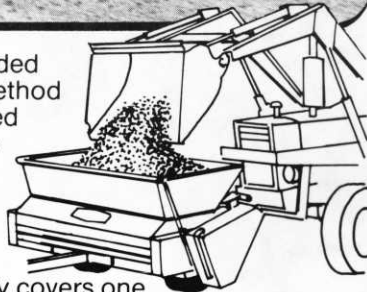


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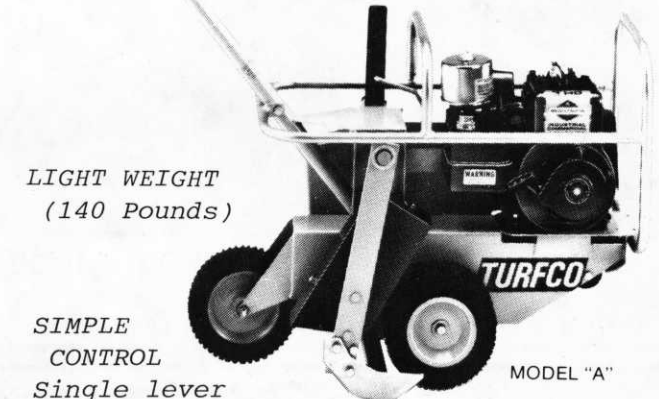
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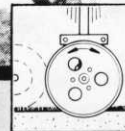
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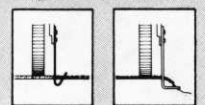
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HOLE NOTES

OFFICIAL PUBLICATION OF THE MINNESOTA GOLF COURSE SUPERINTENDENTS' ASSOCIATION

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FROM THE PRESIDENT'S DESK

DON LINDBLAD

Many thanks to Kurt Erdmann and the rest of the staff at Rochester Golf and Country Club for a great day. Russ tells me everything is on track for our big golf and guest tournament in September. Be watching for the mail out. We finish out the year of golf at Interlachen Country Club with Doug. Let's all hope for a nice fall so we can enjoy a few rounds of golf before snow!

The Research Committee tells me that our green is coming along very well. The seed is due to go down sometime in August. Once the green is up and growing good it will be of great service to all of us.

In talking to Jim Lindblad, I understand that everything went just great for their National Junior tour. Any national tournament is a lot of work for the entire staff at any club. Looks to me like Russ and Dick have a great tournament planned for us at Indian Hills Country Club on September 17. Make sure you all get your registration in early. Let's have the biggest turn out we've had lately.

COMING EVENT

The Wisconsin Golf Turf Symposium will be held October 24 and 25, 1984 at the Pfister Hotel, Milwaukee, Wisconsin.

This year's theme is "Directions in Golf Course Management". Subject matter will include R & D information on pesticides, soils and popular constraints, trends in golf course design and new challenges to super superintendents.

Contact: BOB WELCH, MILWAUKEE METROPOLITAN SEWERAGE DISTRICT, 735 NORTH WATER STREET, MILWAUKEE, WISCONSIN 53202...(414) 225-2222.

BROOKVIEW LOOKS

TO THE FUTURE

by ANDY LINDQUIST
Superintendent
Brookview Golf Club

Renovation of Brookview Golf Course as planned for 1984 is quite extensive. The Brookview Golf Course is part of the City of Golden Valley Brookview Complex which was purchased in 1972. The complex contains a 20 acre park, 27-hole golf course, community center, park and recreation offices and a public swimming pool. The city realized that drastic improvements were needed for most of this complex and action was taken in 1983. Upgrading of the golf course maintenance budget occurred in 1983. Renovation of the community center and golf course '84 or '85 and renovation/elimination of the current pool for '86. I spent most of the late summer and early fall of '83 designing/planning what type of renovation and how much was needed for the golf course. A quick synopsis is as follows:

- 1) Update maintenance equipment thru repair of existing equipment and purchase of new equipment over a three year period. (\$112,000).
- 2) Installation of a new automatic irrigation system for all 27-holes. (\$165,000).
- 3) Improved drainage of fairways. (\$387,000).
- 4) Loss of revenue for course when partially closed. (\$112,000).

I would like to focus in on the irrigation and fairway improvement plans.

