THE BULL SHEET, official publication of the MIDWEST ASSOCIATION OF GOLF COURSE SUPERINTENDENTS.

1989 Board of Directors

President	Bruce Williams (Roxane) Bob O'Link G.C.	Home: 680-1074 Office: 432-0088
Vice-Pres.	Ray Schmitz (Jan) Flossmoor C.C.	Home: 815-469-2773 Office: 798-2498
Sect'yTreas.	Timothy Kelly (Linda) Vill. Links of Glen Ellyn	Home: 858-8174 Office: 469-2077
Exec. Sec.	Penny Meyer (Dave) Office: 820-8181 MAGCS (Mailing Address) P. O. Box 248, Eola, IL 60519	
Board	Michael Bavier Inverness G.C.	Home: 382-7654 Office: 358-7030
	Ed Braunsky (Sue) Geneva Golf Club	Home: 879-8536 Office: 232-0627
	Donald Cross (Cindy) Skokie C.C.	Home: 965-3435 Office: 835-4296
	Alan Fierst Oak Park C.C.	Home: 456-7815 Office: 453-7525
	Joel Purpur (Debbie) River Forest C.C.	Home: 832-6763 Office: 941-1651
	[교리] (2. 개의 : 10 (2. 12) (2. 12 (2. 12 (2. 12 (2. 12 (2. 12 (2. 12 (2. 12 (2. 12 (2. 12) (2. 12 (2. 12 (2. 12 (2. 12 (2. 12 (2. 12 (2. 12 (2. 12 (2. 12) (2. 12 (2. 12 (2. 12 (2. 12 (2. 12 (2. 12 (2. 12 (2. 12 (2. 12) (2. 12 (2. 12 (2. 12 (2. 12 (2. 12 (2. 12 (2. 12 (2. 12 (2. 12) (2. 12 (2. 12 (2. 12 (2. 12 (2. 12 (2. 12 (2. 12 (2. 12 (2. 12)	fome: (219) 924-6597 ffice: (219) 844-0330
Pres. Emeritus Offic	Dave Meyer (Penny) Prestbury G.C. ial Photographer Raymon	Home: 820-1040 Office: 466-4177 nd Schmitz
Dr. Randy T. Kane, Turfgrass Advisor (708) 954-2753 University of Illinois & CDGA		

ECKHOFF AWARD

For Excellence In Golf Journalism



We are not copyrighted and would like to share our articles with any who would like to use them, but please give the author and "The Bull Sheet" credit.

Editor — Fred D. Opperman, CGCS 810 Greenwood Avenue Carpentersville, IL 60110 Phone (708) 428-5009

Fax (708) 669-1013

Bull Sheet printed by Ever-Redi Printing, 5100 East Ave., Countryside, IL 60525.

The **Bull Sheet** is published once a month. All articles are required by the 10th of the month to make the next issue. Advertising is sold by the column inch, by the quarter page, half page, and by the full page. All artwork to be finished and in black and white. Circulation is over 600 issues per month.

President's Message

The holiday season is one of my favorite times of the year. Spending time with friends and family is important and it seems we don't have enough time to do that during the growing season. In the off season some of us even find that occasionally 8 hour workdays do exist. I urge all of our members to relax over the holidays so that we may all face the New Year with a happy and healthy attitude. January and February will come and go very quickly and by March all of our planning will move into the implementation stages. I certainly hope that you all will make your New Years' resolutions soon. What will it be? Is 1991 the year to improve your organizational skills? Is regulatory compliance a priority in the upcoming year? Is employee safety and training an area you can focus on? Whatever resolution you make I am sure it will have a positive impact on your operation and ultimately make your job easier.

The MAGCS membership has honored me by nominating me for the position of Director on the Board of GCSAA. I pledge to you my continued dedication for the advancement of the golf course superintendent. It is important that we continue promoting the importance of the golf course superintendent and the role he plays in the great game of golf. GCSAA is a fine association, I look forward to the challenges that lie ahead.

