

## KOELPER BROS.

Golf Course Building and Remodeling  
444 E. Mors Avenue  
Wheeling, Illinois 60090

708-438-7881  
DANIEL I. KOELPER

708-541-9182  
VICTOR C. KOELPER



### VERTI-DRAIN®

The Ultimate Solution For Compacted Soil

### Mechanical Soil Technology

— Contract Aeration Service —  
Serving The Entire Midwest

David Strang  
Ph. (800) 743-2419

442 Pine St.  
Galesburg, IL 61401



Gregory E. Martin  
General Partner

1700 North Farnsworth

Suite Thirteen

Aurora, Illinois 60505-1512

708-851-9977

Landscape  
Architecture

Golf Course  
Architecture

Land Planning

OLD



DUTCH

SAND COMPANY, INC.

APPROVED TOP DRESSING SAND  
GOLF COURSE AGGREGATES  
TRAP SAND

Call for direct quotes on all your  
Aggregate needs

Richard E. Mika

(312) 374-2303  
(219) 938-7020

# Build your Pythium control program on a firm foundation. Chipco® Aliette®



 **RHÔNE-POULENC AG COMPANY**

P.O. Box 12014, 2 T. W. Alexander Drive  
Research Triangle Park, NC 27709  
919/549-2000

## "Leaves, Limbs, Needles and Boughs"

by Fred D. Opperman

In looking back over my past articles, it seems I have written mostly of "Leaves & Limbs" and little on "Needles and Boughs". This month I've picked a pine that isn't used much in our area. One would have to look far and wide to find one on a golf course. The reason being is that it is not being grown very widely or at all in our local nurseries. But it is a plant that can be purchased and will grow very well in our area.

*Pinus ponderosa* — (pi-nus pon-der-o' sa) Ponderosa Pine or Western Yellow Pine.

**Needles:** in three's, sometimes two's, remaining 3 years, densely crowded on the branchlets, rigid, curved, 5 to 10" long, 1/20 to 1/12" wide, apex a sharp horny point, stomatic lines on each surface, dark or yellowish green.

**Buds:** Oblong, cylindrical 4/5" long acuter, resinous scales closely appressed, reddish brown.

**Stem:** Young stems stout, glabrous, orange-brown or greenish at first, eventually becoming nearly black; with the odor of vanilla when bruised.

**Size:** In the wild will reach 150 to 230', averages 60 to 100' and a spread of 25 to 30' under cultivation.

**Bark:** Brown-black and furrowed on vigorous or young trees, yellowish brown to cinnamon-red and broken up into large flat, superficially scaly plates separated by deep irregular fissures on slow growing and old trunks.

**Fruit:** Cones, terminal, solitary or 3 to 5 together, nearly sessile (which means it is attached directly to the main stem), slightly recurved, symmetrical, ovoid or oblong-ovoid, 3 to 6" long, 1 to 2" broad.

**Culture:** Transplant balled and burlapped, prefers a deep, moist, well drained loam; sunny, open exposure; intolerant of shade, resistant to drought; tolerates alkaline soils.

**Credit: "Manual of Woody Landscape Plants" by Michael Dirr**

## Wind Trim

by Ken Zanzig

March winds trim the willows  
While April burst the buds  
Leaves of green add magic  
As blooms explode with love  
What a wondrous excitement  
Each new season brings  
The golf course ripe with beauty  
Is in the sling of things.

## Lake-Cook <sup>FS</sup> Spotlites Kalo's New Pro-Ap™ Applicator



**Pro-Ap—the Easiest Way to Spray  
the Best Turf-Wetting Agent - Hydro-Wet® RTA**

- Quick Complete Spray Coverage—1000 sq. ft. in less than 1 minute
- Consistent Dilution Rate
- Unique 1" Hose Assembly
- Excellent for Spot Treatment

—to order call—

*The Single Source for Professional Turf Management*

**LAKE-COOK <sup>FS</sup>**  
SPECIALTY PRODUCTS

**Wauconda**  
27310 W. Case Rd.  
(708) 526-0007

**Tinley Park**  
6730 South St.  
(708) 532-4723

**Lake Villa**  
170 Cedar Ave.  
(708) 356-9600

## Ford Iron is here!



Better tractor loader backhoes are here—the Ford C Series.

