our association to host the monthly meetings at their clubs. We would also like to thank Larry Thornton of Wilbur-Ellis for providing the speaker. Owen Towne of Ciba-Geigy gave a very informative talk on the process that a pesticide must go through in order to become registered.

* * * *

Greg Hubbard, Research Chairman has been busy lining up the golf courses needed for this year's Turf Tourney. The date is June 19 with the dinner to be held at Midland Hills Country Club. The proceeds from the Turf Tourney go into the trust fund. The Trust Fund Endowment has presently over one-half the projected total needed to make it self sustaining for research.

* * * *

Applications are available through local colleges and technical colleges, and at the Association Office for the Harold Stodola Scholarship. The deadline for completing and returning the applications, transcripts, advisors' forms and superintendents' forms is July 1. If you have a person on your staff that meets the guidelines, please encourage him or her to apply.

* * * *

John Nylund and Braemar Golf Club host our May 11 golf meeting.

* * * *

The MGCSA Roster book is out and has some very nice changes in it. Along with the spiral binding are the new divisions for membership, the listings for Distinguished Service Award and Scholarship Recipients. Also new to the Roster this year is a section for new members. When new members are listed in the *Hole Notes*, add the new members' names to the Roster. We are still looking to complete the list for Past Presidents. If you can add to this list or if there are errors that need correcting, please let the Association Office know.

—Rick Fredericksen, CGCS
MGCSA President



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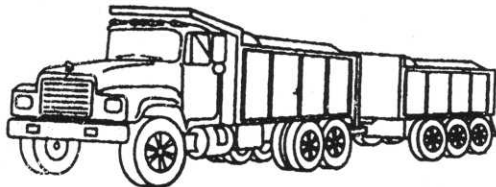
There Will Be a Lot Of New Things to See At Braemar Course

By John Nylund
Golf Course Superintendent

With spring approaching, we all look forward to getting away to attend our monthly MGCSA meetings. Getting a chance to get away and talk with friends in the golf business is a welcome break from the daily grind we all encounter. Dale Wysocki asked me if I would tell a little about Braemar before the May 11th meeting. This gives us some background on the course that is having the meeting.

When you all attend and see projects or interesting features on the course, you will have some idea of what is happening. So here goes.

Braemar Golf Course was built in 1963 by the City of Edina and opened in July 1964. The complex consists of an 18-hole championship course, an executive course and a driving range. In 1969 it hosted the Minnesota Classic. At that time the course was very young to host a PGA event. In 1979 Braemar hosted the USGA National Women's Public Links. Both events proved successful along with numerous state events held over the years. Braemar has a patron card it sells to residents of Edina. This allows them to make reservations over the phone. Non-residents must take what's left of the times.



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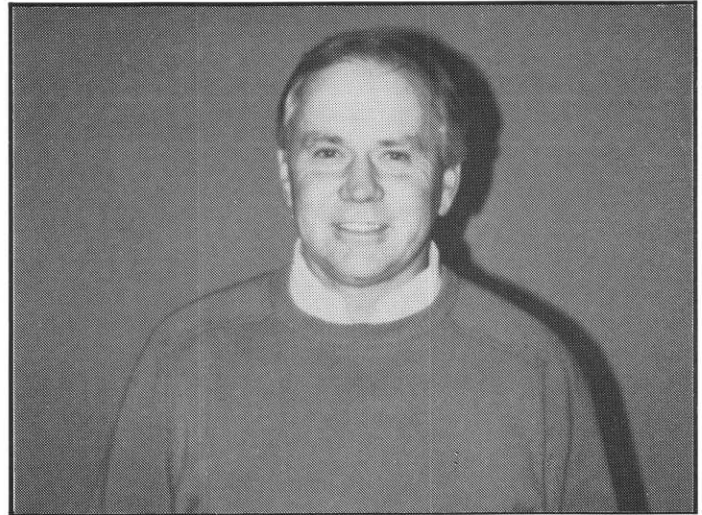
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JOHN NYLUND

Some of the new things you will see when you play are called the Oases. These areas are built to keep traffic around tees to a minimum. They are made with paving stones. The cart path connects to the paving stones so players can drive up and through the service area. The service area includes the ball washer, bench, waste basket and approach to tee.

The golfer then enters to tee off at the red, white or blue markers. We planted ornamentals on each side of the oases and set it off with a new tee sign. We plan to do four or five tees per year, and to this date we have completed 12 oases.

