

TIGER WOODS, U.S. Amateur champ, tries to get the feel of Augusta's greens.



THE AZALEA HOLE at Augusta National



Associates

Garrett Gill, Principal

(715) 425 - 9511

Facsimile (715) 425 - 2962

Golf Course Architects

Williams, Gill of Wisconsin 421 North Main Street River Falls, WI 54022 Services

- New Course Design
- Master Plans
- Golf Practice **Center Design**
- Environmental **Planning**
- · Irrigation Design
- · Renovation & Restoration
- Site Planning

CORRUGATED POLYETHYLENE PIPE

Prinsco pipe will keep your greens and fairways dry... and always ready to play.



CALL FOR A FREE CATALOG and the distributor nearest you.

We Want Golf Courses With Soil Problems!

Soil Solutions!

from Floratine

CalpHlex-

The Economical, Highly Soluble Calcium Chelate for managing:

- Calcium Deficiency
- Magnesium Excess
- pH Balance
- Sodium Build-Up

Maxiplex-

The Concentrated Liquid Humic Acid for Better Management of:

- Compaction
- Nutrient Tie-Up
- Leaching
- Hot Spots

Floratine Products Group
129 S. Main, Colleville, TN 38017
(901) 853-2898

FLORATINE PRODUCTS



JUST FOR THE HEALTH OF IT!

- * ASTRON PLUS
- * PER"4"MAX PLUS
- * KNIFE PLUS
- * RENAISSANCE

and other patented hormone balanced auxiliary nutrient compounds promoting improvements in turfgrass:

- *Root Development
- *Stress Resistance & Recovery
- *Health & Quality

Decidedly Different in Design & Performance

FOR MORE INFORMATION CALL DAN GABLER AT 612-934-1205

SUPERIOR TECH PRODUCTS 80 WEST 78TH ST., CHANHASSEN, MN 55317

PRODUCT MANUFACTURED BY F.P.G. MEMPHIS, TN

HOME OF NOVA TEE

CLASSIFIEDS

FOR SALE

8 ft. Harley Rock Rig \$4000

Call: James Haroldson Wendigo Golf Club

(218) 327-4915

FOR SALE

Used Jacobsen 5-gang Blitzer rough mowers on High Ranger frame. 11-foot cutting width, sharpened and ready to cut. \$1500 or Best Offer.

Cushman Greensaver Aerator for Cushman truckster. Excellent condition. Used very little. Weight trays included. Asking \$800 or best offer.

> Contact: Randy or Jay Havana Hills Golf Course

(507) 451-2577

FOR SALE

4' Gandy Slit-Seeder 3 pt. Hitch New \$6000 Used 40 hrs. MUST SELL

\$3,795

Great for Golf Course Seeding

Contact:

John Glattly

TWIN CITY SEED CO.

Minneapolis, MN

(612) 944-7105

WANTED

- Used 3-Gang Ball Picker
- Used Ball Washer
- Used Beverage Cart

Call: Dave Sime

(612) 843-2109

FOR SALE

- Impact Sprinklers for Manual System
- 13 Fairway Sprinklers
- 6 (f-70) Mid-size Sprinklers • 7 small Sprinklers
- 7 small Sprinklers
 All have 14" QCV Keys
- 6 mid-size Impact Sprinklers on Roller bases
- 1 VT 4 Toro Satellite
- 12 Station Electronic Controller

Call: Don Egeberg, Clifton Hollow

(715) 425-9781



MGCSA LOGO APPAREL

	Jackets		. \$55.0	0 ea.
	Sweatshi	rts	. \$45.0	0 ea.
	Golf Shir	ts	. \$33.0	0 ea.
	Wind Sh	irts	. \$36.0	0 ea.
Size:	XXL (circ	XL le size)	L	М
	Apparel Total \$ +shipping			
			\$3.00	
	Grand	Total \$		

Mail to: MGCSA LOGO APPAREL P.O. Box 617

Wayzata, MN 55391

JOB OPENING:

To: Members/Minnesota Golf Course Superintendents' Association

Elmdale Hills Golf Course is now accepting applications for the position of GOLF COURSE SUPERINTENDENT. Elmdale Hills Golf Course is a newly constructed 9-hole golf course located 10 miles SE of Hastings, Minn. Expected opening date is July 1, 1995.

