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Official Publication
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FROM YOUR PRESIDENT'S DESK

It Was Another Great Day In Benson



Another great day of weather at Benson Golf Club. Maybe that's the answer to scheduling spring monthly meetings. The last time we were at Benson was during the month of April and it was a great day also. Dave, do you know something we don't . . . programmable weather? Once again, Dave and the grounds department staff at Benson Golf Club had the course in great shape. Dave informed me that they really should have been aerifying greens instead of hosting the MGCSA meeting. Well, maybe next time we will all bring an aerifier and have a "core-off." MTI was the sponsor for the May meeting.

The Toro Company's Dr. Syed Dara discussed the basics of tissue testing and analysis of results. This test combined with a soil test gives the superintendent a better feel for what exactly the plant is actually utilizing in the soil media. Tissue tests give us a snap shot of what nutrients were available to the plant at a given time. Continued tissue tests are required to constantly evaluate the dynamic relationship between the plant and the media it is anchored in.

* * * *

The MGCSA Board is currently working on and will approve the 1996-97 budget. The chart of accounts has been revised, more defined and streamlined to give us a more precise, definable and trackable picture from month to month and year to year of our revenues and expenses. The year ending in May 1996 looks to be in the black, and our goal in 1996-97 is to continue to operate in the black without raising dues and continue to give the membership the same or enhanced membership services.

* * * *

A reminder: You may have noticed in this year's MGCSA Roster a change in your membership classification. Please refer to the new by-law change passed at last year's annual meeting that defines the new classifications. This change makes our definitions of classifications the same as the GCSAA. After reviewing your membership class in the roster and you still have questions, please call Scott at the MGCSA office for clarification.

* * * *

The MGCSA Board recently approved funding for a research study at the University of Minnesota with Phil Larson on effects of growth regulators and certain DMI fungicides.

* * * *

Recent law changes have put a snag in the MGCSA Group Insurance Health One Plan, but we will continue to explore other options and keep you updated when further progress is achieved.

* * * *

It's still not too late to sign up for the MGCSA's Turf Tourney.
See you at Park Rapids in June. I hope the ice is off the lakes by then.

— James D. Gardner, CGCS
MGCSA President

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Alternative Lawn Tour—

(Continued from Front Cover)

ton. Grounds managers, landscape designers, and other professionals will be on site to describe installation design, maintenance techniques, costs and benefits and other site specific factors. At each site discussion and written material will further outline: 1) a cost-benefit analysis of installing and maintaining "lower input" lawn areas, 2) maintenance and labor issues, and 3) safety and liability issues. Sample plans for installation and maintenance of alternative lawns from local organizations that have installed them will also be available. Additional information on local producers of native plants, ecological landscapers, low-input lawn and bibliography of further



material will be provided. This day-long seminar will cost \$30. **REGISTRATION IS LIMITED.** For more information about the tour or to register, call Apple Szostak, Friends of the Mississippi River at (612) 222-2193.

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MTGF EXPO
AUGUST 7-8, 1996

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DECEMBER 11, 12 & 13, 1996

Confusion About WILDFLOWERS

By Susie Fobes
Horticultural Consultant
Environmental Re-Creations, Inc.

Thirty years ago a campaign to "Beautify America" was inspired by Lady Bird Johnson. Her ambitions were not political. She had simple observations that grew from a sense of loss. Why were highways riddled with garish billboards, the ditches full of litter, and the fields she had remembered as a child, void of color? Where were the wildflowers? Her enthusiastic efforts resulted in an awakening.

Golf courses have benefited from this campaign. Wildflowers are a popular choice for improving the environment. They are promoted for their wildlife habitat, color and no maintenance; however, there is a wealth of confusion surrounding wildflowers.

The confusion is understandable because the marketplace has two different groups of products called by the same name. . . wildflowers. In an effort to differentiate, the two types will be referred to as **prairie** and **color accents**. Adding to the confusion are the promotions made about wildflowers concerning habitat, color and no maintenance. The promises about wildflower are all true, but the "fine points" and "closer comparisons" between the two types tell a truer picture.

The creation of a prairie requires utilizing **native** seeds of grasses and wildflowers to create a balanced plant community. The emphasis on **native** cannot be overstated. Ideally the resource where the native seeds are collected and produced is less than 200 miles from the future prairie site. The production of native prairie seed is labor intensive and expensive.