- More powerful hydraulics with 6,000 pounds of lift capacity and 12,000 pounds of breakout force.
- Deeper-digging backhoes with XTRA-VATOR™ extendable dipperstick.
- Deluxe noise-absorbing cabs with dual entry/exit, adjustable swing-around suspension seat, all-around visibility and right-hand instrument console.
- Ford quality and service/parts backup.

**See the rigs that are born to dig—today!**



**HUBER RANCH  
POWER EQUIP.**

Rt. 41, Box 188, Schneider, IN  
**1-800-553-0552**

# Schroeder's Nursery, Inc.



TREES

• SHRUBS •

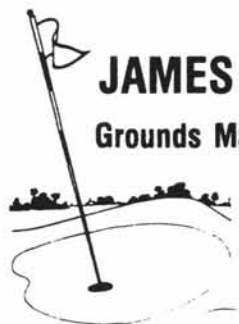
EVERGREENS

RICHARD A. SCHROEDER  
DON VIRGENS  
CARL DRAVIS

Specializing in Large Caliper Trees  
We offer complete installation

**TELEPHONE: 708-546-9444**

23379 W. Route 60 — Grayslake, Illinois 60030  
Located on Route 60 between Rt. 12 (VOLO) & Rt. 83 (IVANHOE)



**JAMES R. BURDETT**

Grounds Maintenance Supplies

Post Office Box 52  
Lombard, Illinois 60148  
(708) 620-5558  
Car Phone 710-5656  
Fax (708) 627-8370



**the  
bruce  
company**

(608) 836-7041

OF WISCONSIN, INC.

**LEE BRUCE**  
GOLF COURSE CONSTRUCTION

2830 W. BELTLINE HWY. • P.O. BOX 330  
MIDDLETON, WI 53562

**par ex®**  
The Ex Stands For Excellence

## Why the EX STANDS FOR EXCELLENCE in professional turf care.



- ☐ Par Ex is the only professional fertilizer line containing IBDU, undisputedly the finest slow release Nitrogen source in the world.
- ☐ IBDU gives you the highest level of WIN, or Water Insoluble Nitrogen.
- ☐ IBDU delivers all of its Nitrogen in a single growing season.
- ☐ The Nitrogen release rate of IBDU is generally affected by only two factors: soil moisture and granule size.
- ☐ Slower release makes Par Ex products perfect for your Fall Fertilization program.
- ☐ Fewer applications are required, labor costs are cut.
- ☐ The salt index of IBDU is the lowest of all commonly used fertilizer materials.
- ☐ IBDU fights nitrate pollution because very little Nitrogen is lost through leaching or volatilization.
- ☐ Choose from over 60 different product formulations.

**Territory Manager**  
**Thomas E. Skinner**  
Keokuk, IA  
319/524-8912

**Turf Products Ltd.**  
West Chicago, IL  
708/668-5537

**par ex**  
The Ex Stands For Excellence

FOR THE FINEST IN SOD  
**THORNTON'S SOD NURSERY**

708 - 742-5030

Rt. 2 Box 72

Elgin, Ill. 60120

**BROOKSIDE SOIL TESTING  
 and**

**IRRIGATION WATER ANALYSIS**

includes a complete report, and recommendations for producing quality turf on golf courses.

**ADVANTAGES:**

- Improves the environment of the grasses and eliminates turf diseases
- Decreases expenses for pesticides
- Reduces thatch and eliminates fairway renovation
- Decreases expenses for costly fertilizers
- Healthy turf attracts more golfers and increases income

Contact: Golf course specialists since 1964

**V. J. Zolman and Son**

8516 Brookfield Ave.  
 Brookfield, IL 60513

**708-387-7782  
 312-461-3679**

Let  
 the  
 Professionals  
 Blend  
 Your  
 Greensmix

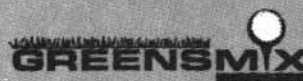


**The nation's leading soil blenders**

Producing premium blends of sand and organic mixes since 1946.