In an effort to gain election to the Board of GCSAA there is a lot of work that must be done and most of it is behind the scenes. My thanks to Mike Bavier, Paul Voykin, Fred Opperman, Len Berg, Roger Stewart, Al Fierst, and Bob Maibusch. Collectively, these men have helped in the organization and direction of my campaign. Brochures have been developed, contacts have been made, and numerous mailings and phone calls have gone out. MAGCS voting strength is at its peak thanks to efforts of Len Berg and Tim Kelly. My most sincere thanks to all of you who have helped in the campaign. It is not too late for anyone to spread the word amongst former classmates and friends around the country. A few personal notes can make the difference in a close race.

The NCTE was held in early December in Springfield, Illinois. The quality of speakers and topics was excellent. The trade show & conference facilities were superb. Don Cross and Joel Purpur worked hard to provide a great educational program for the MAGCS portion of the NCTE. The Chicagoland Golf Course Mechanics Association had a full day workshop which drew a number of mechanics and superintendents alike. The only drawback to the NCTE was a weak attendance from the heavily populated Chicago metro golf courses. I can assure you that those who did not attend missed a super educational opportunity. Springfield was a pleasant drive as it only took 3½ hours from the north side. The Central Illinois GCSA were great hosts and were well represented. We only go downstate one year in every five. Let's show our support for the Illinois Turfgrass Foundation in the future. You won't regret it. Proceeds from the NCTE enable us to continue the high quality of research being conducted at the University of Illinois in a variety of disciplines affecting golf course turfgrass. Plan to be a part of the 1991 NCTE as it returns to Pheasant Run in St. Charles.

Have a Happy Near Year in 1991.

Bruce R. Williams CGCS MAGCS President

Director's Column



Golf Course Mounding

by Ray Schmitz, CGCS Supt., Flossmoor Country Club

I would like to pursue the subject of mounds on the golf course and some of the problems involved in their construction. Mounds are very popular with golf course architects at this time and we as golf course superintendents must be informed as they will be included in most golf course remodeling designs.

Mounds can be described as raised areas of grassed over earth and used to define and direct the playability of the golf hole and provide safety from errant golf shots. Their size can be small to very large and the height can be low to very high. Placement can be virtually anywhere on the golf course.

To build a mound the contractor takes a dozer to the area marked off for the mound and begins to remove all the top soil that can be salvaged for the topping of the mound once the clay base is in place to the desired height. This is where the problems come in for the golf course superintendent. In the process of moving the top soil, any irrigation pipes and wires that are in the way are ripped out along with any drainage tile that you never knew was there. If the pipes and tiles are not ripped out they will probably be broken by the constant pounding of the dozer tracks and the tires of the scrapers that haul in the clay base and topsoil. Once the topsoil is pushed aside and saved for later it causes the grass underneath the pile to be destroyed. In order to calculate the costs for restoration (seeding or sodding) one should figure twice the area of the size of the mound that is to be built.

Mounds also drive up the costs of any remodeling project. At Flossmoor Country Club one new green is being built and new tees on six different holes along with two lakes. Mounds are to be put into their designated places on four different holes and placed along the sides of the practice range for definition. Cost for building the mounds is roughly 66% of the costs for the entire project. Golf course superintendents are aware that architects usually get paid on a percentage of the total construction costs.

I assume that a golf course architect when drawing up plans for a new golf course or remodeling an existing one will take into consideration some of the problems mounds can cause for the people who have to maintain them once the contractor has left and all of the final payouts have been made. Considering the large amount of money that is being spent on the mounds I hope I will begin to accept mounds and become a proponent of the concept.