Prairie seeds are not difficult to install, just slow to mature. Initially the site is very unappealing (weed patch) and requires considerable work the first three to five years. Only after these years of work can the "promises" of minimal maintenance, color and habitat start to be realized.

What Does the Work Entail?

The battle in the first three years is minimizing weeds. If this war is not won, the battle continues. Unmaintained weeds create more weed seeds and a shade canopy for the desirable plants. The best option is to have weed control prior to planting. The next best option is to mow the vegetation down to 4-6 inches in height. Mowing minimizes the shade canopy, reduces flower/weed seed production, and acts as a form of pruning on the plants. Once the prairie is estab-

lished, the maintenance consists of a spring yearly mowing or burning.



The orange Butterfly weed, yellow Black-eyed Susan, lavender Leadplant and white Yarrow create a medley of color in the prairie.

Are the Years of Work Worth the Effort? Absolutely yes.

A prairie is an environmental and aesthetic asset to a golf course. The continual flower color changes, the red fall color of the waving grasses, birds feeding and butterflies working the flowers are all positive contributions to our environment. The minimal upkeep will reduce the maintenance budget. Do not become discouraged by the lack of immediate color, the initial high cost of seed or the struggle to maintain weeds. The long term savings will far offset the initial investment of time and money.

The other wildflower option is referred to as "**color accents**." Color accents are creative seed mixtures of annual, biennial and perennial flowers. Beautiful displays of flower color begin within eight weeks of seeding and continue until frost. Annuals in the mixture insure quick and eager admiration from golfers. No other products perform such a high quality color spot for so little money, in so little time. Since the flower seeds are produced all over the world,

(Continued on Page 6)

Wildflowers—

(Continued from Page 5)

shipped to specific destinations, and the mixtures concocted, the flower mixture costs are minimal when compared to the cost of native seed.

The unknown seed source does lead to some problems. A mixture will list a flower species as a perennial. Technically, this may be true, but in practicality, the plant may not be hardy in the Upper Midwest. The seed generated from a southern source of the same species can lack the hardiness vigor of its northern source. Additionally, the "foreign" flowers can have minimal appeal to "local" insects and birds as a food source or habitat.

The color accent type of wildflower scores very high for its aesthetic appeal the first and second year, but typically, the quality declines and the area must be reseeded every year. The costs to re-install the project every year or even every other year quickly add up. Another maintenance factor is the need to irrigate this type of wildflower. Failure to keep these areas moist during the heat of the summer will yield little if anything. In contrast, a well-established prairie can endure long periods of drought.



Corn Poppies are popular in the color accent mixes because of their delicate white, pink and red flowers.

When selecting the type of wildflower best suited for a site, consider the virtues and failings of both the prairie and color accent types. Review the criterion of no maintenance, color, wildlife habitat, irrigation and cost to reach a well-informed choice. "Color accents" are extremely appealing for aesthetics and low cost, but fall short when measuring the claims of "no maintenance" and habitat. Prairies, while expensive, can provide a measure of success in every category. Prairies are an ecological and aesthetic solution to improving the golf course environment and long term, will reduce the maintenance budget.

Any question, call (612) 933-6465 or E-mail address: flowers29@skypoint.com



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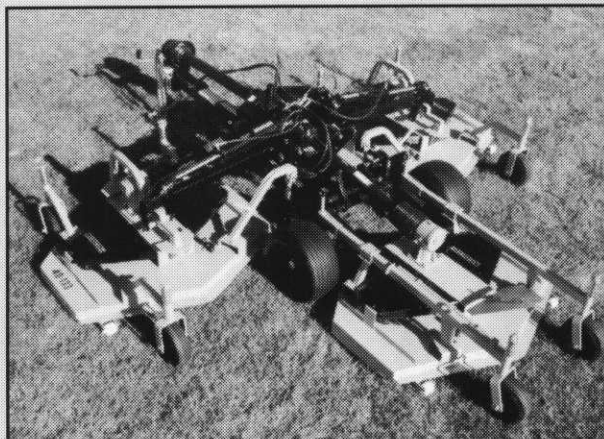
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Boulder Wall Construction

By Brian Netz
Somerset Country Club

Many golf courses have areas that are in need of a retaining wall. It may be on the course itself, or in another conspicuous area such as the clubhouse entryway. When considering the different types of retaining walls and their respective costs, consider a boulder retaining wall. Boulder walls add a natural element of beauty that a good timber or prefab wall cannot. A well-built boulder wall will last a lifetime and more.