**GREENSMIX** owns and operates high capacity soil conglomerators/homogenizers for precision blending of sand and amendments at, or near, your jobsite. **We travel anywhere in the USA or Canada to blend your rootzone mixture.**

CALL TOLL-FREE 1-800-537-1796



A DIVISION OF FAULKES BROS.  
 CONSTRUCTION, INC.

Christine Faulks  
 715-258-8566  
 FAX: 715-258-8750

# We're Layne-Western

We know how to keep your water supply system running dependably year after year.

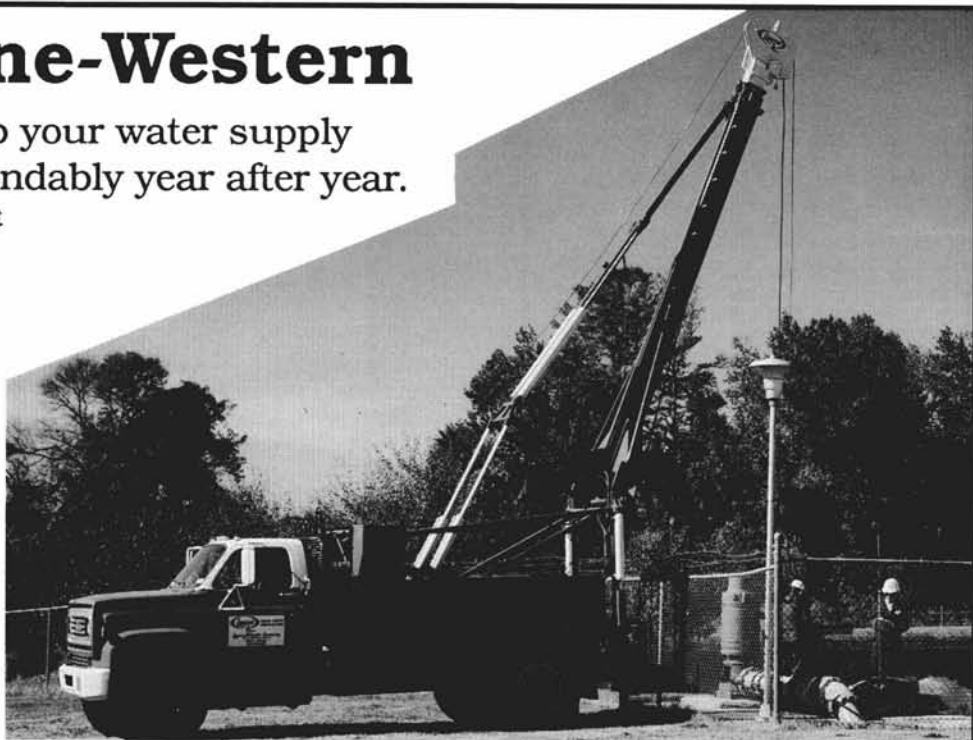
At Layne-Western, we know that a reliable source of water is more than just a well-built, efficient installation. It's also maintaining the well and pump in their best operating condition.

Our complete repair and maintenance services help guard against costly breakdowns and quickly solve problems that arise.

These services are especially important during the irrigation season when pump failure can be critical.

Call Layne-Western for the benefits of these services:

- Water & Pump Preventive Maintenance Programs
- Service & Repair to all brands of pumps
- Sonar-Jet & Downhole TV Inspections
- Water Well Design & Construction
- Pump Sales and Installation
- Complete Parts Inventory
- In-House Machine Shop
- Emergency Repair Services



**Layne-Western Company, Inc.**

721 W. Illinois Avenue  
 AURORA, ILLINOIS 60506  
 708/897-6941



## Editorial

You don't see an editorial from me very often, but it is now 22 minutes past midnight; and after tossing and rolling around in the bed being bothered by something that disturbs me, I just had to get up and write this. At this time of the night, or morning, whatever you call this hour, the thoughts come rushing out; and they may not make a well-organized editorial, but they come from the heart.