MAGCS Committees 1990-1991

Nominations: Chairman - Dave Meyer

Roger Stewart, Mike Nass, Jim Evans,

Dave Behrman

Finance: Chairman - Ray Schmitz

Dave Meyer, Tim Kelly, Bruce Williams

Employment: Chairman - Al Fierst

Roger Stewart, Jim Evans, Len Berg

By-Laws: Chairman — Dave Meyer

Ed Fischer, Brand Bobosky, Albie Staudt

Arrangements: Chairman — Joel Purpur

Steve Cummings, Brian Green,

Mark Bobb, Dennis Wilson

Fall Dinner Dance: Dave Behrman, Carolyn Goodman,

Dave Nadler

Golf: Chairmen - Mike Bavier, Kerry Blatteau

Tim Davis, Dave Blomquist, Pete Voykin, Walter Fuchs, Randy Wahler, Doug Long,

Dave Louttit

Education: Chairmen — Don Cross & Ed Braunsky

Kevin Czerkies, Rick Hahn, Todd Hopphan,

Greg Johnson

Long Range Plan: Chairman — Joel Purpur

Al Fierst, Jeff Nack, Mike Bavier, Pete Leuzinger, Bruce Williams

Membership: Chairmen - Ed Braunsky & Kerry Blatteau

Luke Strojny, Greg Thalman, Reynie Jacobsen

Public Rel: Chairman — Al Fierst

Phil Zeinert, Don Ferreri, John Gurke,

Glenn Bereiter, Dan Quast Chairman — Roger Stewart

Past Presidents: Commercial Member

Advisory Committee: Chairman - Phil Taylor

John Lebedevs, Jim Reed, Kerry Anderson,

Mark Johnson

Editorial: Chairman — Fred Opperman

Roger Stewart, Ray Schmitz, Dudley Smith

November 14, 1990

Mr. Fred D. Opperman, CGCS Editor, <u>The Bull Sheet</u> 1022 Shady Lane Glen Ellyn, IL 60137

Dear Mr. Opperman

We are in receipt of your packet of 13 magazines from the files of the late Raymond Gerber. Please be advised that these are a most welcome addition to the O. J. Noer Memorial Turfgrass Collection, based here at MSU. We are quite delighted to receive them and can assure you that they will have a good "home" as a part of the finest publicly accessable turfgrass literature collection in the world.

Two of the items, in particular, are of special significance:

) The February, 1928 issue of The National Greenkeeper, and

The 1957 Conference Issue of <u>The Golf Course Reporter</u>

Both of these items were not held previously by the collection. One indirect implication of this is that the articles in these issues are not indexed in Dr. James Beard's Turfgrass Bibliography: From 1672 to 1972, and are thus "invisible" to anyone seeking to identify citations on any topics concerned. We will, in time, index these items in the USGA Turfgrass Information File so that they can be identified. In general, we only add older citations to USGA TGIF when they are not in the Beard bibliography, as our higher priority is to index and abstract those items published since 1972.

Enclosed please find, with our compliments, two sample reports, which may be of interest or use to you, from USGA TGIF. The first is an author index for <u>The Bull Sheet</u> for 1986-1987 and the second is a subject index of the same time frame. We can produce such spin-off indexes with relatively little effort, once the bibliographic records exist within USGA TGIF.

Enclosed please also find descriptive information regarding the online file (USGA TGIF), holdings (Noer Collection) and activities of the Turfgrass Information Center. Please call if you have any questions about them.

Again, thank you for your interest and follow through on that interest. It is a good contribution toward making the turf literature universally accessable and will act as a fine memorial to Mr. Gerber. We will so tag the materials.

Sincerely, For better turf,

Dete Cookinhan

Peter O. Cookingham Project Manager

POC/cc



Library W-212 • Michigan State University • East Lansing, MI 48824-1048 • (517) 353-7209



LESCO Has It!

Everything you need for professional turf management.