IRRIGATION: Our regulation course's system was old and inadequate. The Par 3 course had PVC pipe and good quick connector location. Our pump station needed improved pressure control. I decided to install new automatic heads on the Par 3 course (replace existing quick connectors); install new piping with automatic heads on the regulation course; and a revalved pump station.

A Toro VT III video system (computer central with 36 solid state satellites) was chosen for its reliability and the ability to

use the central controller (a Columbia personal computer) for its potential application in data management for my maintenance and budget needs. 670 heads were used in the fairways and 630 heads were used on greens and tees. Individual head control on greens and tees and two heads per station on fairways. Some "double row" design on wider fairways and all approaches were double rowed with 630 heads.

The irrigation system is installed/designed around the fairway improvement plan which is:

FAIRWAY IMPROVEMENTS: Brookview has a lot of peat fairways and a high water table (6-12" below surface) and to complicate matters, we are located within the Basset Creek flood plain which requires that any elevating of areas on the flood plain (therefore reducing flood storage) had to be equalized via ponding or planned flood areas.

Since redesigning of the course was not involved (greens and tees remain in the same locations) the project is basically a drainage project. With this in mind an architectural firm capable of calculating flood storage volumes was hired (in this case TKDA firm).

I located problem areas, potential ponding sites and temporary water holding areas and minimum grades for slopes (2% minimum). The architects designed the drainage patterns, calculated and balanced our flood storage level.

One unique technique we are using is a petro-mat (similar to the product advertised on TV by oil firms) to perform two functions. First of all, we need to "stabilize" the peat. The fabric (Mirifi 600) provides this. Secondly, the "top soil" being placed on the peat would eventually disappear into the peat so the petro-mat acts as a separation fabric between the good top soil and the peat.

The installation process goes as such:

- 1) Site brought to one foot from final grade by use of soil (peat, etc.) dug from "new" ponds and soil hauled in from off site. Soil is placed on existing peat..allowed to settle for one to three weeks.

(Continued, page 5)

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(BROOKVIEW, from page 3)

2) Fabric (purchased in 24' wide rolls 100' long) was rolled over most of the elevated areas and one foot of the top soil was overlaid on the petro-mat.

3) Irrigation was installed (by irrigation contractor) and area was seeded (by golf course maintenance crew).

The results of using the fabric are absolutely incredible. In areas where I couldn't get a utility turf vehicle now (after only 1 foot of soil placed on the petro-mat which is sitting directly on the peat) I can get a 15 yard dump truck thru with no problem! I don't like to call it a "miracle" fabric but...now we can "walk on water".

Our project is expected to be completed in mid- September so if you would like to see this process in action, stop in and I'll be glad to show you this new exciting technique.

POSITION AVAILABLE

The position of Grounds Superintendent has recently become available at the Fort Wayne Country Club. Fort Wayne Country Club is a 75 year old private, member-owned country club with 18-Holes. Bentgrass/poa annua greens, tees and fairways with bluegrass roughs. Single row automatic watering system. Club instituted use of hydraulic fairway mowing in spring of 1984. Superintendent will be fully responsible for top quality maintenance of entire club grounds including golf course and perimeter of all club buildings as well as preparation and achievement of approved annual operating budget. Salary range of \$35,000-\$50,000 commensurate with qualifications. Benefits include full GCSA package, life and medical insurance, pension plan and relocation expenses. Send resume in confidence to: NORMAN J. SPITZIG, JR., CCM, GENERAL MANAGER, FORT WAYNE COUNTRY CLUB, 5221 COVINGTON ROAD, FORT WAYNE, INDIANA 46804.