In the "Midwest Breezes" this month, there is a questionnaire asking for your opinion on a number of questions concerning **The Bull Sheet**. These are questions that the Editorial Committee and I put together. This questionnaire is the result of a letter we received from the Long-Range Planning Committee asking us to consider changing the name of our publication. It seems there are some who feel that the name **The Bull Sheet** is not the professional image that our association wants to portray in the nineties.

Well, it is this name change that made me toss and turn in bed; and finally, I had to get up and put my thoughts in writing. I had to defend **The Bull Sheet**. Maybe it was Ray (Ray Gerber) who kept poking me mentally to put on the armor and defend the name. Or was it Norm Johnson, Frank Dinelli, Bill Stupple, Don Strand, Bob Williams, or the other editors and members before me over the past 45 years?

Yes, it has been, or will be, 45 years come this June that the name **The Bull Sheet** has been in existence. Forty-five years that **The Bull Sheet** has been synonymous with the MAGCS. Forty-five years that **The Bull Sheet** means what's happening in the Chicago area. Forty-five years of keeping greenkeepers and then golf course superintendents informed, keeping them up to date with the latest knowledge in the industry. Forty-five years of having the "Who's Who in Turf" write their latest findings and research works: Musser, Watson, O. J. Noer, Duich, Daniels, Love, Beard, Wehner, Couch, Britton, Butler, Funk, Goss, Madison, Kerr, Shurtleff, Randell, Wilkinson, Kane, Fermanian, Turgeon — and I've missed more than I've named. I apologize for all those learned souls I have overlooked.

This is **The Bull Sheet**. This is the name that is synonymous with learning, with hearing about what your neighbor is doing or has tried, with knowing what the latest research is coming out of the universities and colleges.

A name does not portray professionalism. What portrays professionalism is the body and soul, what deeds have been accomplished, how it has served you. These are the building blocks that portray professionalism.

**The Bull Sheet** can stand very proudly on its record. Its name is known across the land and recognized. It is sought out, and its articles are copied and recopied. It is read in England, France, Mexico, Australia, New Zealand, and Canada.

Yes, its name has nothing to do with turf, but it is recognized as the newsletter coming from the most respected golf course superintendents in the States and as being their voice.

Yes, I'm sentimental about the name. Yes, I flew my flag on the first day of the Mideast "conflict," and my eyes got misty to see our POWs returning to their families. And yes, I'm for the name **The Bull Sheet**.

Now everyone — and I mean everyone — who read this, please fill in the card and circle "No" to question 6 asking to change the name. Then mail in your card so your vote can be counted.

Now, Ray, may I get off the soapbox and go back to bed and get some sleep?

**Fred D. Opperman**  
**The Bull Sheet Editor**

## Is Now the Right Time?

by Joel V. Purpur, Chairman  
Long Range Planning Committee

The long range planning committee has asked the editorial committee to consider the possibility of changing the name of our fine publication, **The Bull Sheet**. At the time I'm sure the name was fitting, but we feel the MAGCS may have outgrown it.

The LRPC believes one goal of our monthly publication should be to promote the true nature and professionalism of our profession. We casually refer to **The Bull Sheet** amongst ourselves with no reaction because we're so used to it. But when a Club Official or the like asks the source of a technical article we've referred them to, their reaction to **The Bull Sheet** is usually quite different, one that is not befitting our fine publication. Sure the name stands out, but for the right or wrong reasons?

We've come a long way since our predecessors first sat down and printed our first publication. Now, with an organization of six hundred members, maybe we've come too far and outgrown the name. We're not against tradition or preserving the name **The Bull Sheet**. Why not rearrange our publication and the **The Bull Sheet** section replace "The Midwest Breezes" where the title is more reflective of its purpose and origin, informing everyone of the latest "Bull"?

