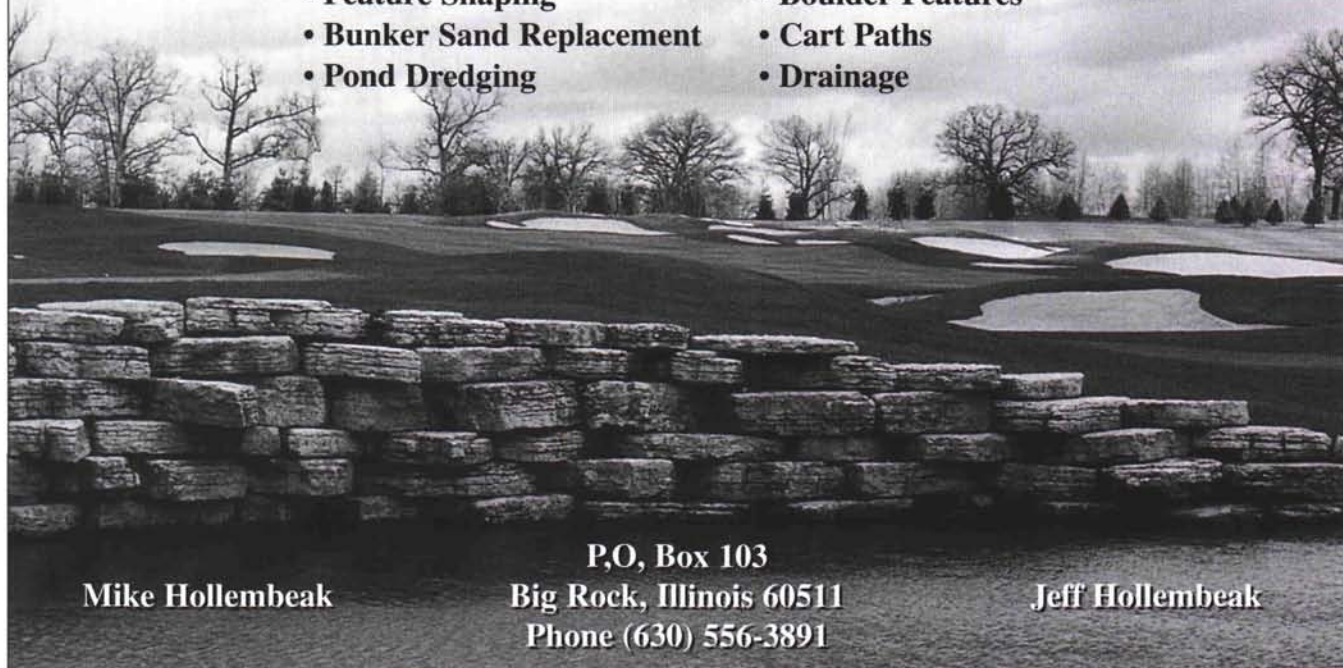


Hollembeak Construction, Inc.

Golf Course Construction and Remodeling

"We believe in a quality job and take pride in our finished product."

- New Construction
- Feature Shaping
- Bunker Sand Replacement
- Pond Dredging
- Pond Construction
- Boulder Features
- Cart Paths
- Drainage



Mike Hollembeak

P.O. Box 103
Big Rock, Illinois 60511
Phone (630) 556-3891

Jeff Hollembeak

Supplying the Chicagoland area with excellent service and technical expertise for over 28 years...

We deliver...



- Aquatic Products
- Block Retaining Wall
- Bulk Fertilizer
- Drain Tile
- Fertilizers
- Geotextile Fabrics
- Grass Seed
- Herbicides
- Hose
- Insecticides
- Irrigation Parts
- Marking Paint
- Specialized Pesticides
- Spreaders
- Spray Equipment
- Tee and Green Equipment
- Terra Shield Green Cover
- Tree Fertilizer

2N 255 County Farm Road, West Chicago, IL 60185

630-668-5537

The Turfgrass Family Tree


(continued from page 10)

passed the gene for hemophilia to her son and two daughters, generations of inbreeding among European royal families resulted in a higher than average occurrence of the disease. Though not all effects of inbreeding are as obviously detrimental as those of hemophilia, the gradual loss of diversity can have a profound impact on any breeding program.

Diversity and the consumer.

At the University of Illinois, we are searching for genetic diversity using molecular techniques. Our preliminary studies have found these techniques to be successful at measuring diversity. It is our hope that we will find new and different germplasm specifically for use in the Midwestern United States.