- Fertilizers
- Seed
- Irrigation
- Equipment
- Plant Protection Replacement Parts
 - Golf Course Accessories
 - Safety Products

(800) 825-3726



LESCO, Inc., 20005 Lake Road, Rocky River, Ohio 44116 (216) 333-9250

Manufacturers, Formulators and Distributors for the Green Industry.

Testing & Licensing Instructions

The State of Illinois Department of Agriculture administers both the general standards and category examinations. Illinois law requires a person who applies a pesticide for hire outside of a structure to be licensed by the Illinois Department of Agriculture.

Testing, certification, and licensing questions should be sent to Bill Anderson, Illinois Dept. of Agriculture, State Fairgrounds, P. O. Box 19281, Springfield, IL 62794-9281, telephone (217) 785-2427. In northeastern Illinois, Stan Smith can be contacted at (708) 990-8256.

For testing sessions, please bring your most current license or all past test results. A calculator will be useful for part of the test. You must pass the General Standards Certification examination before you will be allowed to take a category examination. Tests will be graded and results made available immediately after testing.

Testing sessions immediately following General Standards training will include General Standards testing only except on March 12, 20, April 18, 24, 30, May 7, and June 4. On those dates, as well as during testing sessions following category training, all tests, including general standards, will be available.

1991 Northeastern Illinois **Pesticide Clinics**

\$13.00 per day PREPAID registration fee required at all locations except Crystal Lake. No refunds and no transfers between clinics. Registration is through the Northern Illinois Horticulture Association, P. O. Box 204, Gurnee, IL 60031 except for the March 5 clinic. Due to limited seating at most locations, registration must be received by the Friday before the desired clinic date. Send a self-addressed stamped envelope for confirmation of registration; your check will be returned if the clinic is full.

For 2-day clinics, General Standards training and testing will be on the 1st day, Turf and Ornamentals training and testing in all categories will be on the 2nd day. Each clinic begins at 8:00 a.m., with testing from 1:00 to 4:00 p.m.

The following are the dates, cities, training and locations: Jan. 3-4 — Rockford — G.S., Turf, Orn. — Clock Tower Hotel, I-90 & Bus. 20

Feb. 26 — Mundelein — G.S. — Holiday Inn, Rt. 45

Feb. 27 — Joliet — G.S. — Holiday Inn, Larken Ave. & I-80 March 5 — Crystal Lake — G.S. — Hob Nob II Restaurant,

Rt. 14 & 31. \$10.00 fee. Call (815) 338-3737 to Pre-register.

March 13-14 — Willowbrook — G.S., Turf, Orn. — Holiday Inn, Rt. 83 & I-55.

March 20-21 — Glencoe — G.S., Turf, Orn. — Chicago Botanic Garden, Lake-Cook Rd. E of I-94

March 27-28 — Alsip — G.S., Turf, Orn. — Condesa del Mar, 12220 S. Cicero, ½ mi. N of Holiday Inn

April 10-11 — Wheaton — G.S., Turf, Orn. — DuPage County Fairgrounds, Manchester Rd.

April 16-17 — Glencoe — G.S., Turf, Orn. — Chicago Botanic Garden, Lake-Cook Rd. E of I-94

April 23-24 — Alsip — G.S., Turf, Orn. — Condesa del Mar, 12220 S. Cicero, ½ mi. N of Holiday Inn

May 7-8 — Wheaton — G.S., Turf, Orn. — DuPage County Fairgrounds, Manchester Rd.

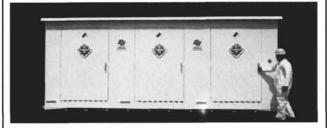
June 4 — Wheaton — G.S., Turf, Orn. — DuPage County Fairgrounds, Manchester Rd.

