### Math Quiz-

### (Continued from Page 16)

6. Your sprayer, the one with the 200 gallon tank that delivers 35 gallons per acre, has nozzles with 20 inch spacings and is operated at 3 mph. The pressure gauge broke, and before you could replace it, you found signs of pythium disease on the course. You decide to use the sprayer without the pressure gauge. You collect 8 ounces of water from one of the nozzles in 10 seconds. Assuming that the sprayer will be operated at the same speed as before, what is the rate of spray delivery expressed in gallons per acre? Do you need to adjust the pressure down or up to get back to the 35 gallons per acre rate? (6 points)

# $GPA = \frac{5940 \times GPM}{mph \times W}$

7. You decide to spray Embark around the base of the trees on the golf course using a hand held pump sprayer that holds 2 gallons of water. The label states "Apply 4 fluid ounces of Embark per 1000 square feet with a pump type sprayer. .." Your mechanic has equipped the sprayer so that the spray tip is a fixed distance from the ground and this distance results in a 10" wide spray band. Your spray technician, walking at a normal pace, tests out the sprayer and covers a 100 foot distance using 16 ounces of spray. How many ounces of Embark should you put in the sprayer for each tank load of solution? (8 points)

-David Wehner Bull Sheet

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HOLE NOTES

the Garske Scramble. COST: \$20.25 per cart (40 total carts) Norma O'Leary, CGCS, pitches over the bunker.

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to reserve carts for

31

### **Bunker Sand Traps**-

(Continued from Page 5)

ing fine particles, the silt and clay can cause drainage problems, and should be avoided. A percentage of no more than 2% total silt plus clay may be acceptable in a material which meets all other standards.

The final consideration is cost. As the ideal material must be screened, and in most cases washed, you can predict that your costs will be substantial. Do not assume that the most expensive material is necessarily the best one; the material may have had to be processed much more intensively than its less expensive competitor in order to meet acceptable standards. In some areas there are local "name" brand materials with good reputations; these tend to be quite expensive, and not always better than a less well-known one. The cost of hauling cannot be overlooked in the cost equation, since this factor can double or triple your total cost. In submitting material for testing, it is helpful to indicate relative costs of the materials, since we can weight our selection using the same factors you do and assist you more effectively in making a choice.

There are a few things to bear in mind as you prepare to put your new materials in place. First, do not mix new material with old, contaminated sand. The bunker should be emptied, drainage checked and corrected, and then the new sand should be added.

Also, try to stage the addition of the material; have it brought to the course and dumped on a driveway or other hard, clean surface. Then transfer it to the prepared bunker. This permits examination and control of incoming materials. It is a good idea to specify that the trucks doing the hauling be cleaned before picking up your load. This prevents contaminating materials such as gravel or cement being picked up by your fresh sand.

Finally, check with the supplier of your selected materials to determine that the deposit of the material you select is adequate to supply your needs for some time to come. Limited availability can affect your future additions, and require that you go through the whole process again much sooner than you would wish.

A little time spent initially on assessing your specific needs, making inquiries concerning available materials and solving the initial cost versus maintenance cost equation will provide you with a more satisfactory long term result. The more information you have, and can provide to us, the better able we will be to recommend the best material for your needs.



## **MEMBERSHIP REPORT**

NEW MEMBERS-JUNE 13, 1994		Class
Chris Balow	Lakeview	C
1014 4th St. S.E., Minneapolis, MN 55414		
William Gullicks		BII
620 Westview Dr., #208, Hastings, MN 55033	W: 612/438-3839	
Shannon Hendrickson		BII
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James Holden		C
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Steven S. Makowske		D
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Daryl Scheerhoorn	.PBI/Gordon	F
1813 West 6th Ave., Shakopee, MN 55379		
Alan Smith	.Sustane Corporation	F
6667 W. Old Shak. Rd., Bloom., MN 55438	W: 612/943-1600	
<b>RECLASSIFICATION-JUNE 13, 1994</b>		
John Sternal	.Retired	A to AA
Mark Callender		
Chris Hasbrouck		
	and the second	

Dick Grundstrom, Membership Chairman

# **Rochester G&CC**-

(Continued from Page 7)

tance here. This is the only hole with out-of-bounds directly along the right side. This green will only receive very high shots or those landing on the front half of the green. Don't be left of the green.