Future plans include expanding to an 18-27 hole course with driving range by 1998. This is an excellent opportunity to grow and expand with a new course.

Job Description:

- Mowing all greens, tees, fairways, roughs, areas around clubhouse, parking lot, trees, etc.
- Watering all greens and tees as necessary to maintain best possible play.
- Fertilizer and pesticide applications as needed and recordkeeping.
- Maintaining all equipment in good working condition.
- · Irrigation repairs and maintenance.
- · Working knowledge of automated Rainbird irrigation system.
- Supervising all assistants and part-time laborers.
- Assist in overall golf course operations.

Salary: \$12.00/hour for 1995 Minimum 40 hrs./week through October 1995 1996-beyond negotiable

Requirements: Combination of experience and education required.

Pesticide Applicator License Valid Minnesota Driver's License

Job available immediately.

Send resume to: Bruce and Diane Brage

Elmdale Hills Golf Course

26161 Nicolai Ave.

Cannon Falls, MN 55009

507-263-2507



Five Good Reasons

To Try Futerra® Erosion Control/Revegetation Blanket



For slopes 2:1 or less

1. Reduces Under Blanket Wash

Futerra is more flexible than traditional straw or excelsior alternatives. It molds and bonds to irregular soil surfaces virtually eliminating air pockets for water to gather velocity.

2. Light Weight

Approximately 1/2 the weight per yd² of excelsior mats. Futerra rolls go down quickly with less man-hours per yd².

3. Completely Degrades On-Site

Manufactured from Conweds original pure wood fiber Hydro Mulch® bonded to photodegradable netting, Futerra produces organic nourishment to emerging grass which can be commercially mowed safely in four weeks.

4. Visual Site Appeal

Futerra's new 30 day Green Dye holds it's turf color until grass is established through the blanket. The color and longevity also matches Conwed's Wood Hydraulic Mulches for tying in adjacent flat areas.

5. Weed Seed Free

Futerra halts deposits of noxious weed seed associated with straw materials and retards airborne seed deposits until grass is established.

PRECISION TURF AND CHEMICAL, INC.,

3145 Sycamore Lane North
Plymouth, MN 55441
612-559-5293 = FAX (612) 559-5002 = 1-800-925-8873

MGCSA Participates in the 1995 Great Minnesota Golf Show

By Bill Cox

Superintendent at Tianna Country Club

The Great Minnesota Golf Show, held March 17-19 at the Metrodome, featurd a wide-range of displays and activities for golfers anticipating the season. Offering a chance to swing a club or stroke a putt, the MGCSA was one of 130 exhibitors at the golf show.

Our display offered information on a variety of MGCSA activities. Included were membership applications, scholarship information and information on the Turf Tourney. Handouts were available on golf courses and the environment, and minimizing exposure to pesticides.

The hot item for golfers visiting the MGCSA booth was the ball mark repair tool, displaying the MGCSA logo. We ran out of them after the second day...again!

An issue of concern was raised by a visitor to the MGCSA booth regarding golf course pesticide use, and the possible relationship to breast cancer. This was referred to Cora Jane Blanchard of the USGA. She is currently gathering research information regarding this issue. We will get the facts out as soon as possible.

A thank you goes out to MTI for providing a TV/VCR for displaying the video library at the show. Also, to Mike Kelly of Rehbein Farms for providing sod to demonstrate ball mark repair techniques. A special thanks to Steve Hamelau, Alexandria Country Club, who kept a captive audience with his expert method of ball mark repairing. Thank you to all who volunteered their time at the booth as representatives of the MGCSA.

The Great Minnesota Golf Show is a great opportunity to promote our association. It promotes the positive aspects of our courses, and the positive image of the people who take care of them.

PLAN TO ATTEND!



MTGF EXPO '95

August 2-3, 1995

Resurrection Cemetery Mendota Heights

- Product Displays & Equipment Demos
- Clinics
- Practical Hands-On Seminars
- A Great Lunch!