G.S. = General Standards, Orn = Ornamentals



Hazardous Chemical Storage Buildings

Comply with Federal, State and Local Regulations



- Relocatable Turnkey Pre-fabricated Buildings
- · Fire Protection
- Accommodates up to Forty 55-Gallon Drums
- Storage Capacity up to 10 Tons
- Available in 22', 15', 10', 8' and 6' Sizes
- · Built of Rugged 10 Gauge Steel
- 500-Gallon Spill Containment Subfloor
- · Wide Range of Options
- · Nationwide Engineering Support
- · One Year Warranty



Call or write today for complete information.

2380 South Bascom Ave., Campbell, CA 95008 Phone: 408/559-3901 Fax: 408/559-3218 Toll Free: 1-800/344-6539 "So...you say you need some trees, custom transplanting, or Par Ex fertilizer?"





- Speciman Landscape Material
- Custom digging
 Transplanting
- Nursery Fertilizers
- Fred Opperman, Sales Manager

Rural Route 2, Box 26 • Huntley, IL 60142 • 708 669-5353 • FAX 708 669-1013

Lewis International & America's Turf
Professionals Rely On







Lewis Equipment Co. has known for years of the high-quality, low-maintenance performance delivered by HIJET, Daihatsu's multipurpose utility vehicles.

The HIJET is powered by a whisper quiet 3 cylinder 30 Hp water cooled engine. Available in 4 different body styles: Cut-a-way, Hydraulic Tipper, New Larger Full Cab and Hydraulic Liftpick/Tipper, you'll be able to do more work with fewer vehicles.

Come in for a demo today on one of the incredible HIJET Vehicles. Call Avery Harris at 537-6110.

4 Locations To Serve You:

Home Office: 55 E. Palatine Rd. Prospect Hts., IL 60070

5220 S. Route 31 Crystal Lake, IL 60014 Payline West, Inc. 225 N. Randall Rd. St. Charles, IL 60174 Payline South, Inc. 1945 Bernice Rd. Lansing, IL 60433

(708) 537-6110

(815) 459-4555

(708) 584-8700

(708) 474-7600

GCSAA Prayer Breakfast

The members of the GCSAA Prayer Breakfast Committee are happy and proud to announce that Dr. Houston Couch will be this year's speaker at the PB in Las Vegas. This will be the first time that we have had a member from our own profession to be our guest speaker.

Mr. Ben J. Staff of Hog Neck Golf Course in Easton Maryland will serve as chairman of the PB this year and hopefully for many more years to come. After having served as chairman for 11 years with the support of many fine people it's time now for some fresh faces. I hope that Ben will receive all the help and encouragement that has been given me over the years.

Because we were a little late in getting things lined up this year there has not been much advance notice in the GCSAA communications however there will be a PB in Las Vegas!

The Bull Sheet has many readers and we would like to remind them again that the date is February 10, 1991, Sunday, at 7:30 A.M., Riviera Hotel. Check for exact location.

Thank you for all your help in the past, now and in the future.

John C. Ebel, Retiring chairman

Houston B. Couch

Professor of Plant Pathology, Virginia Tech

B.S. (Agronomy) — Tennessee Technological University, Ph.D. (Plant Pathology) — University of California.

1954 to 1965 — Assistant to Associate Professor of Plant Pathology, The Pennsylvania State University. Taught introductory plant pathology and a course on diseases of turfgrasses. Conducted research on the nature and control of



turfgrass diseases — with particular emphasis on chemical control and the influence of nutrition, soil moisture and air temperature on the development of turfgrass diseases.

1965 to July 1974 — Professor of Plant Pathology and Head, Department of Plant Pathology and Physiology, Virginia Polytechnic Institute and State University. In addition to administrative duties, taught introductory plant pathology and conducted research on the nature and control of turfgrass diseases.

July 1974 to present — Resumed full time duties in July 1974 in research and instruction as Professor of Plant Pathology at Virginia Polytechnic Institute and State University. Teach a course in graduate plant pathology. Conduct research on the chemical control of turfgrass diseases and the effect of various environmental factors on turfgrass disease development.