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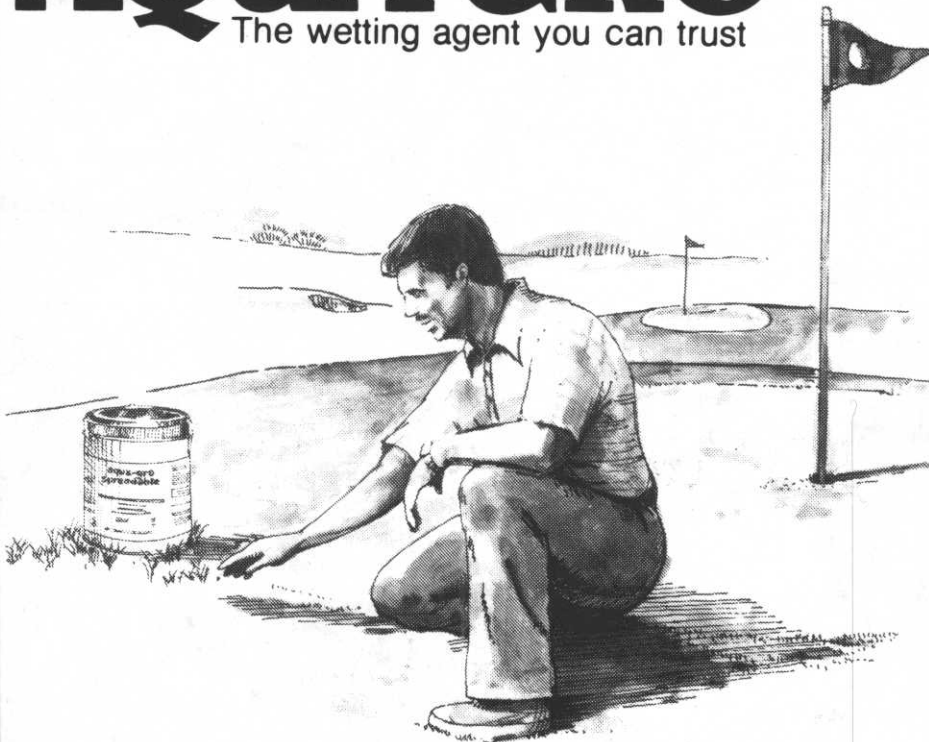
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EDITOR'S CORNER

by DOUG MAHAL
CHAIRMAN
EDITORIAL COMMITTEE

That magical day, Labor Day, has finally come and as superintendents, perhaps we can begin to relax a little. No summer season can be considered easy maintenance-wise but, "Mother" did supply a climate which made our jobs a little easier this season than some in recent memory. We did get a short stretch of weather early to mid-August that put us to the test but most superintendents were up to the challenge.

What a great outing at Rochester Golf and Country Club for our annual Superintendents' Championship. The course was great and hospitality even better. Many thanks to Kurt and a very cooperative grounds, pro shop and clubhouse staff for an extremely enjoyable championship. I'd also like to extend a special thanks to Tom Haugen of Brayton

Thanks to last month's contributors Scott Ainsworth of River Falls Golf Course and Associate Member Dale Walesheck for their articles and support of the M.G.C.S.A. A special thank you to all our associate members for their continued use of advertisement space. Without their support HOLE NOTES would not be possible.

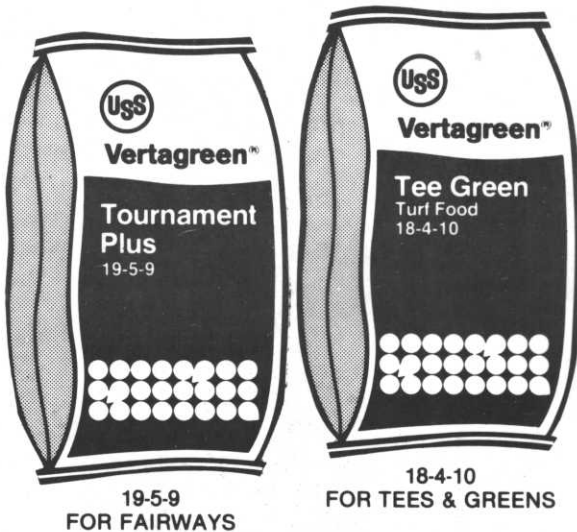
Did you read the article by Bill Smart of IBM Country Club? Didn't his thoughts and descriptions concerning stress sound familiar?

Copies of a report on the Employee Right to Know Law of 1983 are available through the M.G.A. office. If you would like one mailed to you, the cost will be \$3.00. Copies will be printed and brought to the next several monthly meetings and available at a cost of \$2.00.

September is here, the pace is slowing down a little. "Stop and smell the roses" if you get a chance! See you at Indian Hills!

