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### HOLE NOTES

Official Publication of the Minnesota Golf Course Superintendents' Association

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FROM YOUR PRESIDENT'S DESK

### Tianna C.C. Was Well Worth The Travel



The farther we travel the better it gets. Bill Cox had Tianna C.C. in excellent condition on June 13th but as I was told by a member in town, Bill always has the course looking great.

Bill also took time to socialize with some early arrivers on Sunday. Thanks Bill and crew.

The Turf Tourney is over for 1994. Thirty-two foursomes participated, not a bad number considering we lost some of our prime courses this year due to scheduling conflicts. Nice going, Kevin Clunis.

It seems the busier the courses get, the harder it is to get four tee-times on a given day. Hopefully, things will work out a little better next year regarding some of the "prime" courses.

For anyone that doesn't understand this tournament, I'll try to explain. A golf course donates four tee times accommodating 16 golfers with 8 carts. We market this for \$320 a foursome. We do occur some expense by providing meals and prizes. This is a greeat fundraiser for research — and where is any successful organization without research? The main prizes consist of complimentary rounds of golf at participating courses that did not fill up.

If anyone has any ideas for next year, please let me know.

I thought of a couple things as I was writing, such as a statewide tournament that runs for a longer time. Or maybe some of the courses that couldn't accommodate us would like to donate tee times as prizes.

A special thanks to Ex-officio Greg Hubbard and Executive Director Scott Turtinen for helping out with the scoring!

See you in Rochester on July 18th.

Joe MorisPresident



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# THE BUNKER SAND TRAP

By Judith Ferguson Gockel Agri-Systems of Texas, Inc.

hoosing a new bunker sand has many of the elements of organized gambling; if you are lucky or particularly skillful you could win, but the odds are not on your side. It is possible to even things up, if some of the basic guidelines for making the selection are observed.

In the laboratory, several factors are taken into account. We make recommendations based on particles, particle shape, color, cleanliness and cost. After we have done all that, we then bring the whole thing into the real world by firing a golf ball into a pile of sand almost horizontally and then dropping it from a height sufficient to achieve something close to terminal velocity. If the material passes these tests, it is going to be fine.

For the individual in the field doing the selection, there are some points to consider. The first consideration is particle size. Experience has demonstrated that having the majority of the particles in the .25MM to the 1.0MM range provides the most satisfactory results. By majority, incidently, we are referring to 85% or more of the material, not merely a percentage large enough to elect a President.

Particles exceeding 1.0MM work their way toward the top of any aggregation, while the fines are moved downward through the coarser materials. Any mixture of particles will demonstrate their characteristic while achieving stability.

Large particles blasted onto the green can cause damage to equipment, as well as becoming an uncomfortable hazard to bystanders. Deposits of the recommended sand range are usually very similar to the material used for topdressing; consequently they create few problems. An excess of fine particles often indicate the presence of significant amounts of soil materials;

these associated silts and clays can create serious drainage problems, or complicate existing ones.

It is most desirable to have the bulk of the particles in the .5MM to .25MM range, except where frequent high or gusty winds occur. In this instance, it is advisable to go to the larger size range.

Particle shape is harder to determine and is largely a subjective determination in the field. There is no national standard for sand; one company's mason sand may be another's concrete or glass sand. You can at least request an angular or sub-angular sand, which terms have loose meanings to most suppliers. The problems engendered by Round sands make a determined search for angular materials worthwhile, round sands are theorized to have been windblown at some point in their history; the forces which create them are too great to have been mere water movement. They are inappropriate for most golf course uses, since they shift under pressures of various sorts. A good analogy is a boxful of ball bearings. If you apply pressure at any point everything moves eventually. Pity the hapless golfer, slowly sinking beneath a tide of encroaching sand, while slashing hopelessly at his invisible ball.

Angular materials have some flat sides which interlock with those of other particles, establishing stability quickly, and retaining it well in the long term. It is possible to go too far into the region of the angular; truly sharp sands may pack too hard, making explosion shots difficult. These determinations are difficult to make without special techniques, and these sands are best selected with a laboratory procedure.