Author of the book "Diseases of Turgrasses." First published in 1962. Second edition issued in December 1974. Third edition is scheduled for release in the Spring of 1991. Publisher: Robert Krieger Co., P. O. Box 9542, Melbourne, Florida 32091.

Has been married for 45 years. Father of five (four sons and a daughter), and grandfather of nine (6 boys and 3 girls — all of whom live no more than 15 minutes away!).



A TRADITION

More than 60 years of complete, dependable, economical tree service.

Since 1930

Nels J. Johnson, Tree Experts, Inc.

Nels J. Johnson, Sr.

President

Nels J. Johnson, Jr.

Vice President

Karl G. Johnson Vice President

Complete economical tree service for Private Estates, Municipalities, Schools, Industrial Areas, Parks, Golf

All phases of Arboriculture, Diagnosing, Pruning, Treating, Transplanting, Fertilization, Hydraulic Spraying, Removals, Stump Routing, Municipal Forestry, Chempotherapy for elms, and other trees.

FULLY INSURED

MAIN OFFICE: 912 Pitner Avenue, Evanston, IL 60202

TELEPHONE: (708) 475-1877 FAX: (708) 475-0037 Hinsdale: (708) 325-0970



Six Reasons Why Aqua - Master Fountains Are Superior To The Competition

- Bigger spray patterns at same horsepower
- · Interchangeable nozzles
- · Integrated light systems no more brackets
- Power cable entry through bottom plate reduces bulkhead connector breakage
- 3 yr. pro-rated warranty on 1 HP & up motors
- Less Expensive

For A Free Estimate Call 1-800-347-4272

CENTURY RAIN AID

- Downers Grove, IL (708) 515-8555 Elkhart, IN (219) 262-2270
- Elk Grove Village, IL (708) 640-6660 New Berlin, WI (414) 796-8288



Reach, Speed & Stability



Ford New Holland "Super Boom" skid-steer loaders do more for vou:

- * Reach Loads center of six-wheel dump.
- * Speed Faster cycle times, speeds up loading/unloading operations.
- * Stability Longer wheelbase with low center of gravity.

MARTIN IMPLEMENT SALES, INC. 16400 S. 104th Ave. Orland Park, IL 60462 (708) 349-8430



FOR QUALITY TURF ALL SEASON LONG

DISCOVER THE

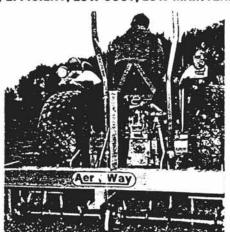


ADVANTAGE...

FAST, EFFICIENT, LOW COST, LOW MAINTENANCE TURFGRASS AERATION

SEVERAL MODELS AVAILABLE, WITH:

- 28" TO 86" SWATH
- PULL-TYPE OR 3 POINT HITCH
 "5", 6½" AND 8" TINES
 HYDRAULIC LIFT



Call Us For More Info: 708-301-8500 • 815-469-8500



ANGULAR TINE AERATION FOR ATHLETIC FIELDS PARKS/PICNIC AREAS **GOLF COURSES**

SOD FARMS LANDSCAPERS/ESTATES CEMETERIES

DESIGNED **ESPECIALLY FOR HARD** COMPACTED TRAFFIC & PLAY AREAS.

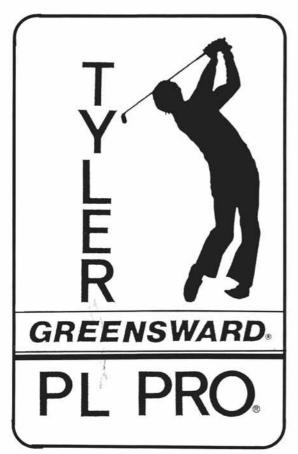
The unique patented design fractures the soil between the tines enhancing the soil profile and its natural capillary action. This eliminates ponding and allows air, moisture and fertilizer to get to the root system maximizing growth and greener turf.