The MAGCS is known for being progressive, staying on the leading edge of our profession. Maybe now is the time to take the next step, change the name which represents our publication, and keep the name **The Bull Sheet** for our more personal news around town. I don't think our predecessors who worked hard for the advancement of our profession would be so adamant on the name that they would impede progress and our professional image.

You the membership have to decide because it is your publication and the Board of Directors and its committees are here to serve you.

**Advertisers — If three columns are chosen your ads will be smaller, similar to the one shown here. Use the enclosed card and vote ...**

### To Keep Your Course In Classic Condition, Use These High-Quality Products from NOR-AM

• **NITROFORM® SLOW-RELEASE NITROGEN**  
Releases by slow bacterial action to provide consistent 38% nitrogen

• **TURCAM® W.P. INSECTICIDE**  
Controls a wide range of turf and ornamental pests, especially white grubs

• **TURCAM® 21/2G**  
All the benefits of regular TURCAM® in convenient granular formulation

• **BANOL® TURF AND ORNAMENTAL FUNGICIDE**  
Controls pythium and phytophthora

• **PROGRASS® HERBICIDE**  
For the establishment of perennial ryegrass turf, or on established perennial ryegrass turf, Kentucky bluegrass or creeping bentgrass for control of *Poa annua* and broadleaf weeds

• **PROXOL® 80SP INSECTICIDE**  
Controls white grubs, sod webworms, cutworms and armyworms in fine turf

**NOR-AM**

NOR-AM CHEMICAL COMPANY

2501 Silverdale Road, P.O. Box 1495

Wilmington, DE 19803

THE FAIRWAY CLASSICS to keep your course in top condition

IMPORTANT! Please remember always to read and follow carefully all label directions when applying any chemical. Copyright © 1988 NOR-AM Chemical Company. All rights reserved.



# TORO®

## Reelmaster® 223-D

The lightweight fairway mower with fully interchangeable cutting units.

Variable Reel Speed Control matches the reel speed to your desired height of cut and mowing speed.

708-773-5555

**Chicago**  
**Turf & Irrigation Inc.**

1170 W. Ardmore • Itasca, Illinois 60143

# TORO®

## Fairway Aerator

Now you can aerate 61,000 square feet an hour at speeds up to 2.2mph with exceptional hole quality, plus adjustable coring depth control.



**Chicago**  
**Turf & Irrigation Inc.**

708-773-5555

1170 W. Ardmore • Itasca, Illinois 60143

## Midwest Breezes



## Upcoming Events — Mark Your Calendar

**May 20** — Combined Association meeting at Springbrook and Naperbrook C.C.

**June 10** — MAGCS monthly meeting at Naperville C.C.

**July 15** — MAGCS monthly meeting at Golf Club of Illinois

**July 4-7** — Western Open at Dubsdred

**July 30** — MRTF Field Day & Trade Show at Purdue

**August 12** — MAGCS monthly meeting at Woodmar C.C.

**September** — MAGCS monthly meeting at Ridgemoor C.C.

**October 7** — MAGCS monthly meeting at Flossmoor C.C.

**November 6** — Midwest Clinic at Medinah C.C.

**December 3-5** — NCTE at Pheasant Run Resort

**January 1992** — Arrowhead Golf Club

**January 20-22** — MRTF Conference & Show, Indianapolis Convention Center

**April 1992** — Geneva Golf Club

**June 22, 1992** — River Forest Golf Club

**July 13, 1992** — Briar Ridge Golf Club

**August 1992** — Mt. Prospect Golf Club

**October 1992** — Settlers Hill Golf Club

Edwin Wollenberg, president of the MAGCS in 1969, passed away at home in Park Forest on April 2, 1991 at the age of 75. Ed was the victim of a brain tumor just recently diagnosed.

Eddie grew up in Matteson, Illinois and his first job was at Olympia Fields C.C. raking sandtraps when he was nine years old. He became assistant supt. at Idlewild C.C. under the renowned Mel Warnecke. His first superintendent's job was at Navaho Fields C.C. in Palos Heights, Illinois. When that course was sold to become the site of Trinity College in 1959, Ed became superintendent at Gary C.C. He retired in 1984 after serving Gary (now Innsbrook C.C.) for twenty five years.