The term "angle of repose" is related to particle shape; the more angular

the particle, the greater the angle of repose. The material is piled to the highest angle it will support without having grains of sand begin to avalanche down the sides of the pile. The test is done with material in the dry state; the presence of moisture increases this angle considerably in all sands.

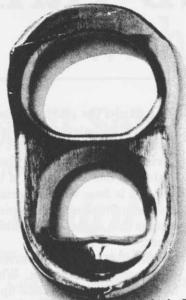
Color is a consideration which requires special attention. While the beautiful white sands show up well on television and are much sought-after by persons who must rely on visual appeal for sales of property or memberships, the white sands are hard on the eves, and can make the ball hard to see in some situations. If you have a choice of materials, you might want to take into consideration your specific needs. If maintenance creates problems, bear in mind that the white and pale cream sands show contamination much more readily than some of the darker materials.

Compaction is another major consideration. The best results are usually obtained from the silica-based sands. There are white limestone sands which are available; however they tend to break down, creating an undesirable quantity of fines. The fines can cement together, creating drainage problems; they can also produce a good deal of dust in windy conditions. This is your last choice if any other materials are available.

Cleanliness is a major consideration in the choice of a bunker sand. Many sands, including "washed" sands, have a significant silt/clay component. This is difficult to determine quantitatively in the field. Because processing methods vary so greatly, one company's washing procedure may be much more or less efficient than another's. As with any of the conditions involv-

(Continued on Page 32)

# PULL FOR THE RONALD MCDONALD HOUSE:



Recycled beverage was help the Twin Cities' Ronald McDonald House, a "home away from home" for families of children undergoing cancer treatment. Twin Cities Ronald McDonald House, 608 Ontario Street S.E., Minneapolis, Forest MN 55414-3118.

### Ronald McDonald House Pop Tab Recycling Project

The Pop Can Tab Recycling Project began as a small project to raise a few hundred dollars to support families staying at the Ronald McDonald House of the Twin Cities while their children were undergoing treatment for cancer or other life-threatening illnesses at area hospitals.

Since the start of the project in 1987 over 250 tons (380,060,800 tabs) have been collected, raising \$215,466.18 for the Ronald McDonald House.

The program has been organized and conducted by VFW Post #295 and Auxiliary of South St. Paul. It now involves thousands of schools, organizations, businesses, and individuals from all over the USA.

Due to storage limitations and health considerations, only the can tabs and not the entire cans have been collected. The can tabs are shipped or delivered to either the VFW Post, the Ronald McDonald House or Twin Cities' McDonald's Restaurants and are then taken to Great Western Recycling Industries, Inc. Some out-of-state groups have even recycled the tabs themselves and sent the cash to the Ronald McDonald House.

This project continues to grow because it is a simple, grass roots, volunteer directed project. It's an easy and fun task for young and old and a great way for people across the nation to lend support to children and their families during an extremely traumatic time in their lives. Please join this growing effort. Collect can tabs in your area.

PLEASE COLLECT TABS ONLY, NO CANS, NO BOTTLE TOPS, NO CAN LIDS. COLLECT TABS IN A CONTAINER THAT IS EASILY ACCESSIBLE (i.e. no small mouth containers) !!!

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# A Hole-By-Hole Look At Rochester Golf & Country Club

Rochester Golf & Country Club is a vintage A.W. Tillinghast designed golf course, circa 1925. While Tillie's trademark design philosophy of a "controlled shot to a closely guarded green is the surest test of anyone's golf," holds true at RGCC, the tight evergreen-lined fairways have extended this philosophy from tee to green.

Veteran golfers at RGCC have a few basic strategic golf pointers for playing this Tillinghast classic.

• Never miss your approach shots to the greens long, especially No. 2.

· Don't try to be a hero when punching out of trees. Just pitch it straight back to the fairway.

· Stay below the hole, especially on

· Accuracy of the tee, not distance, reaps rewards.