Watch your mail for details or contact:

Gary Beckerleg MTGF Expo '95 Chair

612/493-8350

Par Ex[®] introduces a family of mid-sized fertilizer grades designed to meet the needs of today's closely-mowed turf.



WHY MID-SIZE GRADES FOR CLOSELY -MOWED TURF?

BECAUSE fairway-sized particles are too large to apply to closely-mowed turf.

BECAUSE greens-sized products can be difficult to spread.

BECAUSE IBDU is the most reliable, most consistent source of slow-release nitrogen.

For more information contact:

Precision Turf & Chemicals 3145 Sycamore Lane Plymouth, MN 55441 612/559-5293

> Ken Quandt Territory Manager West Allis, WI 414/327-3993

Best Bunker Sand From Plaisted Companies Is Preferred Choice Throughout Minnesota

With some suppliers, you can only hope for bunker sand that's consistent from one year to the next. But with Best Sand, you can count on the same top-quality sand, from the same company-owned quarries, meeting the same tough specs, truckload after truckload.

For bunker sand, topdressing, drainage gravel and more, do what so many Minnesota superintendents have already done. Call the Plaisted Companies at 612/441-1100 and order the Best Sand products you need now.



P.O. Box 332 Elk River, MN 55330 612/441-1100

Chicago Bears Offer Challenges For Maintaining Sports Turf

By Ken Mrock

Chicago Bears Grounds Superintendent

As groundskeeper for the Chicago Bears, I have to manage turf that takes the hardest beating in sports turf. Over the past nine years here, I've seen demands on our turf increase dramatically. The players have become bigger and faster and the ball club advocates a year-round training regiment. This is tough because the Midwest has such a short growing season. Essentially, we have to grow grass when it doesn't want to grow.

This past season we had five mini-camps and several twice-a-day practices in addition to our normal four practices per week. On top of this, the Bears share their field with the Lake Forest College football team for five home games.

With this schedule the field doesn't have as much time to grow grass! So what do we do? Punt? Kneel down with the ball? No way!! We attack!! Fortunately, the Chicago Bears are in the forefront of getting better turf for their athletes.

Tackling the Bears' turf every season isn't easy. Along with Assistant Groundskeeper John Berta, I've put together an aggressive mix of seeding and fertilization together with a tight maintenance program to ensure Bears ballplayers have the best possible playing fields.

It all starts in March with seeding.

Starting at the end of March, we pre-germinate seed — a mixture of Blue, Rye and Poa Supina. As soon as the field is workable, we will aerify with a Ryan GA-30, or Toro Greensaire. We try to bring up as many plugs per square foot as possible. We have found this speeds germination and establishes the growth of the plant a little lower in the turf surface, somewhat protecting the plant when the players try to rip them out with their cleats.!

After aerification we allow the plugs to completely dry. We then broadcast the pre-germinated seed mix over the entire practice field and add another 7-8 lbs./1,000 sq. ft. of dry seed broadcast, mainly between the numbers. This area is the most worn and the wear area has greatly expanded, out to the number, due to the short passing game or "West Coast Offense." This is where three or four receivers line up between the hash marks and numbers, cutting and spinning their way up the field. With the receivers, of course, come the defensive backs and linebackers defending against them. This puts six to eight players in that small area. The divoting and wear has increased substantially!

Starter Fertilization is key in late March.

Since we have no internal drainage and the practice field was constructed with Turface caloined clay, we have continued to apply Turface and our top dressing soil to the practice field. This process is done with a Turfco meter-matic top dresser. We apply this mix across the entire field, then lightly drag all material in with a draft mat. The next step

we take is to fertilize with a starter fertilizer. I prefer Vicksburg Chemical's K-Power™ 13-24-12. This formulation offers potassium nitrate for the established turf, quick release nitrogen that works well in cool soil conditions, and phosphorous for seed germination and root establishment. Next we apply Pythium Control and cover the entire field with a frost blanket. This allows us to bring up the soil temperature to speed up germination of seed and promote growth from existing turf with the K-Power.™

April's Mini-Camp increases maintenance.