*At the University
of Illinois, we are
searching for genetic
diversity using molecu-
lar techniques. Our
preliminary studies
have found these tech-
niques to be successful at
measuring diversity. It
is our hope that we will
find new and different
germplasm specifically
for use in the Mid-
western United States.*

Although constructing a family tree of perennial ryegrass will not necessarily produce a better turf, it will provide a picture of how varieties are related. By looking at these relationships and the amount of variation present at the DNA level, we can determine which varieties of perennial ryegrass may be useful in new breeding programs. This variation may be the source for resistance to diseases or tolerance to environmental stresses. For the homeowner, this means more options for controlling diseases and less reliance on chemicals. For you, this means a more competitive stand (one that requires fewer inputs) and an overall superior turf. 

**We'd like to say we buried the competition.
But that would mean putting an extremely
inferior fertilizer in the ground.**

Only par ex with IBDU® has the highest WIN percentage.

We have more than Lebanon® and more than Scotts®. Because the higher the Water Insoluble Nitrogen content, the longer your turf will remain green and the less chance there is for burn.



IMC Vigoro

FROM FERTILE MINDS.

*Lebanon is a trademark of Lebanon Seaboard Corporation. *Scotts is a trademark of O.M. Scotts & Sons Co. ©1996 IMC AgriBusiness Inc. All rights reserved.

Arthur Clesen, Inc.

543 Diens Drive Wheeling, IL 60090 (847) 537-2177 FAX (847) 537-2210





AERATORS INC.

Simply The Best Fountain Aerator For Your Golf Course.

Improve Water Quality And Add Beauty To Your Lakes And Ponds



Fanfare



Weeping Willow



Old Faithful



Water Lily



Circulator

Aqua-Lator® Fountain Aerator From Aerators Inc.

- **Tough stainless steel construction** - the most rugged and durable Fountain Aerator. Other fountain aerators are made with plastics and mild steel or limited stainless steel.
- **Maintenance free pump motor** - unlike other fountain aerators which have oil cooled pump motors that require frequent expensive field service.
- **A variety of spray patterns and horsepower.** Lights optional.
- **Made by Aerators Inc.,** with over three decades of experience in aeration products.

J.W. Turf, Inc.

14N937 U.S. Hwy. 20
Hampshire, IL 60140
Phone: 847-683-4653
Fax: 847-683-3978

Aqua-Lator Fountain Aerator . . . Simply the Best

Aqua-Lator® is a registered trademark of Aerators, Inc. © Copyright 1997

Keep Your Course In Top Condition With **CENTURY RAIN AID**



Sprinklers • Valves • Controllers • Fountains • Pump Stations • Controller Repair

Century golf professionals can show you how to keep your course in top condition with efficient irrigation and drainage, landscape lighting, water features and more. Call today for a free on-site consultation: **800-347-4272**.



Legacy Golf
Control water, labor and energy costs with an efficient Legacy Golf irrigation system. Complete line of rotors, valves and controllers.



Pump Stations
An efficient pump station can solve many irrigation problems. The SyncroFlo Eagle Series is the premier system for golf courses.

SyncroFlo, Inc.



Controller Board Repairs
Century handles controller board repairs for Rain Bird and Toro. Call 888-855-9132 for replacements within 24 hours.

CENTURY RAIN AID

CENTURY GOLF PROFESSIONALS > ILLINOIS/INDIANA • ED KRUSE • CAMERON BLAYNEY ☎ 630-515-8555

Instruction in Greenkeeping Given at State Colleges

Editor's Note: Starting this month and for the next couple months, we will run articles that appeared in early editions of "The Bulletin of the United States Golf Association Green Section." This month's article appeared in Vol. 10, No. 6, June 1930. These articles are from a collection of USGA Green Section Bulletins that Dan Wyatt had in his office at the Rockford C.C.

In this issue of the *Bulletin* are given descriptions of five short courses of instruction in greenkeeping at five state agricultural colleges and experiment stations. In addition to these short courses, at least one agricultural college includes in its regular curriculum for the 4-year college student a special course in which the problems of turf production are given particular attention. This special course is described in the *Bulletin* by Professor Curtis, of Cornell University.

The propagation of good turf for golf courses or other purposes has in recent years been placed on an entirely changed status due first, to higher standards demanded by club members, and second, to the introduction of new machinery and scientific methods which have become necessary in handling the many problems faced by those who care for turf. The United States Golf Association *Green Section* has taken the leadership in the application of scientific principles to turf production, and its success in this field has led to an ever increasing interest in this type of work and to a greater demand for more information. For years there have been many who felt that the *Green Section* should establish

schools where greenkeepers and others interested in turf growing might avail themselves of the opportunity to study by means of lectures and laboratory exercise some of the recent developments

The propagation of good turf for golf courses or other purposes has in recent years been placed on an entirely changed status due first, to higher standards demanded by club members, and second, to the introduction of new machinery and scientific methods which have become necessary in handling the many problems faced by those who care for turf.