A veteran of World War II Ed served in the Air Force in Iwo Jima and Las Vegas, Nevada.

We made many enjoyable trips with "Fast Eddie" to Purdue Conferences; Happy Valley, Penn; and the CDGA flight to the Masters at Augusta.

Eddie is survived by his wife, Agnes; three daughters; and a son, David, a commercial MAGCS member.

Eddie, you never did master the game of golf, but there is no one that will keep Heaven any greener.

by Dudley Smith

**For Sale:** Viking Seeder, very good condition. \$800.00 or best offer. Call Joel Purpur, River Forest C.C., 708/782-4259.

Ryan Greensaire with regular and quadratines, excellent condition. \$1800 or best offer. Call Joel Purpur, River Forest C.C., 708/782-4259.

Vernon Massie of Green Acres Country Club will be hosting the Chicagoland Golf Course Mechanics Association's meeting on Tuesday, May 14th at 12:30 P.M. Robert Volden, "Sparky", of Ez-Go Corporation will be featuring the Fuji 4 Cycle Engine. A cutaway engine will be on hand. An R.S.V.P. will be required. Please contact Sparky at Ez-Go before Friday, May 10th. The number is (708) 438-5511. Our meeting is sure to be packed with information. Please try to attend.

## Annual Gin Tournament

by "P.V."

March 5th we had our 9th annual benefit Gin Tournament at Hackney's Restaurant. The tournament raised \$1,000.00 and was won easily by Dave (The Quake) Meyer. Gin tournament chairmen John Berarducci and Peter Voykin decided that the money again be donated to the Ron Austin family. (Ron is Superintendent at West Gate Valley Country Club).

The bill so far for the medical treatment of the little Austin daughter Rebecca is beyond belief ... over one and one-half million dollars. The insurance has run out a long time ago. Little Rebecca is a very sick girl with a rare ailment and is fighting valiantly for her life. Please pray for brave Rebecca Austin and be kind enough to send a check to help relieve the enormous expenses incurred by her illness. Any amount will be appreciated. Thank you!

Ron Austin Family  
17340 S. Parkside Ave.  
Tinley Park, IL 60477

## Member Input Needed

The Editorial Committee and Editor would like your input on what your feelings are concerning **The Bull Sheet**. We are asking all of our readers who receive this newsletter to fill in the enclosed self-addressed, stamped postcard. **The Bull Sheet** is sent to all members of the MAGCS in the various classifications, to advertisers, to other newsletter editors, and to those I'll classify as Friends of MAGCS. We want all of you to take the time to record your comments and return the postcard. Please take this opportunity to do so. This is YOUR newsletter, and your comments are wanted and needed.

Circle your answer on the postcard for the questions below, or add a comment where required:

1. Are you happy with the present ratio of 60% ads and 40% articles?
  - a. Yes
  - b. No
  - c. Suggested ratio
2. Would you like to see the number of newsletter pages
  - a. remain at 22 pages.
  - b. increase to \_\_\_\_\_ pages.
  - c. decrease by \_\_\_\_\_ pages.
3. Which page layout do you prefer?
  - a. Page 15 example, with three columns and smaller ad sizes, or,
  - b. Our current two-column layout with quarter- and half-page ads. (cont'd. page 18)



## KUBOTA L2650DT-W 23.5 PTO HP

- Compact design
- Greater operator convenience and comfort
- 3 cylinder, liquid-cooled diesel engine
- A Wet Clutch—first of its kind in this size tractor
- 4 wheel drive
- Easy Checker panel
- Power steering
- Full range of matching implements

**Kubota**



*Is Your 1 Source For  
Kubota Engine Parts & Service.*

UPS Parts Daily  
Call Our Toll-Free Parts Line:  
**1-800-397-0397**  
For Service Or Equipment Call:  
**1-708-301-8500**  
**1-815-469-8500**

(Your Input is Needed cont'd.)