Mini-camp hits in late April — three days of twice-a-day practices with about 80 players. I call this our *opening day*, the coaches' first chance to see what the Bears look like! After this inauguration, the field is available to the team until January. With all the traffic on the field, daily maintenance on the field is quite aggressive. Divots must be replaced after every practice. The ones that can't be "found" are replaced with a mixture of seed, topsoil and turface. It's the same process that's done on tee boxes at golf courses. Fertility steps up in May and June.

In early May the next fertility application is made in conjunction with a spot herbicide treatment for broadleaf. This time I go the K-Power™ 12-0-42. This ratio helps toughen the grass plants for our next two mini-camps. I've experienced the benefits of 12-0-42 and swear by it. I've seen less disease perfication of field, fewer clippings and a much, much more turgid turf stand. Our ballplayers have complimented me on the sturdiness of the turf. Stiffer turf means they play better, similar to how it helps golfers make better shots. The quality of the turf must be the best possible.

The irrigation that is done on the field is by a Kiffco B-140 water reel. Watering is usually done well before dawn, allowing the least amount of plant wetness in the evening hours. Under our normal late spring and early summer conditions, I like to irrigate about twice a week, putting down 3/4" to 1" water per application.

Now that we're into the middle of June, an application of K-Power™ 12-0-42 is done at about 1/2 to 1/3 rate. This enhances what might have been depleted and strengthens the field for the last two mini-camps (rookie camp).

Practice break in July provides window for seeding.

Around mid-July we take a break in practice scheduling and the entire football operation moves to the University of Wisconsin at Platteville for roughly four weeks. This time of the year in Chicago is sometimes a tough time for seed development. But it's our only window. We completely aerify the turf in two directions diagonally, overseed, top-dress and make another application of K-PowerTM 12-0-42

(Continued on Page 28)

26 • HOLE NOTES MAY 1995

Finally, A Rotary That Can Rough It.

The Groundsmaster® 455-D is the first rotary mower built for golf course roughs. This 10 ft. mower combines rotary productivity with the consistency and quality of cut you demand.

To make it in the rough you have to be maneuverable. So

Toro put the deck out front for visibility and control. The floating wings follow turf undulations and breakaway so you can trim around obstacles. The 455-D has a zero

uncut circle in 2WD mode and only a 10" uncut circle in 4WD.

Power through 5" tall rough with the low maintenance belt drive that delivers more cutting horsepower to the blades. And

since you can
cut roughs in
half the time, you
can cut more often for

more turf consistency.

Call us to bring out a 455-D, or for even greater productivity, the 16 ft. 580-D. Then you can rough it up for yourself.

Helping you put quality into play.™





14900 - 21ST AVENUE NORTH • PLYMOUTH, MINNESOTA 55447 PHONE (612) 475-2200 • FAX (612) 475-0351

Groundsmaster 455-D

Chicago Bears -

(Continued from Page 26)

at 1/2 rate. Fungicides and insecticides are sparingly used in this part of our maintenance program. We also do another spot spraying with herbicide for broadleaf, usually dicamba for knotweed and clover control.

August-the toughest stretch.

As our team prepares for the upcoming season with training camp, August is the toughest stretch of our turf management program. With the grind of twice-a-day practices with 80 players, we mow daily after every practice, sometimes twice a day, to allow a light rolling. We maintain the turf at 1 3/8" to 1 5/8" with a Jacobson Tri-King 84" reel-type. This is a light-weight mower and allows us to pattern the turf five yards one direction and the next five in the opposite direction. The ballplayers like close-cut turf—they play better on it.

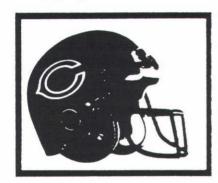
As with golf courses, aesthetics are

Yes

1

important at a football field. The Bears always have five to 10 TV media outlets, and 10 or so print media outlets. We have to attain game conditions at all times! The proper ratio of potassium produces the excellent turf we need. We also topdress and pregerminate seed daily. And after every practice, we replace all divots, lightly roll the field and topdress in all scars or rips in the turf. The integrity of the surface is extremely important.

Cold weather means a shift in fertility program.