No. 17, Par 4, 390 yards. With prevailing southerly winds, this hole will play long. Tee shots finding the right side will be blocked by a large Eastern White Pine. Pin placements on the left side will require an approach shot short and right of the hole.

No. 18, Par 4, 410 yards. A drive down the left side of the fairway will avoid the double elm on the approach. The greenside bunkers on the left front give a false sense of depth perception. Pin placements to the left require accuracy.

# A (W)HOLE IN ONE One-stop shopping for golf course materials





During a discussion with a close personal friend, who is extremely well-traveled, I asked him to define "playability." Oh my gosh, I think I found a subject that is undefinable — when you consider each golf course is totally different, and that all the little factors that no one ever thinks about really add up quicker than the national deficit. But, when it comes to explaining these micro deviations to a golfer, they just don't add up to a hill of beans.

Why is that? I guess that golfers would like a golf course that is set up fairly. Each golf course as viewed through the eyes of the superintendent is always set up fair and square. The superintendent has made sure that the greens are groomed neat and tidy. Rolling true is more often than not more important than hyper-quick greens. The mowers have been set so that they clip the turf, not tear it. This is also a minor factor that many people do not see. We do not go out and try to make a golf course unplayable. As a matter of fact, any time we go to an annual conference. A monthly meeting, we go to learn something. Life is full of learning experiences. Learn to get something out of everything. When it comes to work, maybe finding something to make the golf course more playable will make the golfers feel that they are getting a better educated superintendent and a superintendent who is interested in their needs as golfers.

Now that seasonal staff have made their very welcomed appearance on our golf courses, it's time to ponder questions that have been nagging the back of your mind since the last of the snow cover disappeared. Some of the nagging thoughts that have been in the back of my mind are:

• Why is it when I play golf, the sprinkler closest to my ball has no yardage marker, and the one I walk over to comes on?

• No matter how often out of bounds is on the right, the only time the out of bounds is on the left, I hit a hook.?

• Each spring when rakes are put out each bunker gets two or three rakes, but when I go out to play and land in a bunker, all the rakes are gone.

• Why don't people steal your golf balls out of hazards?

Hasn't this year been different from Day One? The weather has been totally different, heat and humidity. As an amateur meteorologist, I often listen to age-old sayings to see if they are true or just old sayings. Sometimes they do hold some truths to them, and sometimes they just blow along with the dust devils out on the prairie. This editorial is being written during the summer solstice, and the way it has been written is that on the day of the solstice, so the the weather shall be until the next change of seasons. Tomorrow's forecast is for less humidity with the temperature around 84°. It will be interesting to see if this old saying does in fact come true.

I was talking to the treasurer the other day and he was mentioning that more members of the MGCSA are getting name tags. This is good. The MGCSA continues to grow and with the influx of new members, it is nice to know whose face matches his or her name.

\* \*

November 12th is the day the MGCSA is going to Knott's Camp Snoopy. This will be the monthly meeting for November. What is going to happen is this meeting will be for the entire family. Bring the children, bring your significant other and bring yourself. The cost to you as a member of the MGCSA will be a mighty low price of \$15. That's just one price for the entire family. Registration will be very important to make sure the luncheon buffet numbers are good. If you have any questions, contact Bill Cox, Arrangements Chair.

MGCSA policy has always been to "comp" the host superintendent at a monthly meeting. Well, at the LeSueur Country Club meeting held during the month of May, host superintendent Rick Hoffman donated the entire registration fee for himself and three of his staff to the Scholarship Fund. The Scholarship Committee wishes to thank Rick.





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