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HOLE NOTES

Official Publication
of the
Minnesota Golf Course
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FROM THE PRESIDENT'S DESK

Warren Rebolz To Receive MGCSA's Distinguished Service Award



Despite a strong westerly wind and temperatures in the low 50's, several members took advantage of the opportunity to play Island View at the October meeting. Mark Poppitz and his staff did a fine job of preparing the golf course for our arrival. We appreciate their help with the monthly meeting.

* * * *

at the September Board meeting unanimously selected Warren Rebolz as the recipient of our MGCSA Distinguished Service Award for 1992. The Distinguished Service Award is given to individuals who have given of themselves to further our association. Warren served as the MGCSA's Executive Director from 1974-1989, working closely with the Board and the membership as our association continued to grow. He will retire from the MGA as Executive Director in December after 19 years of service. The award will be presented to Warren at the Annual Banquet on Friday, November 20.

* * * *

Hole Notes pertaining

to alternative mercury uses for snow mold. Please take the time necessary to read through the information presented and be aware that after July 1, 1994, Calo-Chlor will no longer be licensed for use in Minnesota. Any remaining Calo-Chlor in your inventory will need to be disposed of by other means than applying it to turf after this date.

* * * *

has submitted two by-laws changes for this year's annual meeting. One change concerns the addition of the two associate members to the Board of Directors. Their presence on the Board has proven to be quite helpful. They provide their insight into running a business and also serve as a liaison between the board and the associate membership. The other involves an inactive class for members who may find themselves unable to maintain their classification due to illness, unemployment or other reasons. These changes will be voted on at the Annual Meeting.

The GCSAA has several by-law changes proposed for this year's Annual Meeting. Bill Roberts, President of the GCSAA, will speak at the Annual Conference regarding these changes. Greg Hubbard will serve as voting delegate for our association at the Annual Meeting in Anaheim.

* * * *

draws to an end, I would like to thank the Board, the committee chairs and the committee members for helping make 1992 successful. Also I would like to thank the members who helped provide their clubs for meeting and tournament sites. It is the help and dedication of our members of the MGCSA that makes it the success it is today.

—Rick Fredericksen, CGCS, MGCSA President

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Island View C.C. On A Sunny October Day

The weather cooperated to an extent. It was sunny, temperature around 50° and a slight wind out of the northwest at 25 knots, which meant a windchill of about 35°. Golf Course Manager Mark Poppitz and his fine staff did a phenomenal job in preparing Island View for the onslaught of 70 MGCSA members. Mark Reuter and Bob Frank put on a wonderful display of turf equipment from John Deere. Before lunch Keith Van Liere of Priority Management offered insight on how to better manage our time and become more productive.

Now it was time for golf, pairings were made, the golf shop was running a special on "wind resistant golf balls" and some people were trying to figure out how to turn a slice into a hook. The outstanding drive went to Tom McCann, Warren Haugen showed that it's easy to sink the long putt and Mark Moers and Joe Buege gained the honors as most accurate. The MGCSA monthly meetings were a tremendous success for 1992, and all host Golf Course Managers and their respective facilities are to be thanked for letting the MGCSA utilize them.



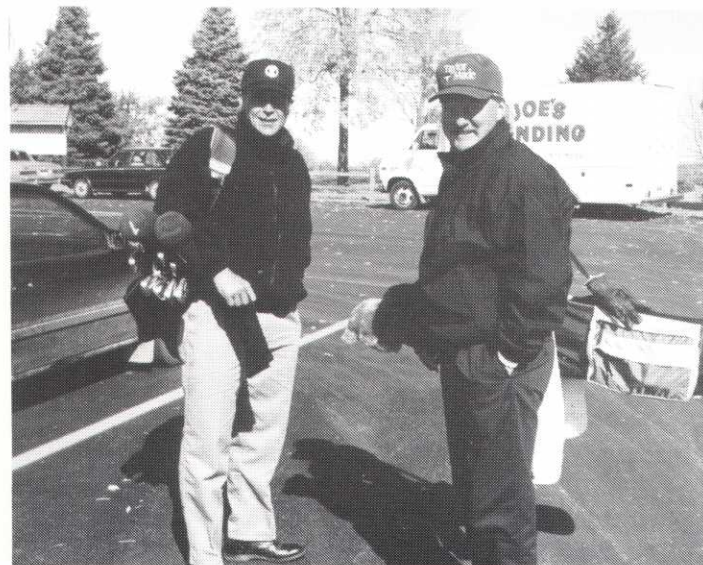
HOST SUPERINTENDENT MARK POPPITZ (right) and KEITH VAN LIERE of Priority Management exchange ideas.



MARK REUTER (left) and BOB FRANK of Polfus Implement, Inc.