Another thing at Braemar is the new 12th tee area. This is a tee built into the side of a very steep hill. Our problem has been keeping turf on a small tee area. Our solution was a drive-thru tee area with four new tees built into the sides of the steep hill. A large amount of Keystone block was used to build tees and hold back steep banks of soil. The hole is a favorite now and is much easier to maintain.

Our other project completed last October was the redesign and installation of a new sixth green. The entire project consisted of a new USGA green, extensive drainage, irrigation and sodding of the green, fairway and all areas damaged getting to the site. Needless to say, this was very expensive but considering having the hole ready to play by May and completely finished make for happy members.

These are but a few of the projects we are doing at Braemar and hope you all attend and enjoy the day. See you May 11th.

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The Evolution of 'Hole Notes'

Part I: The First 44 Years

By LARRY VETTER
Turf Management Products, Inc.

We all have memories of how our profession has changed over the years. Some of our young members remember the days without computer-controlled irrigation systems. Others, just a little older, remember when greens were mowed only with power walk-behind mowers and bunkers were "raked by hand." Still older members remember when the night waterman was critically important to the health and playability of our courses.

What started with just a handful of members meeting whenever possible grew slowly as more clubs were formed and more "greenskeepers" came to the profession. For some years the "Annual Meeting" consisted of three days of meetings at the "Farm School" on the St. Paul campus where the professors lectured the "greenskeepers" for three days, then tested them and gave them grades. This took place during the first week of March whenever possible.

If you want to really understand where this began, many can spend some time looking in the archives of their club's memorabilia or look at pictures in the locker rooms or on the walls of the grill at some of the older clubs in the area and see photographs of a time that most of us find difficult to imagine. A time when fairways were mown with cutting equipment pulled by a team of horses. A time when gasoline or diesel engines were not even dreamed of. When a "push mower" was literally just that!

The ingenuity of some of the early members of this profession was incredible, as you see pictures of them designing and building tools to help them do their jobs better. In fact, the initial concepts of both the sod cutter and the aerifier of today are the result of Minnesota "Greenskeepers" and their search for improved turf maintenance tools.

There have been phenomenal changes in our profession, with many of them taking place just within the past few years. Most people "in the business" are aware of these to one extent or another. However, many members of MGCSA are not aware of how the Association has changed and, in particular, how *Hole Notes* has changed. That is the primary focus of this article, even though some reference is made that is more accurately "MGCSA history". Those two are so intertwined, that to understand one requires some reference to the other.

This is not intended to be a precise accounting of history. It is, however, offered as an approximate chronicle of events that took place and some of the reasons for those events. The author hopes that this article will inspire someone out there to record some form of a history of MGCSA while there are still some of the "oldtimers" around to fill in the voids and record the events that have taken place over the years. I know from researching background for this article that there are a number of members who have rather extensive files. Let's get this information centrally recorded so that files are not purged and all of this is lost.

MGCSA has gone through a number of name changes since it was organized in 1927. *Hole Notes* has not, although its form and substance have changed drastically over the years. Back in the early days, the Association's written communica-

tion was limited to a postcard mailing to the members telling them when and where the next meeting would be held. As the Association grew, so too did the need and desire for more extensive communication.

In 1960, MGCSA's communication vehicle underwent its first major improvement. The commitment was made to publish an official newsletter that would include not only the information that was previously provided via the postcard, but also personal and professional items of interest to the membership.

In order to accomplish this, the Association acquired a manual typewriter and a mimeograph machine. The official custodian of this equipment was the elected Secretary of the Association. It then became that person's responsibility (I'm sure this was not without assistance at home many times) to sit down monthly, accumulate this information, "cut a stencil," run off the necessary number of copies using the mimeograph machine, fold the one-page newsletter, stuff it in an envelope, seal and address the envelopes, lick the appropriate number of stamps and take this bundle to the post office.

Now most of you can probably picture this to be an absolute nightmare for the superintendent who was "elected", and thereby inherited this task. Remember, this was over 30 years ago! Most of us in the turf business were not English majors and had enough trouble spelling "typewriter," let alone using one! In addition to this, if you are old enough to remember mimeograph machines and stencils, you know that these were critters that had minds of their own more times than not, even when being used by professional secretaries. But, be that as it may, that was the price of being the Secretary in those days. As you might suspect, that position was not highly campaigned for by those willing to serve on the Board!