The "AER-WAY" now comes standard with a full width weight box, tow bar and arking stands, and optional passive or precision overseeders



QUALITY...

It's a Way of Life at Tyler.



For a cost effective way to run your fertilizer program, write or call us today.

Introducing
Tyler Greensward
PL PRO.
fertilizer with



At Tyler, we are happy to announce our new symbol of QUALITY. The Tyler **Greensward PL PRO** (perfect lie professional) symbol. This symbol assures you, the Golf Course Superintendent, a fertilizer blend with NUTRALENE. This all new homogenous, low burn, nitrogen source is not dependent on coating or particle size for its release; nor will premature fracturing affect its ability to give 12 to 16 weeks of predictable and dependable release without extravagant growth flushes.

Tyler **Greensward PL PRO** has the ability to release both by hydrolysis and microbial action. This ensures early Spring green-up and late Fall color, minimal leaching and volatilization.

Tyler **Greensward PL PRO** is now available in both fine and standard particle sizes, and a variety of analyses.

Quality Products for Quality Turf

Tyler Enterprises, Inc.

P.O. Box 365 • Route 53 South • Elwood, Illinois • 60421 Telephone: (815) 423-5551 • FAX: (815) 423-6331

> TOLL FREE 1-800-421-4740 (IN MILWAUKEE (414) 535-0466)

> > Copyright 1990 Tyler Enterprises Inc.

Turfgrass Education at the University of Illinois

by David Wehner

Many of the readers of the Bull Sheet have heard me mention the continuing need for students to enroll in the turfgrass management program at the University of Illinois. We have attacked recruiting of students in an indirect way by developing a brochure and, more recently, a video tape that describes what is involved in being a turfgrass manager and the benefits of the profession. The brochure was funded by the Illinois Turfgrass Foundation and as such lists all of the schools in Illinois that have programs in turfgrass management. The video tape, which was sponsored by the CIBA-GEIGY, Deere & Co., Spraying Systems Co. and the Illinois Turfgrass Foundation, is a generic video that could be used by any educator or other individual in the U.S. to promote turfgrass management. The purpose of this article is to describe the turfgrass management program at the University of Illinois and present some aspects of our program. There are many fine schools offering turfgrass education, however, our program offers some distinct advantages that you should be aware of.

The turfgrass management program at Illinois is based in the Department of Horticulture. Students interested in turfgrass management pursue a B.S. degree in Ornamental Horticulture. There are two courses in turfgrass management, an introductory course that covers basic species utilization and management, and an advanced course that deals with intensive turfgrass culture. Students interested in the turfgrass option take both courses while students interested in other aspects of horticulture may take the beginning course as an elective. All of our students are required to take a core of horticulture courses covering woody ornamentals, plant propagation, horticultural science, and bedding plants. Electives are available in arboriculture, nursery management, home grounds design, floricultural crop production, vegetable crops, small fruits, and tree fruit science. With careful course selection, the student can become qualified to work in virtually any aspect of the horticultural or turfgrass industry. The broad training that our students receive allows them to easily make career changes if they discover new opportunities.

In addition to horticulture courses, students take required courses in soil science, botany, plant pathology, entomology, mathematics, social sciences, humanities, and chemistry with electives available in business, agriculture engineering and several other departments. Our students receive a well-rounded education that prepares them for the challenges of the future.

The University of Illinois offers tremendous resources that can be used by a student to excel in their chosen field of study. Computer facilities are readily available (including computers in the dormitories) with training on how to use them offered through various courses. The university has the fourth largest library in the United States (top three are Library of Congress, Harvard, Yale) with well over 7 million volumes. Students can gain experience working with the faculty on special projects or on the research plots. Students receive help with placement for summer jobs and after graduation.