· Always remember which direction the wind is coming from before you start, because the avenues of evergreens cause many deceptive swirling winds below the tree line.

The following comments give you some details for the holes at RGCC.

No. 1, Par 4, 355 yards. Unless there is a strong wind from the west, the fairway bunker usually doesn't come into play. The fairway slopes right to left with a ridge preceeding the green, giving a false depth perception to the approach shot. Any pin placement in the front third of the green may result in many three-putts.

No. 2, Par 4, 390 yards. With more room to the right side of the fairway, players should choose to play safely away from the pines lining the left side. Those going over this green will find themselves facing a nearly im-

possible shot coming back.

No. 3, Par 3, 190 yards. A great par three. There is no margin for error. Missing the green left or right leaves very delicate chip shots to this left to right sloping green.

No. 4, Par 5, 530 yards. One of the great par fives in the state. While the tee shot appears to allow placement down the center of the fairway, any shot left of center may be blocked by pine trees on the corner. A well-placed drive provides the option of hitting either a fairway wood to a short uphill lie or a mid-iron onto a longer flat lie. Wayward approach shots have been known to produce broken windows in the clubhouse or find the pool.

No. 5, Par 3, 175 yards. This tee shot requires a full carry to a wide but shallow putting surface. One of the easier greens to make a long putt. Remember your wind direction here.

No. 6, Par 5, 535 yards. This elevated tee creates one of the most scenic views on the golf course. With the safe negotiation of the fairway bunker, it takes two large shots to reach this green in two. The right bunker in front of the green creates a distance illusion, making the third shot club selection key. In best shot, a par here and you lose a stroke to the field.

No. 7, Par 4, 335 yards. Accuracy, not distance is the key to this tee shot. Players will want to avoid driving down the left side, as overhanging limbs will block the approach to another elevated green. Considered by members to be the most difficult green on the course. An approach shot below the hole may yield a birdie try or a demanding shot from "Big Mouth" bunker in front of the green. Downhill putts here require steady nerves and a light stroke with a par four being a great score here even in

No. 8, Par 4, 370 yards. Again the tee shot is key. A slightly off-line drive in either side of the pine trees means an almost certain bogey. Yet for those who set up their approach well with an accurate drive, the green may provide rewards.

No. 9, Par 4, 435 yards. A long par four which usually plays against the prevailing winds. One of the few holes where a long tee shot pays dividends. This green is the largest on the course.

No. 10, Par 4, 320 yards. The shortest par four on the course. A dogleg right to a small elevated green that slopes right to left. Only an uphill putt will yield aggressive attempts at birdie here.

No. 11, Par 3, 120 yards. A classic short par three with surrounding bunkers. This hole always seems to be in between clubs and especially can be tough downwind with out-ofbounds directly behind the green.

No. 12, Par 5, 450 yards. A great chance for eagle here in best shot and certainly a sure birdie. This hole was originally a par four (same yardage) and was changed via members in the late '40s to a par five. It takes a big tee shot to avoid a downhill lie, and the green is crowned. Therefore, accepts only the straightest of approach shots with putts breaking to the clubhouse.

No. 13, Par 4, 405 yards. A great par four! Long iron approach shots must be on target with severe penalties for straying long or left. Also, a bail-out right of the green will leave you at a very difficult chip to right pin placements.

No. 14, Par 4, 370 yards. The landing area in the fairway narrows as you get nearer the green. This is the toughest green to hold. Again, missed approach shots right, left and long reap severe penalties. Putts on this

green are difficult to read.

No. 15, Par 3, 172 yards. The first of the "two new holes" has a long but narrow green for a long iron approach. Prevailing winds are usually right to left, making a solid hit imperative to keeping your flight line. A bail-out right in the greenside bunker almost guarantees a bogey....or more.

