## PARTICLE SIZE DISTRIBUTION OF A USGA ROOT ZONE MIX

| FINE gravel | VERY COARSE SAND | COARSE SAND | MEDIUM SAND | FINE SAND | VERY <br> FINE <br> 8AND | SILT | CLAY |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $\begin{aligned} & 3.4 \mathrm{~mm} \\ & \text { to } \\ & 2.0 \mathrm{~mm} \end{aligned}$ | $\begin{aligned} & 2.0 \mathrm{~mm} \\ & 1.0 \mathrm{~mm} \\ & 1.0 \mathrm{~mm} \end{aligned}$ | $\begin{aligned} & 1.0 \mathrm{~mm} \\ & 0.50 \\ & 0.5 \mathrm{~mm} \end{aligned}$ | $\begin{aligned} & 0.50 \mathrm{~mm} \\ & 0.25 \mathrm{~mm} \end{aligned}$ | $\begin{aligned} & 0.25 \mathrm{~mm} \\ & 100 \\ & 0.15 \mathrm{~mm} \end{aligned}$ | $\begin{aligned} & 0.15 \mathrm{~mm} \\ & 10 \\ & 0.05 \mathrm{~mm} \end{aligned}$ | $\begin{aligned} & 0.05 \mathrm{~mm} \\ & 10 \\ & 0.002 \mathrm{~mm} \end{aligned}$ | $\begin{gathered} \text { LESS } \\ \text { THAN } \\ 0.002 \mathrm{~mm} \end{gathered}$ |
| $\begin{gathered} \text { MAX } \\ 3 \% \end{gathered}$ |  | AT LEAST 60\% <br> OF THE <br> PARTICLES |  | $\begin{aligned} & \text { MAX } \\ & 20 \% \end{aligned}$ | $\begin{gathered} \text { MAX } \\ 5 \% \end{gathered}$ | $\begin{gathered} \text { MAX } \\ 5 \% \end{gathered}$ | $\begin{gathered} \text { MAX } \\ 3 \% \end{gathered}$ |
| $\begin{array}{r} \text { 10\% MA } \\ \text { GREATE } \\ 1.0 \end{array}$ | ximum R THAN mm |  | WITHIN <br> ANGE |  | 10\% MAXIMUM LESS THAN 0.15 mm |  |  |

## "Who ... What ...?"'

by Fred D. Opperman, Editor

Just a short quiz to see how well you know your fellow members and association.

1. Who's the weekend cowboy who ropes?
2. Who puts about as many miles on his bike as his car?
3. Who are the two MAGCS Presidents who were neighbors?
4. How many father-son, brother, superintendent combinations would you guess are in the MAGCS?
5. Who's the rookie artist who already has been commissioned to do a painting?
6. Who are the 2 father-sons who have been MAGCS Presidents and the fathers were Presidents of the GCSAA?
7. Who's the retired superintendent who has 3 sons with PhD's?
8. Who has won the "Ray Gerber Editorial Award" twice?
9. Who was the 50th President of the MAGCS?
10. Who was the 1 st?
11. What year did the MAGCS start?
12. Who's the superintendent who raises and flies falcons?
13. Who was the first Penn State graduate to become a superintendent in the Chicago area?
14. Who started the Prayer Breakfast at the GCSAA Conferences?
15. Who has won the MAGCS Golf Championship the 2nd most number of times?

## Answers to Quiz on Page 24

## Deer Beer Stew

by Dan Albaugh

2-4 lbs. of venison - cut into bit size chunks
8 large onions - peeled and quartered
10 carrots - cut in 1" pieces
5-10 cloves garlic - finely chopped, the more the merrier $3-5$ beers (maybe the more the merrier refers to the beer?)
1 tablespoon dried mint
1 tablespoon crushed red pepper - to taste
3 tablespoons olive oil
8 medium/large potatoes - peeled and cut into chunks
Remove all talo and membrance from the meat - this is a must for it imparts the gamey taste. In a large 8-10 quart pot add olive oil, medium heat, add onions and the chopped garlic. Cook till they pearl, add meat and brown it. Add 3 cans of beer, potatoes, and the rest of the ingredients. Cover, cook for 3-4 hours, add additional beer as needed. Stir occasionally. Salt to taste. (Editor's note: Thanks Dan, I can try this recipe now that you provided the main ingredient).

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Issue \#3
"Can we have championship conditions even if we want them?"

The next issue is one that I feel is perhaps the most crucial. Most superintendents realize that the conditions seen on TV during a major championship simply cannot be maintained for an extended period of time. Unfortunately, many players have virtually no knowledge of steps necessary to produce such conditions. Starved greens, microscopic cutting heights, unlimited labor and equipment, and the course dried to the bone are not conditions that can be maintained for more than a few days at a time in most climates. This is truly "Management On The Edge'. (Refer to the Green Section Record article of July, 1987 by the same name). It takes months and in some cases years to prepare a course for a major championship. Often, the complete reconstruction of greens and tees, reshaping of fairways, and yes, even the removal of trees that have been allowed to ruin the architecture of a classic design, must be accomplished prior to the event. Attempting to maintain championship conditions on a daily basis would destroy most courses.

As the Green Section staff travels the country, we often find ourselves explaining these facts to those present on the tour of the course. We also frequently visit clubs that are "pushing" the course way too hard in an effort to provide championship conditions. As a result, we often make recommendations to raise cutting heights, fertilize more, and accept slower greens. These recommendations are in direct contrast to preparation for an Open. Is this 'two-faced'? No, it's just common sense.

Credit: Mid-Continent News, Vol. 5, 9/29/92

## Answers to "Who...What...?"

1. Harold Frederickson
2. Rick Hahn
3. Tim Kelly \& Fred Opperman, 1022 \& 1023 Shady Lane, Glen Ellyn
4. I counted 25 combinations and no doubt missed a couple. Here is the list of last names and you can put together the relationships: Benson, Braunsky, Breen, Byrne, Dinelli, Fuchs, Gerber, Gruening, Hopphan, Johns, Kensinger, Kiraly, Kronn, Mach, McNair, Meyer, Michaels, Miles, Mirkes, Pieper, Potthoff, Voykin, Williams \& Wollenberg.
5. Peter Leuzinger
6. Ray \& Donald Gerber, and Bob \& Bruce Williams
7. Tony Meyer -2 sons are veterinarians \& Bill is the agronomist.
8. Dave Ward
9. Fred Opperman
10. I don't know, will someone please fill me in on the history.
11. 1926
12. Dan Dinelli
13. Dudley Smith
14. John Ebel
15. Peter Voykin has won it 6 times and Bob Kronn 10 times since 1962.