In September temperatures fall and there is less sunlight. We shift our fertility program to K-Power™ 18-3-18. Some of this application will release quickly; the rest will be stored for the critical cold weather weeks to come. When the nights begin to get down to 35%45%, we pull out the frost blankets as needed. This raises the soil temps and kicks in the fertilizer - the turf stand is excellent! We also use our rain/snow tarps as needed, covering 140 x 65 yards in seven sections that zipper together to form one solid tarp. This is important because, other than during a Bears practice or college game, no rain or snow is allowed to accumulate on the practice field.

As the season progresses we pump 4 million BTU's of heat via Kerosene-fired heaters under the tarps to keep the field from freezing. The only time the field is uncovered is for practice during November and December and hopefully January (playoff time!) The increased levels of potassium allow us o literally beat up this field, but it ...eeps getting up. In mid-November, an application of K-Power™ 12-0-42 at full rate is made which will take us through until the spring when this fun starts all over again!

When It Comes to Turf Management...

Nobody Knows Like Your Wilbur-Ellis Pro

★ Quality Products

★ Environmental Leaders

★ Regulations/Services

★ Trouble Shooting

★ Fertility Programming

★ Diagnostic Work

★ Leaders in Environmentally Favored Packaging

★ Best Technical Services

Your one-stop shop for all turf management needs. Ask about our complete line of chemicals, fertilizers and seed.

Wilbur Ellis....dedicated to quality, customer service and environmental stewardship.

FOR MORE INFORMATION CONTACT: SHANE ANDREWS



612/723-0151 or 1-800-642-2736



Sentinel

40WG Turf Fungicide

The First Fungicide
That Won't Leave You
Holding The Bag.



Because with Pace, you handle only the outer carton, not the bag itself.





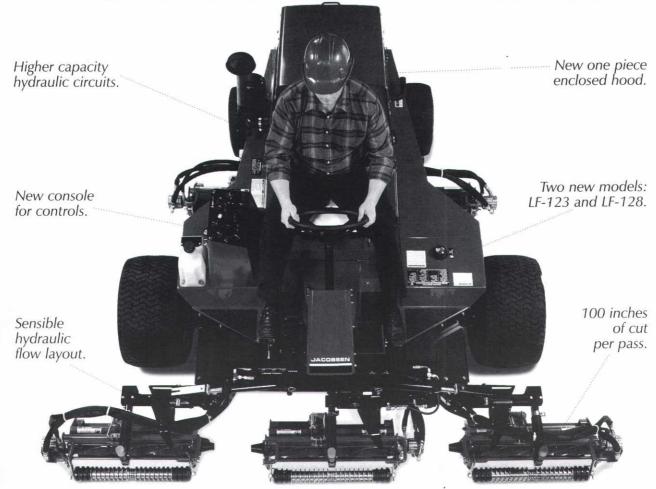
Spring Into Action With Turf Supply Company

For more information contact your Turf Supply representative at:

Turf Supply Company

2797 Eagandale Boulevard • Eagan, Minnesota 55121 (612) 454-3106 • Fax: (612) 454-7884 • 1-800-551-4857

2 new models. 5 extra inches. 11% more common sense.



Introducing the 23-horse LF-123 and the 28-horse LF-128. Both offer common sense where you need it most.

More horsepower per inch of cut. Even with fewer horses than the nearest competitor, we deliver up to 11% more horsepower per inch of cut. How? By featuring hydraulic flow layouts that get power to cutting units more sensibly. Instead of one pump being responsible for more cutting, each shares work evenly. The result: superior cutting capacity—even in thicker, heavier grass.

More inches per pass. You get a 5" wider swath than the nearest competitor—a full 100 inches of cut per pass.

More sensible features. New, more ergonomic controls mean more operator convenience. A stylish, new enclosed hood design lowers sound levels and makes accessibility easy. And the optional, one-of-akind Turf Groomer® fairway conditioner creates the ultimate fairway playing surface. Both two-wheel and four-wheel-drive models are available. Ask your Jacobsen dealer for a demonstration.

THE PROFESSIONAL'S CHOICE ON TURF.



NORTH STAR TURE, INC.

3080 Centerville Road St. Paul, MN 55117 (612) 484-8411 (800) 592-9513