However, once the equipment and objectives were in place, the next item to be tackled was finding a name for this new publication. What better way than to have a contest to see who could come up with the best name? The winner of that contest, according to Carl Anderson, was Maynard Erickson. And thus, *Hole Notes* was born.

"What to write about?" became the next issue to be dealt with. Space couldn't be filled using pictures, so words were the only space filler that was available. The objective was to have a publication that would be both interesting and informative. How this was accomplished and what it included also was almost entirely left up to the Secretary.

We must remember that over 30 years ago, word processors and computers were not even dreamed of. We also must remember that, even today with these tools at our disposal, it is many times difficult to find the time to sit down, call around collecting news and then put it down in written form. You might especially try to picture finding the time to do this from about May through September. But to their credit, these dedicated Secretaries took the time to put together a means of communicating with their fellow members.

(Continued on Page 8)

Evolution of Hole Notes—

(Continued from Page 7)

This newsletter would include such “folksy” items as “Mrs. John Greenthumb just gave birth to their first son, John Jr., who will undoubtedly follow in John’s footsteps and take over City Country Club when John retires. Both Mary and John Jr. are doing well. We’re happy to report that John Sr. is also coming along fine!” Another item might have been, “John Greenthumb reports that he and his wife Mary had a great time on their vacation this winter. One of the highlights of the trip, especially for Mary, was when they got the chance to tour the new maintenance building that was just built at Southern City Country Club.”

Items similar in flavor to the above were included in nearly every issue. This gave the publication a very personal touch and was anticipated and enjoyed even by the spouses. In addition to the personal touch, business and professional items were included, such as “John Greenthumb, City Country Club, reports no breaks coming out of winter on the new irrigation system that he put in last fall. John now feels confident that he will be able to water all nine tees and greens in the same night if his waterman can stay awake that long.”

It was also about this time that technological advances and governmental regulations began to appear almost overnight *Hole Notes* became a much-needed vehicle for these types of communications to the membership.

It wasn’t too many years, however, before the task of publishing this newsletter was just too overwhelming to expect one person to accomplish it, particularly on a “volunteer” basis with little, or no, spare time. The Association was growing rapidly as were the demands placed on the Superintendent by the golfing membership. It became very apparent that a change had to take place to relieve the workload of all Officers and Directors, particularly that of the Secretary.

When the 1971 season was in full swing, this need could not be ignored any longer. The growth was too rapid, the pressures too great, the work load too large. Something had to change!

Next Month — Part II: The Next 21 Years

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U of M Men's Golf Club Honors Russ Adams

On April 15, the University of Minnesota Men's Golf Club honored retired Golf Course Superintendent Russ Adams. Russ had recently retired after 29 years of service at the Les Bolstad University of Minnesota Golf Course. The event was part of the annual spring banquet held by the Men's Golf Club at Midland Hills Country Club.

Men's Golf Club President George Benson spoke to the group about Russ' achievements and his always positive attitude when presented with never-ending tasks of taking care of the golf course for golfing events, but also preparing it for cross country meets, assisting with the track and field program, and for those of us that attend Golden Gopher hockey games at Marriucci Arena, there's always that friendly corner of the arena, where you can meet a handful of superintendents discussing their ideas on how their golf courses are making it through the winter or on how the referee has no real idea on what he is doing. In summing up his talk, President Benson mentioned with Russ Adams "it was always *Why not* instead of *Why?*"

Roy Tutt, Executive Secretary, then took over the podium and explained how when retired athletes retire, the club that they retire from will also retire their game jersey, but with Russ the idea of retiring his jersey just isn't feasible, so instead the Men's Club will honor Russ with a new game day jersey, Number 1, Lifetime Member at Les Bolstad Golf Club.



CHARLIE POOCH of Les Bolstad University of Minnesota Golf Club gives **RUSS ADAMS** some final advice.

In short, it was nice to see this fitting tribute to a man who has given so much of himself. And remember, when your down in that deep pot bunker raking it out, and a short gentleman calls your name, you will first notice the grin that extends from ear to ear and a quick handshake with a "How's it going?" I'll wager that it will be Russ Adams enjoying his well-deserved retirement at your golf course. Maybe someday his handicap will be down to 1 or 2, but he will always rate a perfect 10.