TOM HABERMAN of MTI, (left), rides along with CARY FEMRITE, Pebble Creek Country Club.



DALE PARSKE, CGCS of Turf Supply Co. and DUANE SLAUGHTER, Stonebrooke G.C. "It's not cold outside!"



GREG HUBBARD, CGCS Manitou Ridge



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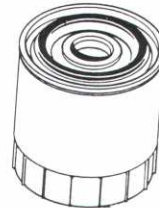
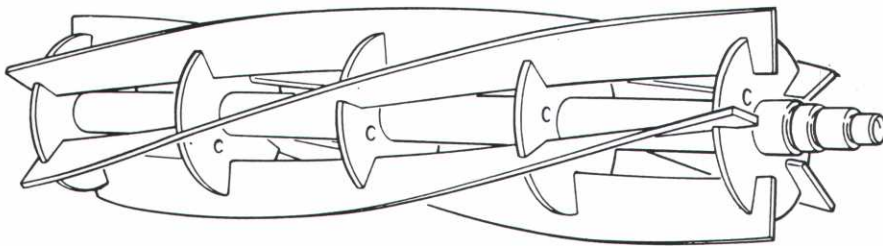
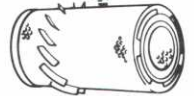
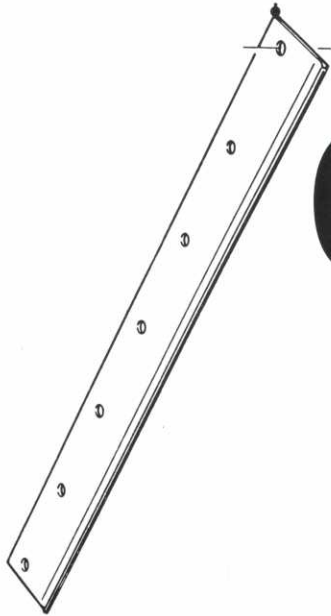


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Preparing Irrigation Systems for Winter

The items requiring the highest maintenance on an irrigation system are:

1. Pump Station
2. Water Source
3. Lightning Protection
4. Automatic Controls
5. Turf Rotors

The pump station (the heart of your system) is usually the most ignored item. This is understandable because it is the most highly technical piece of equipment.

Eighty percent of pump station damage is due to your water source, and that is why I have given the source its own heading (#2, below). If closed coupled centrifugal pumps are maintained, the suction lift through the foot valve and intake line will give the most problems. Close examination is necessary, and if wear is noticed in the foot valve, screen or seal assembly, replacement may be necessary.

Remember! Replacement parts may be available for the foot valve, but it usually takes four to six weeks to get these parts from your supply company.

The second problem item in closed coupled pump stations and the first problem item in a turbine pump station is the main control valve.

The pilot control orifice on the main control valve can become clogged at the drop of a hat if not properly screened.

The past couple of years, pilot flush screen assemblies have been introduced to minimize station miscalibration due to clogging. The other items on the pump station usually fall a distant third if maintenance has not been ignored.

The pump motors will need to be periodically lubricated and if high speed (3,600 rpm) motors are installed, expect to replace the motors every two to three years.

The pump shaft packing will need to be replaced at least once a year. Mechanical seals of the pump shafts may have been installed, and, if so, examine excess leakage and adjust or replace if necessary.

The heating and ventilation of the pump station will need evaluation for automation and effectiveness. Proper water drainage for the pump station pad and motor packing will minimize undue moisture damage and control circuitry malfunctioning due to humidity. Painting the inside of the station will minimize air contamination to the electrical circuitry.

The pump station should be inspected by a professional service company. I would recommend a service contract with a pump station firm to do detailed preventive maintenance.

Water source preventive maintenance is usually easily done during the winter, but impossible to repair during the watering season. The water source includes three main points:

1. Water quality and quantity
2. Reservoir maintenance
3. Intake structure-screen, wet well intake and wet well

The water quality for golf course irrigation is not likely to improve and most likely will get more difficult to work with

in years to come. Algae strikes fear in all of us, but it is best corrected at the source. Aeration, chemical application and even grass carp have been effective. State and federal control is affecting these approaches and professional advice will be necessary.

The increased demand for better year-round turf has caused the lowering of lake levels. This fluctuation causes suspended particles to infiltrate into the system. Drilling of wells or transfer pumps would be recommended to maintain lake level control.

Reservoir maintenance should be a yearly project. The cleaning up of the shore banks and opening of inlets and exits will keep an effective water flow through the reservoir.

The inlets will need to be dredged for silt yearly. This will prevent extensive and expensive dredging if building up occurs.