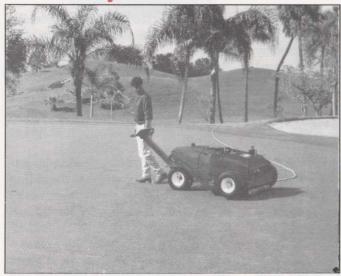
No. 16, Par 4, 350 yards. A tee shot of 225-250 yards is of extreme import-

(Continued on Page 32)

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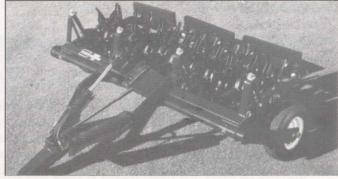
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# **Keeping Reels Sharp**

By Monty Montague National Mower & Turfco, Inc.

Reel mowers are high-precision machines that provide topquality cutting. To deliver such cutting performance, they employ a combination of a reel, often spinning between 600 and 2,000 rpm., and a bedknife.

Because those two elements combine to do the cutting, they should be adjusted precisely. There should be little or no contact between the reel and the bedknife, and the leading edges of both should be squared off — some manufacturers even believe there should be a "reverse angle," and those vary from five to 15 degrees.

There are several ways to sharpen reels. The most commonly used is backlapping, which is actually a simple, inexpensive honing procedure that should be done after approximately 40 hours of cutting. Backlapping involves spinning the reels in reverse after applying (brushing) a special compound, and either backing the reel down to the bedknife or the bedknife to the reel, depending on the particular mower. The pressure between the reel and bedknife, combined with the sharpening compound acting as "liquid sandpaper" actually sharpens the reel blades. When the "grinding sound" stops, the backlapping process is usually complete.

Sharpening compounds come in a number of grits, from a very coarse 50 grit to a very fine 220 grit. Most people tend to use them in the 80 to 120 grit range.

There are two basic ways of spinning reels backward for backlapping. For reel mowers that are not hydraulically driven, there are electric backlappers. They cost about \$400 and can be hooked directly to the mower. Hydraulically driven reels, on the other hand, will probably have a backlapping switch on them.

Sometimes backlapping isn't enough. The next step is grinding and there are several ways to grind mower reels. The first is a spin grinder. Spin grinders range in cost from \$2,600 to \$20,000, so many sports turf managers will actually send their reels out for grinding. But whether you send your reels out for grinding or do it in house, the most important thing you do before is to check the reel for bearing wear and adjust end play. A worn reel, particularly an unevenly worn reel, could be the sign of an improper adjustment or even a worn bearing that needs replacement. If that same reel was sent out for grinding without the mechanical problem being corrected first, the reel and bedknife could "slap" during grinding and create a damaged or an unevenly sharpened reel. Solve any and all mechanical problems with your reels before you send them out for grinding - check your owner's manual for specific adjustment instructions.

Spin grinding is "flat-edged" grinding and is good until you have no relief left on your reel blade. Relief grinding creates an angle on the trailing edge of your blade. All blades come from their manufacturers with relief, and it reduces the pulling and tearing of grass when reels get dull. Relief also speeds up the backlapping resharpening process. Some manufacturers believe it extends the life of the bedknife.

One of the most common tests for reel sharpness after backlapping, grinding or relief grinding involves placing two pieces of newspaper between the reel and bedknife. If they cut the first piece of paper and bend the second, then the mower is probably ready for action. It's important to repeat this test, not just in the center of the mower but at both ends.

Improper adjustment or a worn bearing can lead to uneven sharpening and leave you with a conical reel.

How often you backlap, grind or relief grind your reels will, in large part, be determined by your specific situation. Factors include grass type, cutting frequency and height, topdressing frequency, obstacles and more - it all depends on use. If your reel mower is still cutting beautifully at the end of the season, there's no sense in grinding it. Again, the most crucial thing is to consistently check bearing wear or end play wear, and correct it immediately. If you make adjustments and still get end play, it's probably time to change the bearing - before you use any reel sharpening method.



### MSU Turfgrass Field Day To Be Held On August 18

The 1994 Michigan Turfgrass Field Day will be held Thursday, August 18, 1994, at the Hancock Turfgrass Research Center, Michigan State University, East Lansing, Mich. Details regarding this event will be mailed in July. For further information contact Kay at 517-321-1660.

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