4. Would you like to see the front cover and flag of **The Bull Sheet** changed?
  5. Would you like to see 4-color process on the front cover?
  6. Would you like to see the name of the publication changed?
  7. If yes, what name would you suggest?
- 
8. Please circle your MAGCS Classification:
    - AA — Retired
    - A — Active Superintendent
    - B — Less than 3 yrs. as Superintendent
    - C — Assistant Superintendent
    - D — Employee of Superintendent
    - E — Associate Member
    - H — Honorary
    - AE — For this survey, the firm/person advertising at the present time.
  - Editor of other newsletters
  - Friend of MAGCS
  9. Please circle your age bracket.
    - a. 20-29
    - b. 30-39
    - c. 40-49
    - d. 50-59
    - e. 60+
  10. Additional comments you would like to make concerning your newsletter?

Please mail your reply by May 15, 1991, or ASAP.

The objective of **The Bull Sheet** is to give the members up-to-date, timely, and educational articles; local, regional, and national news/articles; and current events. We also try very hard to make a profit with our newsletter. This profit is usually the money that is donated to various turf organizations.

### MAGCS Meeting at Nordic Hills G.C.



*Bob Graunke, CGCS, our Educational Speaker  
"Golf Courses and Compliance with Federal Regulations"*



*Ed Fischer and Tim Davis (The Two Gray Foxes)*



# Tee Time® The Andersons

## Quality Turf Care Products

- Homogeneous Greens Fertilizers
- Greens and Fairway Fertilizers with Nutralene®
- Sulfur Coated Urea Fertilizers
- Combination Products
- Granular Insecticides
- Granular Fungicides



Distributed by:

**Turf Products Ltd.**

2 North 255 County Farm Rd., West Chicago, Illinois 60185  
312-668-5537

**Olsen Distributing Company**

969 North Pepper Rd., Barrington, Illinois 60010  
708-381-9333

## Cover-up.



**U**nderneath some beautifully conditioned, championship golf courses are mountains of trash, the scars left by years of garbage replaced by a beautiful, invaluable green belt. And, landfill covers are only one way today's professionally managed golf courses are helping make our world a better place.

Who's in charge of keeping these amazing ecosystems in harmony with nature? Today's golf course superintendents. They're part troubleshooter, part business manager, part scientist and all environmentalist — dedicated to making our world a greener place.

**WE KEEP GOLF GREEN.**



*Frank Krueger, Lynn Wesson and Jim Burdett*

## CDGA Green Seminar, March 21, 1991



*Mr. Ray Anderson, Oak Park C.C.  
Chairman, USGA Greens Committee*

*"Environmental Impact of Golf Courses — USGA Research Initiative"*



*Dr. Gomes, Dean of University of Illinois  
College of Agriculture*

*"Recent Activities in the College of Agriculture"*



*Dr. Randy Kane, CDGA & University of Illinois  
"The Changing Disease Picture of 1990"*



*Bruce Williams, CGCS & President MAGCS  
"Meeting the Challenges of Golf Course Management in the '90's"*



*Roger Stewart, CGCS  
"New Products and Techniques"*

**All pictures by Ray Schmitz**

## "Be Prepared"

by Mike Bavier, Inverness Golf Club

Are you ready in case of an emergency at your club? Many of you have told me you have plans for many different types of accidents.

Just the other day, one of my employees fell while getting out of the truck (just an accident), and then not more than a few hours later paint stripper spilled on one of the guy's arms. For both of these accidents, we were ready to react.

Many times common sense will cover the situation. But you should have at your fingertips information on all your employees. They may have this information at the clubhouse, but **you** need this information, too. You need to know the employee's home phone number, spouse or relatives numbers can be important. Do they have allergies that you should be aware of in case of some special treatment, and the person's personal doctor's name could be very helpful. This type of information is important and can save valuable minutes that could very well count.

Now is the time for you to update your records. Take the time and review your system and do something about it. Go over this plan with your key personnel. Make sure they have access to this information. A back up plan can be helpful, too.