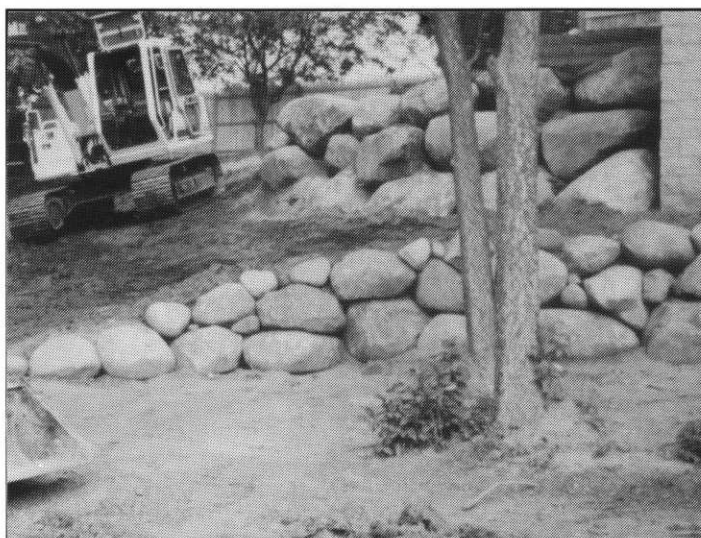
Boulder walls will provide good soil retaining strength and provide a look that golfers will love. The expense of a boulder wall is not much more than that of a properly constructed timber wall, and usually cheaper than prefab or “keystone” walls. Considering how long it will last, the extra cost of a stone wall is worth the extra expense over a wood wall.

When looking for boulders you must shop around and make lots of calls, as there is a great difference in price. A large portion of the expense is trucking the stone to the site.

Before beginning construction you must consider the size of the stones you need. Bigger, taller walls require large stones and large machinery. The stones are much heavier than they look so forget about elbow grease. A skid loader will move stones up to 30” in diameter, although it will not lift them very high. Stones larger than that can weigh 3000-5000 pounds, and therefore you need larger equipment, such as a trackhoe.

Next you should buy drain tile, crushed limestone and

pea gravel, as well as a good quality erosion control fabric in large sheets. As in all construction, the foundation is the first and most important part of the wall. One half to three quarters of the first tier should be underground on top of a foot of well-compacted crushed limestone. The edge of the erosion fabric can now be buried so that it can be unrolled against the stone as you build upward. Back fill and compact with enough soil to hold the first tier in



place. The drain tile can now be installed behind the first tier and the fabric. It is vital to remember to compact the soil thoroughly behind each tier as you go. This is extremely important.

As you build your wall, you will see that the process of selecting the stones is the most time-consuming. The stones must fit together well — somewhat like a jigsaw puzzle. The majority of each stone’s weight must be on the stones below it, not on the soil behind it. In this manner the wall will be mixed in with the large ones periodically and randomly as you go up. The same principle applies to colors. Do not start with large stones on the bottom and end with small ones on top. The object is to avoid a wall that looks organized. The stone should also be laid more horizontally than vertically, as this creates a pleasing flow to the eye. Also remember to step back and view your progress. It is helpful.

When you finish, you should have a beautiful new structure that will hold the soil and be a center of attention for much longer than any timber wall.

1996 MGCSA MONTHLY MEETINGS

Monday, June 10
HEADWATERS COUNTRY CLUB
Host Superintendent: Mark Fossum

Monday, July 8
IZATY'S GOLF & YACHT CLUB
GARSKE SCHOLARSHIP SCRAMBLE
Host Superintendent: Steve Schumacher

Wed.-Thurs., August 7-8
MTGF EXPO '96
Resurrection Cemetery

Monday, August 12
ST. CROIX NATIONAL
MGCSA CHAMPIONSHIP
Host Superintendent: Kevin Clunis

Sunday, September 15
MADDEN'S ON GULL LAKE
STODOLA RESEARCH SCRAMBLE
Host Superintendent: Scott Hoffman

Monday, October 7
FOX HOLLOW GOLF CLUB
Host Superintendent: Chuck Molinari

Wed.-Fri., December 11, 12 & 13
MTGF ANNUAL CONFERENCE
Minneapolis Convention Center

Kelly Johnson Recovering After Fall From Ladder

On the 24th of April, our fellow superintendent Kelly Johnson apparently fell from a ladder and either struck a Cushman or the floor. The result was some badly bruised muscles and a near total loss of memory. Kelly can remember his wife Kathy and son Mason for the most part.