The inlet screens and wet well must be checked. These screens are usually made of stainless steel, but different grades of stainless are affected differently by toxic water conditions. The intake pipe and wet well will need to be checked for deterioration and repaired. The wet well is also a point for silt accumulation. This can be cleaned by a sludge type pump, rented from any local rental company.

Lightning is a fact of life. Some type of protection can minimize damage. Lightning protection can minimize damage. Lightning protection is frequently being updated and manufacturers' recommendations should be observed. Testing of arrestors and ground rod assemblies should be done and repairs made when necessary. The difficulty with lightning damage is that when you think it's repaired, some other damage will be exposed. **DO NOT TAKE LIGHTNING PROTECTION LIGHTLY.**

The irrigation system **automatic controls** maintenance is year-round. During the winter, all control panels should be checked and repaired. The motors, printed circuit boards and wire terminal blocks will show wear first. The irrigation programming will need to be evaluated and adjusted for overwatering and pumping system inefficiencies. If computer controls are used, winter is an excellent time for updates and checking golf cart damage to pedestals and mounting pads. Check field wiring connections and note repaired points.

The **turf rotors** will need to be reviewed in the fall noting the following:

1. Slow opening and closing
2. Weeping
3. Coverage/Application
4. Clogged nozzles
5. Cover and case damage
6. Rotor operated smoothly

After noting the defective rotors, proceed with a rotation repair program. Take ten rotors at a time and replace or repair the rotor. Manufacturing companies usually have repair services if difficult problems occur. Check to see that the rotors are at ground level. Too high will cause mower damage—too low will prevent the open case rotor from working properly.

—Bob Scott, *Irrigation Consultant, Conyers, Georgia*

We Do It The Old-Fashioned Way

By Mike Bailey

Have you ever just sat down and thought about it? Is golf really getting too big for its britches? I mean after all, remember when golf was a simple sport? You know. Go out and rent a set of clubs, hit that little white ball all over the place and when you finish, think to say "that was fun."

Now look at golf. High tech with turbos and graphite. What in the world can you do with a "turbo driver?" Is it really a buzzword or what? Maybe you guys that drive Porsches think you can hit it farther, but I'll bet if you were blindfolded, you couldn't tell the difference. Remember when a good ol' hickory shaft was good enough? We won't even discuss graphite and carbon shafts.

Hey, and what about you golf course superintendents? Remember when you were just greenskeepers and those maintenance technicians were just laborers. Now you need a license to go out and spray those fancy bug chemicals. Next I guess they'll even want to know where you go and throw your junk away.

Now really, what's all the fuss about fast greens? Maybe we've gone just a bit too far. We measure the height of cut in "thousandths of an inch." Can you actually tell the difference? And then there's even talk about double-cutting and triple-cutting. Some guys even claim they mow their greens not only in, the morning but in the afternoon too.

Whew! Just cut the darn things and don't worry about it. I'll bet I can grind down the blade on my bush hog, put that sucker in low range, get that P.T.O. whirring like a buzz saw, and my greens will look just as good as yours.

Well, of course. It's very simple why my greens have no grain.

It's quite simple. Everybody knows grain grows towards the dominant southeast sun.

I personally think verticutting is a bit overrated. The easiest way to get rid of grain is to take a sod cutter, strip the greens and turn the sod around. This way the grain curves around from the north and yep, you've got it; NO GRAIN.

I wonder how they changed cups in the beginning. I'll bet they probably used a post-hole digger. Think about it. Why bother to buy a fancy cup cutter tool when a good ol' post hole digger will do just fine. Once you get the hang of it, there's not much difference.

Plus consider the extra benefits. Now you've got a tool that can do two things. You can even dig holes for fence posts. After all, how else can you keep the goats from just grazing anywhere?

Thatch? No problem here!

I believe a good, deep, thorough verti-cutting every spring will rid you of your thatch problem for the rest of the summer.

There are a couple secrets, however. Verti-cut only one direction, immediately fertilize and water heavy and don't mow for about a month. After that everything will be just fine.

By late summer, I can get those greens down really tight. Why mess with one of those silly little walk mowers. Even one of those new fangled tri-plex greens mowers still seems to take too long. I can put a fairway mower on that green, whip a couple circles around the green and lickety split, it's done and I'm off to the next.

The only tip I can give here is: it's best to be a hydraulic unit in order to get better reel speed on the clean-up circle pass.