(Continued on page 9)

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GUARANTEED ANALYSIS	
Primary Nutrients:	
Total Nitrogen (N)	19.00%
5.5% Water Insoluble Nitrogen from Urea-Formaldehyde	
Available Phosphoric Acid (P ₂ O ₅)	5.00%
Sulfate of Potash (K ₂ O)	9.00%
Secondary Nutrients:	
Calcium (Ca)	1.50%
Magnesium (Mg)	0.60%
Sulfur (S)	12.00%
Micro-Nutrients:	
Copper (Cu)	0.05%
Total Iron (Fe)	0.28%
0.03% Iron Chelated (Fe)	
0.25% Iron Fritted (Fe)	
Manganese (Mn)	0.05%
Density: 50 = per Cubic Foot	

Tee Green Turf Food 18-4-10

GUARANTEED ANALYSIS	
Primary Nutrients:	
Total Nitrogen (N)	18.00%
5.5% Water Insoluble Nitrogen*	
Available Phosphoric Acid (P ₂ O ₅)	4.00%
Sulfate of Potash (K ₂ O)	10.00%
<small>*Derived from Urea-Formaldehyde</small>	
Secondary Nutrients:	
Calcium (Ca)	2.00%
Magnesium (Mg)	1.20%
Sulfur (S)	10.00%
Micro-Nutrients:	
Copper (Cu)	0.05%
Total Iron (Fe)	0.28%
0.03% Iron Chelated (Fe)	
0.25% Iron Fritted (Fe)	
Manganese (Mn)	0.05%
Density: 60 = per Cubic Foot	



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ASSOCIATE'S CORNER

by ROBERT E. NEARY

As one of the newer members of the association, I want to express my thanks for the opportunity to introduce our company in the Associates' Column.

While gathering thoughts as to what to write, the reality struck home....we were six years old this July!

I had previously served as Vice-President of Marketing in a firm that manufactured mower sharpening equipment, as a small part of their overall product line. Convinced that the turf industry would respond favorably to new and improved sharpening equipment (and tired of wearing three piece suits and neckties) I started Neary Manufacturing, Inc.

The first machines (reel grinder, bed knife grinder and back lapper) were made in a two car garage and exhibited at the 1979 GCSAA conference in Atlanta.

After an enthusiastic product acceptance and with a handful of orders from the show, we moved out of the garage and located in a Brooklyn Park industrial development.

Very early in our company's existence we got the message from superintendents, distributors and others...."there's got to be a better way of sharpening mowers!"

All of them were faced with common concerns: 1) Time required to sharpen units; 2) Length of time between required sharpenings; 3) Quality of cut; 4) Operator qualifications and manhours spent.

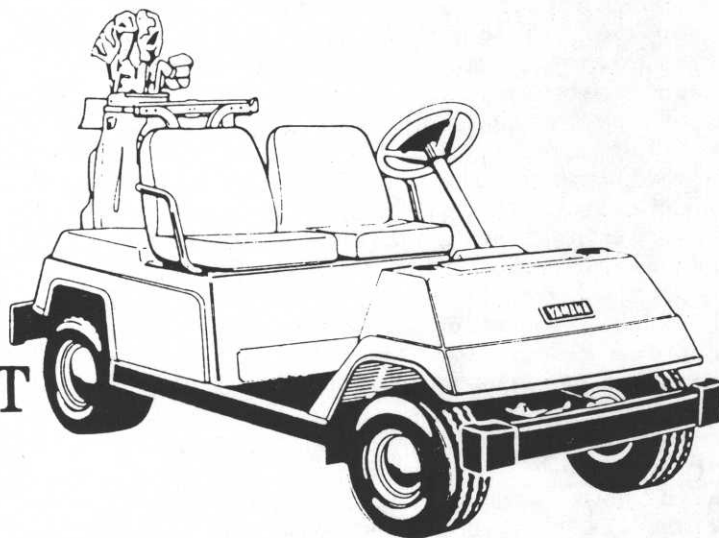
We made a commitment to those concerns to design leadership and quality. That commitment has enabled us to develop the industry's most complete line of mower sharpening equipment. Included are the first bed knife grinder to be offered with automatic travel capability and the only "spin-type" reel mower grinder made in the United States.

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Fall Planting and Transplanting of Trees

Howard Pidduck, Cornell University

Fall planting can extend the work season and offer the grounds manager the opportunity to improve the landscape during the time of reduced work loads. There are some basic rules of good plant care that must be observed before any planting program can be successful.