The doctors feel that his brain suffered no permanent damage and a full recovery is forecast with time. He can still do things like read, write and drive a car, etc.

It appears that Kelly was changing light bulbs in his shop, something that most of us would not think twice about doing alone. It is something I will never do alone again.

Kelly's injury could have happened to any of us. In our profession a ten-hour day or more is the norm during the season. Many of us work seven days a week throughout the season. I know that Kelly had been under tremendous pressure constructing and growing at Oneka Ridge Golf Course. Was his body telling him to slow down?

Dan Murphy, formerly of Wedgewood/Prestwick, has been hired to fill in until Kelly is full recovered. By the date of the publication of this article, Kelly's physical injuries have healed enough for him to return to work soon. His memory is still intermittent at best.

The only bright spot in this situation was the instant support that Kelly's family and Oneka Ridge received by many local superintendents. A special thanks goes to Mr. Joe Moris and Mr. Steve Garske for acting as "coordinators" in the efforts to help Kelly's family and Oneka Ridge.

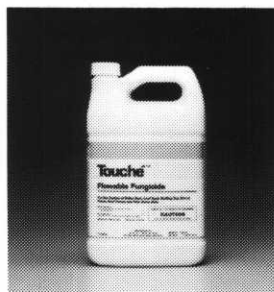
If there is a moral to all of this, I think it is this: Take a day off with your family once in a while, for your life can change suddenly. The grass will live a day or two without you. Let us all pray for a speedy recovery.

—Tom Parent

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MTGF ANNUAL CONFERENCE

DECEMBER 11, 12 & 13, 1996

Pathological Pointers

By Dr. Ward Stienstra
Extension Pathologist Turfgrass
University of Minnesota

“Fungicides, Grass Plant Growth and Algae”

Fungicides are used to prevent or protect a grass plant from disease. Fungicide use was determined in the past by knowing what disease was expected (Preventive) or by what disease was present (Curative) and at times we had choices about which product to select. Choices were made based upon cost of control (economics) or length of control (persistence) or product availability (on site or rapid delivery) and range of other diseases expected that could also be managed. Today you must consider two additional aspects.

The superintendent in '95 that suffered from algae must consider the following reports about fungicides in the DMI (DeMethylation Inhibiting) group. These products can produce the dark green effect (increased chlorophyll and thicker leaves) especially in the summer. This can result in a more open canopy and the development of algae. The cause of this is not understood. Is it due to a direct effect on algae or a result of changed grass plant structure and growth or some other unknown reason? Increased algal problems were reported following use of Banner, Bayleton, Eagle and Sentinel in field trials. All but Banner had more algae than the check when greenhouse tested. Field plots treated with Sentinel exhibited carryover into the next year when scored for quality. Lynx had the least algae and may be an exception to the rule that DMI's in the field and in the greenhouse tend to increase algae. Rubigan was not tested in these studies, but it was expected to perform as a DMI also.

Reports about the benefits of using Aliette and Fore every 7 to 14 days should also consider the potential for reduced algal competition or direct algal control with Fore.

Those who are using plant growth regulators [chemistry type II, limitation of gibberellin biosynthesis (Primo, TGR or Cutlas)] may find some disease control (list above is least to most), but the level of disease control-Dollar Spot is minor. The similarity of these growth regulators and some DMI products is significant and programs that use both growth regulators and DMI fungicides could experience additive effects especially in the hot period of the season. Fungicide selection today should also consider your expected use of plant growth regulators.

A chemistry type I product (Mefluidide) used for seed head suppression when mixed with Ferramec is reported to produce effective suppression without any undesirable side effects. The side effects of growth regulators, type I or II and I believe some DMI fungicides, are not completely understood. Gibberellin needed for cell elongation is report-

ed to result in suppressed growth of stems making some grasses shorter and stronger, but is this the only result of suppressed gibberellin production? Even if the plant's production of gibberellin is the only product affected by growth regulators, all other products in the production pathway can be affected. Synthesis of gibberellic acid in a plant is not the only plant hormone: Auxins and Kinins and Gibberellins are all involved in stimulating basic aspects of growth, cell division and elongation. Each is reported to work in conjunction not only with other substances but also within the group of three, and in animal systems it is known that such hormones mediate a great variety of functions in addition to growth.

A Pathological Pointer, DMI fungicides are more than fungicidal and interactions are a real possibility. How this can affect you is dependent on use rates and the environment.



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