(Remember this was written in 1930!)

in turf culture. However, such instruction calls for certain accommodations in the way of lecture rooms and laboratories with suitable equipment. Such facilities have not been available to the *Green Section*, but are readily available in many of the state agri-

cultural colleges were such courses are part of the regular routine work. Those who have applied to the *Green Section* for such instruction have always been directed to get in touch with the courses that are available in the agricultural colleges. When called upon to do so, the *Green Section* has always rendered every possible service to those who have conducted these short courses, and members of its staff will take part in the programs of three of the short courses offered in 1931.

Short courses in a great variety of subjects have been in operation in many of our state colleges for years. Almost every specialized subject of agriculture is taken into consideration in the short courses offered by the various state agricultural colleges. The first short course in which the problems of the greenkeeper were given chief consideration was conducted by the Massachusetts Agricultural College, at Amherst, under the supervision of Professor Dickinson. In the spring of 1929 the New Jersey and Pennsylvania State agricultural colleges gave short courses of instruction primarily for greenkeepers and park superintendents. In 1930 the Wisconsin agricultural experiment station added to its program a short course for greenkeepers. In February, 1931, the Michigan College of Agriculture will be the fifth state college to give such a short course. The large attendance at these several greenkeepers' programs has clearly indicated the interest in such educational features and shows the attitude that the modern greenkeeper takes toward such instruction.

(continued on page 16)



**FULL LINE OF POWER EQUIPMENT,
PARTS, & LANDSCAPE SUPPLIES.**



STIHL®



COME CHECK OUT OUR NEW LOCATION AT:

RUSSO POWER EQUIPMENT

6510 W. Dakin St.

Chicago, IL 60634

Tel: (773) 777-1058 Fax: (773) 777-6406

TAKE CONTROL OF YOUR TURF !



Are grubbing skunks causing thousands of
dollars worth of damage to your course?

Are beavers having a field
day with your freshly planted trees?

On Target Animal Damage Control.

Specializes in the selective control of grubbing
skunks and beaver removal. Our control
methods have proven to be 100% effective in
major golf courses in the Chicago area. Stop
spending thousands of dollars on insecticides
intended to control the grubs.



ON TARGET A.D.C.

P.O. BOX 469 CORTLAND, IL 60112

815-286-3039

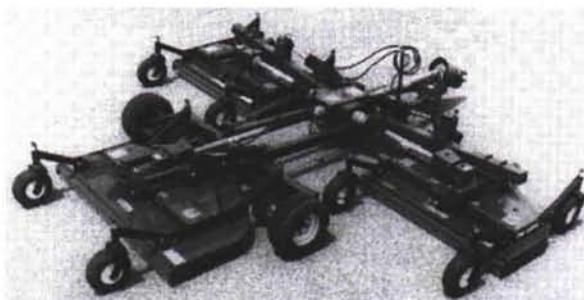
BEST TURF MOWERS FOR A QUALITY CUT.

The Bush Hog TD Series Tri-Deck
Finishing Mowers are available in 15 or
17-foot cutting widths and are ideal for
sod growers, golf courses, land owners,
municipalities and recreational sites.

These mowers are designed for precise
cutting on even or uneven terrain . . .
they feature a 30° up and 10° down
wing flex and are rated for 40 and 45
minimum tractor horsepower. Gearbox
rpm is 540, and deck construction is
rugged, 7-gauge steel. Blade tip speeds
are over 15,500 fpm, to give you finer,
cleaner cutting on each pass.

Wing decks flex side to side and front
to rear, for closer mowing.

Come in today and see why Bush Hog
Tri-Deck Finishing Mowers are clearly
your best choice for quality.



BUSH HOG®

DIVISION OF  ALLIED PRODUCTS CORPORATION

Building the Legend.

Roseman Tractor Equipment Co. Inc
2620 Crawford Avenue
Evanston, IL 60201
847-864-1842 Fax 847-864-1938

The short-course movement, like any movement that involves progress, has had its full share of criticism. There are many who attempt to discredit these courses and condemn them on the grounds that greenkeeping can not be learned in a class room. This truth is fully recognized by even the most enthusiastic supporter of short courses. It must be remembered, however, that although the short course for greenkeepers is relatively new, the short-course principle is now well established as a feature of agricultural college programs. The farmer recognizes very well that he or his son can not learn all about the dairy business, poultry raising, or other agricultural subjects merely by attendance at a short course of instruction. Each year indicates, however, that the farmers recognize the value of such courses as an adjunct to their practical experiences. The need for practical experience and information is certainly as important in farming as it is in greenkeeping, and anyone who understands the American farmer recognizes that this practical side is thoroughly understood. Practical farmers for their part realize that in these days of scientific progress technical information most readily obtainable in college lecture rooms and laboratories can be of great value if placed at the disposal of individuals with enough judgment to put those principles to practical application. The big majority of greenkeepers who attended these courses undoubtedly returned to their clubs better greenkeepers. It is true, there are always students in any college class, whether it be in a short course or an advanced course, who are deprived of the benefit of such instruction, due to the antagonistic and disparaging mental attitude with which they approach the subject. However, the large number of greenkeepers

who have attended these short courses from year to year indicates that those who have entered into

the proper spirit of the short course have recognized that there is something to be gained from it.