First, provide a soil media suitable for good plant growth, devoid of rubble and road salts, yet capable of anchoring the tree firmly.

Second, provide adequate water to encourage root growth during the fall, before winter freeze up. Watering should also aid in the setting of the soil and reduce the chance of large air pockets, which tend to dry out the roots, creating a barrier to the movement of soil moisture by capillary action. Overwatering or excessive repeated watering can lead to drowning, the suffocation of the roots by water completely filling the open porous spaces between the soil particles. The loss of soil oxygen is as much a detriment as the lack of water.

Third, choose species best suited to the landscape site most able to survive fall planting. These include Norway and sugar maples, sycamores, red and pin oaks, lindens, ginko (maiden hair), horsechestnuts and almost all of the conifers. Avoid exposure to open, severely windy sites. These are best left to a spring-time planting.

Root systems with a thick fleshy covering as a rule, are best planted in the spring. Example of these are dogwoods, tulip trees, magnolia, yellowwood, sweetgum, beech, birch and tupelo.

Fourth, nursery grown trees that have been root pruned the year before and have had the crown properly shaped offer the best hope of survival. Selecting forest grown trees requires an exceptionally large root ball, disproportionate with the crown in order to assure sufficient roots to support the top. Larger equipment is then required to complete the move, making it more expensive plus making it a riskier process.

Fifth, staking the tree securely is often overlooked or omitted. It is necessary to stop or reduce movement of the crown which flexes the tree, creating a cavity around the base of the tree at the soil line. Water can then collect in the cavity, freeze, and destroy the bark, thus interrupting the cambium flow at the soil line, resulting in death of the plant. Mechanical damage is also caused to the root system as the crown flexes, resulting in slower establishment, or may cause the tree to tip and expose the roots. Staking systems can vary but success is best accomplished when two or three hardwood stakes are utilized. Stakes are placed on more than one side and aligned to protect the tree from the force of the prevailing wind. Wires should never completely circle the trunk and should always be covered with a length of old garden hose, thus preventing any injury to the trunk of the tree. The larger trees need the added support of the three wire system placed equally about the trunk, fastened at least halfway up the main stem and far enough at the base to be beyond the rootball. A 45 degree angle for the supporting wires is best.

Sixth, enough cannot be said for the practice of mulching fall planted tree. Mulching aids in preserving the soil temperatures, giving a longer period of time for roots to establish themselves before winter freeze up. Moisture is retained and weeds are reduced during the following growing season, thus improving the appearance of the planting.

Seventh, wrapping the trunk with burlap or a special paper tree wrap protects the trunk from damage through freezing

and thawing. This damage is characterized by vertical splits and or a loosening of the bark from the trunk. During periods of wet, rainy weather the practice of wrapping can be delayed, or substituted by a burlap screen placed a short distance from the tree. Under no circumstances should the first wrapping be left on indefinitely, but should also be removed within the first year. Failure to remove it can cause girdling as the trunk continues to expand.

Eighth, little or no fertilizer need be added if the soil used to backfill has reasonable nutrient levels as determined by a previous soil sample. Small amounts of phosphorus and potash can be added (1/4 cup per bushel of soil) if desired. Never place the fertilizer in the hole so that it can come in direct contact with the exposed roots. Nitrogen based fertilizers need not be used as they promote top growth. New growth in the crown is to be avoided.

Ninth, The success of failure of all plantings often can be attributed to the planting depth. Although some species may survive for short times with minor grade changes. NEVER change the depth at planting time. The rule here is "plant at the same depth to which it has been growing".

Care should be used when transplanting to firmly tamp the soil so that no large air pockets persist around or under the soil ball. These same pockets can exist when using the pointed tree spades to excavate the planting hole.