Numerous MAGCS members have studied at the University of Illinois. These individuals have been successful in obtaining excellent positions and are among the leading superintendents in the Chicago area. (cont'd. page 10)

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





P. O. Box 12014, 2 T. W. Alexander Drive Research Triangle Park, NC 27709 919/549-2000 (Education University of Illinois cont'd.)

The courses offered at the University of Illinois are for the most part, taught by faculty members who are doing active research in the area that they teach. Thus, the students are kept up to date on the latest techniques, procedures, and plant material.

Recently, the University of Illinois was rated 16th on the list of top schools for your educational dollar (Money College Guide 1990). The rating was based on the amount of tuition versus what the school has to offer. No other school in the midwest was rated higher than Illinois.

In addition to the undergraduate program, we offer advanced degrees in turfgrass science. Our graduate students have taken important positions in industry or have become turfgrass educators in several states such as Michigan, Massachusetts, Ohio, Virginia, and Oklahoma.

In summary, the University of Illinois is an excellent place to study turfgrass management. If either you or someone you know is interested in the University of Illinois, please give us a call. I can be reached at 217/333-7848. My address is Horticulture Department, 1201 S. Dorner Drive, Urbana, IL 61801.

Leaves, Limbs, Needles & Boughs

by Fred D. Opperman

This month's selection is a tree that you see a lot of further south in Illinois, Indiana, and Missouri, etc. But it can and is growing quite well in many locations around the Chicago area. One just has to plant this tree to see its beauty and you will be adding it to your yearly plant list.

Liquidambar styraciflua (lik-wid-am'bar sti-ra-se-floo'a) American Sweetgum.

Leaves: Alternate simple, 4 to 7½" wide and about as long, 5 to 7 lobed with oblong-triangular, acuminate starshaped, finely serrate lobes. Leaf color is a very beautiful deep glossy green above in summer, changing to rich yellow-purple-red tones in the fall; there is a great variability in fall colors.



Bud: Terminal imbricate, 6 to 8 scaled ovate to conical 1/4 to ½" long, laterals smaller, reddish green brown, sometimes fragrant when crushed.



Size: 60 to 75' in height with a spread of 2/3's to equal the height; can reach 80 to 120' in the wild.

Fruit: Syncarp of dehiscent capsules, (in plain language they are little balls with spines and holes), 1 to 11/2" diameter, persists into winter.

Culture: Transplant in the spring into deep, moist, slightly acid soil and full sun.

Credit: "Manual of Woody Landscape Plants" by Michael A. Dirr.

NEW COMBINATION IN SLOW RELEASE NITROGEN



WITH 7% WIN

15-1-10 FERTILIZER

- Combines Benefits of Nutralene & Milorganite
- Organic Base
- Non Burning
- Low Salt Index
- For Turf & Ornamentals
- Uniform Release of Nitrogen
- 50/lb Bag Covers 7500 SQ. FT.
- * Can Be Used Any Time Spring Summer Fall

ALSO AVAILABLE: A 6-1-16 Fertilizer With High Quality Sulphate of Potash

Call Us Today For Pricing!

LAKE-COOK SPECIALTY PRODUCTS (A Division of Lake-Cook Farm Supply Co.)

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



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

utralene



For the turf care industry, Kubota has designed a team of tough precision

instruments that work hard, but provide maximum economy.

Powerful but economical Kubota Tractors. Mowers. Tillers. Box scrapers.

Front Loaders. Even mini-excavators.
For golf courses, athletic fields, parks, and even private residences, Kubota equipment satisfies the most demanding standards.
Kubota's versatile turf equipment works both independently, and with most existing implements and attachments.

Standard features on many of our tractors include hydrostatic transmission.

Standard features on many of our tractors include hydrostatic transmission, comfortable operator platforms, and Power steering, safety and noise reduction

Add the operating economy special to Kubota, and you have precision instruments sional. See the Kubota turf team today.



Nothing like it on earth.



Schneider, IN 219/552-0552 IN 800-553-0552 • IL 800-553-0554