HOCKEY



BEGINS NOVEMBER 12

It's time for the **Minnesota Golf Course Superintendents' Association Hockey Club** to put their blades back on. Ice time is as follows:

<u>DATE</u>	<u>TIME</u>	<u>LOCATION</u>
Thursday, November 12	11:30 a.m. — 1:00 p.m.	Augsburg "B" Rink
Thursday, December 17	11:30 a.m. — 1:00 p.m.	Augsburg "B" Rink
Thursday, January 14	11:30 a.m. — 1:00 p.m.	Augsburg "B" Rink
Thursday, February 11	11:30 a.m. — 1:00 p.m.	Augsburg "B" Rink
Thursday, March 11	11:30 a.m. — 1:00 p.m.	Augsburg "B" Rink

Any association member is welcome to play. Ice time is courtesy of Associate members.

Join us for pizza at Davanni's after the contest.

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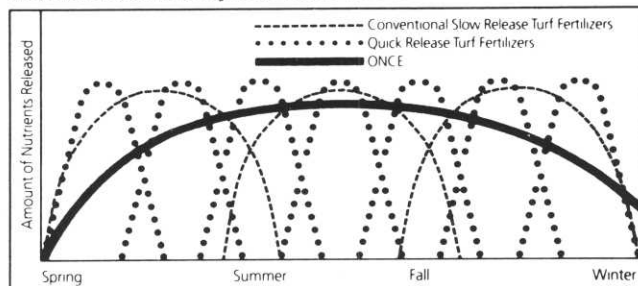
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Microbial Releasable	■	■			
Not dependent on coating or particle size for release	■	■			■
Nonburning	■	■	■	■	■
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Winter Storage of Engines and Equipment

When you do not plan to use your vehicle or equipment for some time, it should be stored in a dry and protected place. Unnecessary exposure to the elements may deteriorate its appearance and shorten the usual service life.

1. Operate the engine until the fuel is completely consumed.
2. Drain the fuel from the fuel tank. After draining the fuel, back flush the inline fuel filter.
3. While the engine is still warm, drain the oil from the crankcase and refill with fresh oil (see "Engine" manual).
4. Clean exterior of engine. Paint the exposed metal or coat with a light coating of rust preventive oil. Use oil that complies with SAE #30 MIL-L-21260 Standards.
5. Wash, clean and completely lubricate the tractor. Refer to the charts in the "Lubrication" section. Paint the exposed metal or brush a light coat of rust preventive oil over unpainted metal.

Battery

Refer to manufacturer's manual for specific instructions. Remove battery and clean it; store in upright position. Maintenance-free batteries should be stored in a cool, dry place. Storage above 80 degrees greatly increases self-discharge. If wet batteries are discharged, the electrolyte will freeze when stored below 20 degrees. **IMPORTANT** - The battery should be checked every 60 to 90 days while in storage, and should be recharged if necessary.

Tires

Before storing the vehicle, clean the tires thoroughly. Jack up the vehicle so the load is off the tires.

1. If it is not jacked up, check the tires at regular intervals and reinflate as necessary to keep them at the recommended pressure.
2. Store the vehicle so tires are protected from sunlight.

Starting after Storage

1. Check and recharge the battery according to recommendations given in the battery booklet. Reinstall the battery.
2. Clean the fuel filter and drain water from fuel tank.
3. Service the air cleaner and check the radiator water level.
4. Check level of oil in the engine crankcase and hydraulic system.
5. Fill the fuel tank with fresh fuel.
6. Before driving the vehicle, make certain the tires are inflated to the proper pressure.
7. Either move the vehicle outside before starting engine or keep doors and/or windows wide open to provide sufficient ventilation to prevent danger from carbon monoxide gas in the exhaust.

Start the engine but do not operate at high speed immediately after starting. Allow time for it to become properly warmed and lubricated.

Long Storage

Before storing the engine for more than a few months, remove any dirt on the machine and:

1. Drain the coolant in the radiator. Open the cock at the bottom of the radiator, and remove the pressure caps to drain

water completely. Leave the cock open. Hang a note ("No water") on the pressure caps. Since water may freeze when the temperature drops below 32 degrees, it is very important no water is left in the machine.

2. Always set the accelerator lever on "Stop." Should the decompression lever be pushed, and compression reduced while the engine is stopped, starting the next time may be not only difficult but impossible.

3. Remove dirty engine oil, fill with new oil and run the engine for about 5 minutes to let the oil penetrate to all the parts.

4. Check all the nuts and bolts, and tighten if necessary.

5. Remove the battery from the engine, recharge it and adjust the electrolyte level. Store the battery in a dry and dark place.

Storing Tractor with Mowers

The outrigger and wing units should be stored in the raised position. Tie mowers in this position to relieve strain on hydraulic system. The front and center units are stored in the lower position on blocks so weight is not on tires. Store where tires will be protected from sunlight.

Mower Storage

Read "Storage" section of operator's manual for your "Hydraulic Reel Mower."

—Larry Evans, *Lawn & Turf*

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