(EDITOR'S CORNER from page 7)

Chemical for his "acquisition" of Dr. Robert Shearman of the University of Nebraska. Dr. Shearman's sand topdressing update proved we don't have all the answers yet! Some of you might be interested in the results of the championship. Here they are:

1ST LOW GROSS-SUPERINTENDENT: Randy Nelson, 74; 2ND LOW GROSS SUPERINTENDENT: (Tie) Monte Swift, 75 and Jerry Dalen, 75; 1ST LOW NET-SUPERINTENDENT: (Tie) Joe Morris, 67 and Dean Pelkey, 67; 3RD LOW NET-SUPERINTENDENT: Jim Gardner, 70. LOW GROSS-SR. SUPERINTENDENT: Jerry McCann, 86; LOW NET-SR. SUPERINTENDENT: Tony Magina, 77; LOW GROSS-ASSOCIATE: Mike Redmond, 90 ("Ninety"); HIGH BOWLERS SCORE: Steve Lawson, 125.

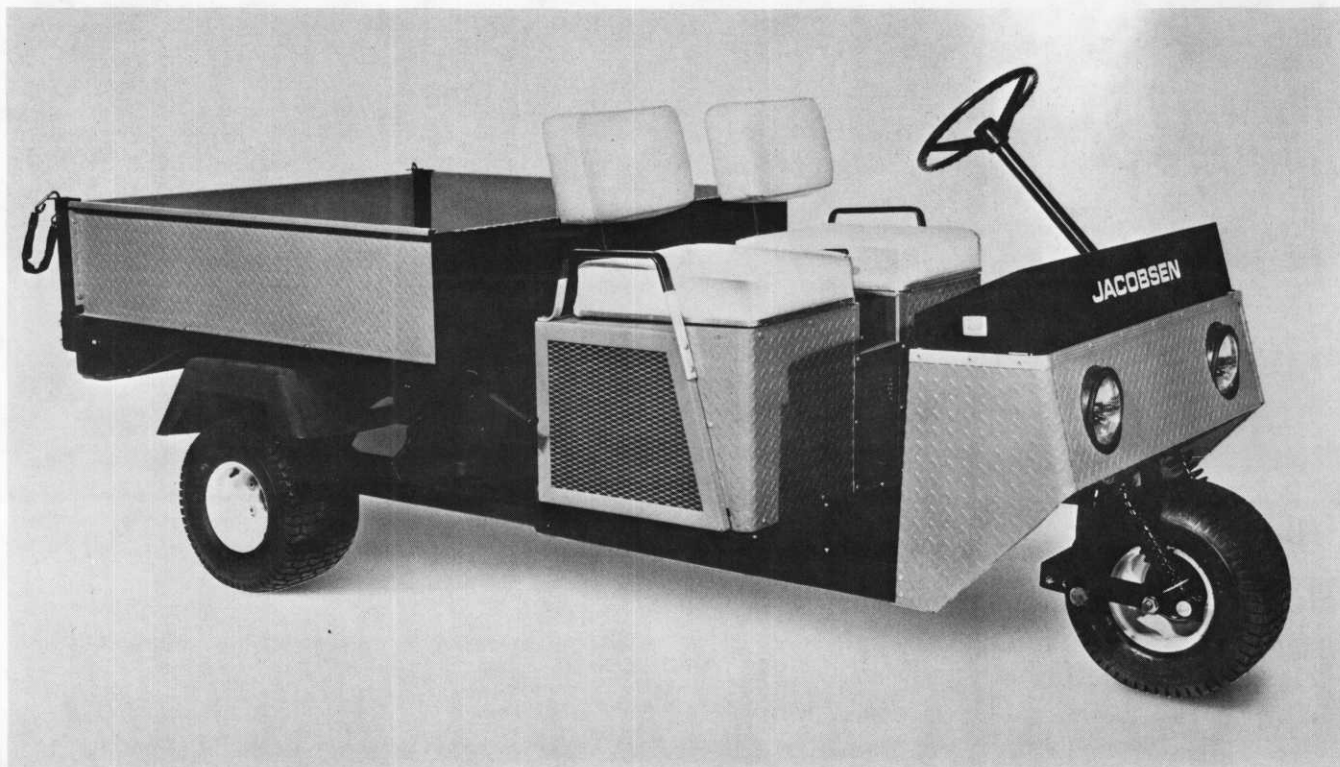
These scores seem awfully good on such an unforgiving course. All winners will be graciously recognized at the September meeting.

Speaking of the September meeting, we're heading back to Indian Hills for our annual MGCSA Guest Scramble Tournament. Arrangements Chairman Russ Adams has come up with an even more equitable scramble arrangement this year. Get those pre-registrations in quickly. First in get first preference of shotgun times.

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