— Dale Wysocki

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COMPATIBILITY IN THE SPRAY TANK

By understanding a few basic principles, the chemical operator can apply a large number of chemical combinations simultaneously

By Dr. Paul Sartoretto,
Technical Director
W. A. Cleary Chemical Corporation

There is a great economic and performance benefit in being able to spray a mixture of chemicals at the same time. The beneficial results have at times been astounding, and once the art has been mastered the chemical operator will never go back to the old-fashioned notion that chemicals must be sprayed one at a time.

For economic reasons the farmers of this country have been spraying mixtures for years, but turf has been sadly neglected for the obvious reason that phytotoxicity might be encountered on fine turfgrass. This need not be if one has a thorough but simple understanding of the nature of the chemicals one is spraying.

I divide all chemicals into two categories: solubles and insolubles. Of course, water is the substrate. I go one step further and make the dogmatic statement that *insolubles cannot burn grass*. If they are insoluble in water, how can they possibly diffuse into the plant in toxic concentration? Or, how can they possibly be so concentrated as to produce reverse osmosis and have water move out of the plant and cause desiccation? In my 35 years of experience in the turf field, I have never encountered phytotoxicity with insolubles at the time of spraying.

I will admit that there are insoluble pre-emergent weed killers that could be sprayed on fine turfgrass and could, over a period of time, release a soluble chemical that could be toxic to a particular species of grass. But these precautions are clearly outlined on the label. For example, there are certain pre-emergent crabgrass killers that are not to be used on bentgrass or *Poa annua* greens.

Taking this exception into consideration, and following the rule of not exceeding the recommended application rate because EPA has warned applicators not to do so, one can mix any number of insoluble chemicals in the spray tank without incurring phytotoxicity.

Fortunately, the majority of pesticides are insolubles. This allows the pest control operator considerable latitude on what he can mix in the spray tank. On the other hand, *soluble* chemicals must be handled intelligently to avoid phytotoxicity. One must carefully follow the rules and guidelines that I am about to propose in order to avoid burning.

Soluble chemicals can be divided into two general classes: *ionic* and *nonionic*. The ionic solubles are usually referred to as salts, and can be further subdivided into cations and anions. The cation, which is positively charged, is always accompanied by an anion, negatively charged. They are always found together, neutralizing each other. But it is customary to single

out the nature of the active ingredient and ignore the ionic charge of the inert ingredient. For example, 2,4-D can be formulated in various salts, such as dimethylamine and diethanolamine. The 2,4-D acid is considered anionic, and the cation is the inert portion whose function is to solubilize 2,4-D in water. Another example is cadmium fungicide, which occurs as soluble salts, such as chloride or succinate. The active ingredient cadmium is cationic, and the inert anion is ignored.

Compatibility Test

Incompatibility results when an active cation is tank-mixed with an active anion. An example of such incompatibility would be the tank mixing of Caddy (cationic) fungicide with 2,4-D (anionic) herbicide. This is clearly visible when a little 2,4-D and Caddy are added to water in a glass jar. Instead of being a clear solution, the water will become milky, followed by the precipitation of a gum of the cadmium salt of 2,4-D.

Fortunately for the pest control operator, all the soluble post-emergent herbicides on the market are anionic. Therefore, they are compatible and can be tank-mixed without incurring precipitation. When trying new soluble pesticides for possible tank mixing, simply test them in a glass jar as previously described. If they can be mixed with water and still result in a clear solution, they can be safely tank-mixed.

It has been previously stated that all soluble post-emergent herbicides are anionic and compatible. There are only six cationic pesticides on the market at the present time, and two of them, Diquat and Paraquat, because they are general grass and weedkillers and are never tank mixed with other pesticides. The other six, strangely enough, are all fungicides: PMAS and Calo-Clor, two mercuries; Caddy and Cadminate, two cadmiums, and Subdue and Previcure (propamocarb), two *Pythium*-control chemicals. Again, I emphasize that if two or more soluble pesticides are tank mixed, test them in a glass jar of water to assure yourself of their compatibility. Once you are satisfied that they are compatible, you can add any number of insolubles to that mixture without incurring phytotoxicity.

EPA uses signal letters to inform applicators whether a product is soluble or insoluble.

S = solution

SP = soluble powder

EC = emulsifiable concentrate

WP = wettable powder

F = flowable

S, *SP* and *EC* are classified as solubles, *WP* and *F* are insolubles.

(Continued on Page 12)