Many of us are fortunate to have many very conscientious workers that are careful in their work habits.

So there is no need looking for problems. Just be prepared!!!

## Storm Warning Systems

by Jeffrey A. Nack, Dir. of Golf Services  
Naperville Park District

It hasn't been that long ago that the tornado blew through the area near Plainfield and left a trail of destruction in its wake. I'm sure that many of us have some form of storm procedure that we automatically follow when something like this comes up. The ranges of readiness, all the way from a bull horn type of warning to literally sending someone around on a golf cart to warn your users and staff of the impending storm and its potential consequences.

When I arrived in our clubhouse shortly after the recent tornado I found a room full of three high school golf teams and assorted other patrons. The thought of seeking shelter in the basement of the building must have not crossed the minds of over fifty individuals. This stated to me clearly that we needed to get a better system that would command more attention than a violent thunderstorm and a formal procedure that we could implement in the event of threatening weather. Hind sight is usually 20/20, after all the center of this most recent storm passed less than ten miles away.

Prior to this, I had checked into getting a giant horn and a blaster to power the belling device and came up with an uncomfortable price tag of 3000 dollars. We bought a new putting green mower instead, after all we can demonstrate results with it. This recent brush with mother nature made me start to think of some alternative that would yield the same result with different financial implications.

Enough rhetoric ... we bought a cop car siren/whelp/phaser unit for about 150 bucks and one of the horns that they put on the top of their light bars for another 90 dollars, a motor cycle battery for another 9 bucks. This was packaged in a plastic fishing tackle box so as not to leak any undesirable goo on the pro-shop floor and the wire was strung across the roof to the horn. Presto-changeo, we've got ourselves a new belling device that cost what the 3000 bucks would earn in interest (if the bank would just creep the rate up a bit) in several months.

As an addition to that, we bought a "plectron receiver". This dandy little device sits on the shelf like a little transistor radio and is the receiver for the National Weather Service/Civil Defense. (Warnings like "Incoming scuds, we hope to never hear). When activated it emits a bleep and is an ear to the Civil Defense. This little hummer cost about \$240 and is what I hope we can rely on to have the pro-shop staff use as a trigger, inducing them to broadcast over the P.A. When they get done blasting with the wail/phaser/siren they can announce threatening weather, Kennedy has been shot, or the war is over. Hopefully, just threatening weather.

I know what you're thinking, what if the battery goes dead? Well, plans call for a battery charger to be included in the fishing tackle box, and then that gets plugged into a timer that turns it on and off.

I've got two systems for about 1200 bucks. At a little over 600 dollars a copy it sounds super cheap compared to the obligation of warning patrons of impending danger.

### LIGHTNING — THUNDERSTORM SAFETY RULES FOR GOLF COURSES

#### WHEN A THUNDERSTORM IS APPROACHING

- DON'T play the next shot: Get off the course IMMEDIATELY.
- DON'T seek shelter under an isolated, unprotected area.
- DON'T hold on to metal shafted clubs.
- DON'T use an umbrella with a metal shaft.
- DON'T be naive and play the odds and think you will never be affected by lightning on a golf course.

#### DO get off the course AT ONCE.

- DO seek refuge in a large building or a rain shelter or other small building equipped with approved lightning protection or under a tree equipped with a certified lightning protection system.
- DO get off high terrain - you are safer in a ditch, gully or depressed area or lying flat on the ground.

#### REMEMBER

YOU DON'T HAVE TO BE HIT BY A DIRECT STROKE OF LIGHTNING TO BE SHOCKED, INJURED OR KILLED. THERE IS A POSITIVE CHARGE OF ELECTRICITY IN THE GROUND EQUAL TO THE NEGATIVE CHARGE IN THE THUNDERHEAD AND LIGHTNING CAN ENTER YOUR BODY FROM THE GROUND UP CAUSING SHOCK, INJURY OR DEATH ESPECIALLY WHEN WEARING METAL SPIKES OR HOLDING A METAL SHAFTED CLUB.

—Courtesy of

Philadelphia Association of Golf Course Superintendents