*He wrote that
he had in different
years attended the
short courses given
in the state colleges
of Massachusetts,
New Jersey, and
Pennsylvania, and
during 1931 he hoped
to attend a short
course conducted by
another institution.*

The *Green Section* recently received a letter from a greenkeeper who apparently has taken the broad-minded viewpoint of short courses. He wrote that he had in different years attended the short courses given in the state colleges of Massachusetts, New Jersey, and Pennsylvania, and during 1931 he hoped to attend a short course conducted by another institution. It is evident that this greenkeeper recognized fully the advantage of getting as many viewpoints as possible in enabling him to understand more fully the problems that he faced from day to day on his golf course. Green committees that have the right kind of men as greenkeepers can probably do their club not greater service than to encourage their green-

(continued on page 30)



- **Supplier and installer of quality large caliper Shade, Ornamental and Evergreen trees.**
- **Reduced pricing on select stock due to future development plans of our nursery.**
- **Perfect for instant shade, windbreaks, screening and beauty.**
- **Contact us for a tour of the nursery, current availability and/or pricing.**
- **(847) 949-6667
(847) 949-6668 fax**



*Poul's Landscaping
& Nursery, Inc.*

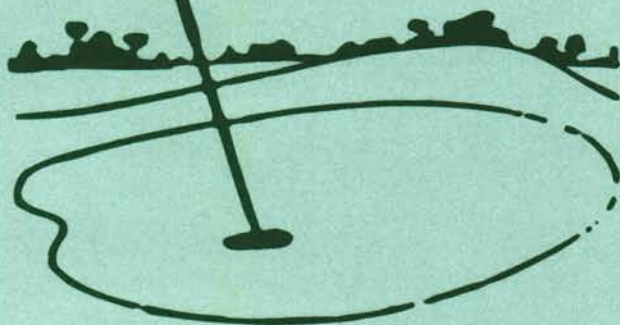
6754 W. Indian Creek Road
Long Grove, Illinois 60047

Burdett's, Inc.

Distributors of:

SOUTHERN GOLF
MASTER of the LINKS
FOX VALLEY SYSTEMS
MARKERS INC.
BAYCO

& Course Maintenance Supplies



P.O. Box 1865 • Lombard, IL 60148-1865
1-630-620-5558 • FAX #1-630-627-1104
IL Toll Free 1-888-TURF-888

CANNON TURF SUPPLY, INC.

1227 Naperville Drive

Romeoville, IL 60446

**WE STOCK A COMPLETE
LINE OF FERTILIZERS,
GRASS SEEDS, AND
PESTICIDES FOR THE
GOLF COURSE INDUSTRY.**

(630) 378-9200 – Office
(630) 378-9292 – Fax
(800) 457-7322 – Toll Free

Cannon Turf Supply, Inc.:

*Where Success is based on
a Commitment to people . . .*



Washed Sod That Fits Your Course To A Tee!

- PENNCROSS™ BENT SOD
- PENNEAGLE™ BENT SOD
- PENNLINKS™ BENT SOD
- XL-100 BLEND SOD™

Available as H & E Hydro-cut™ Washed Sod
or traditionally cut sod with soil.

"Single Source Convenience"

H&E SOD
nursery, inc. 

GENERAL OFFICES:
3900 West 167th Street
Markham, IL 60426
Fax: 708-596-2481
Phone: 708-596-7200

Blows the competition away!



Air Compressors



- Rent by the day, week, month
- 100 - 150 PSI, 100 CFM - 1600 CFM
- CAT® diesel engine powered

1-800-RENT-121

Patten
POWER SYSTEMS



615 W. Lake Street • Elmhurst, IL 60126

Commercial Representative Report

John C. Meyer
Turf Partners, Inc.

7wo years ago, I was asked by Don Cross to chair the Commercial Members' Advisory Committee. That seems like yesterday. We all get so busy in our professional and personal lives that the months and years just seem to fly on by. I will be stepping down this fall as chairman and allow one of my fellow commercial members to continue on in my footsteps.


I envisioned a couple of things when I came to the committee. First and foremost, I hoped to establish an Annual Vendor's Day Golf Outing to raise money for research or a charitable

organization or to establish a scholarship fund with the day's proceeds. Year One, we accomplished that. We raised over \$5,000 for the research green at Cantigny.

Year Two, the interest level dropped off so dramatically that it was not going to be worth the effort it took to put it on. I challenge the next chairman to get the ball moving again and reestablish the Annual Vendor's Day. I pledge my support and will do everything I am able to help.

Second, the committee and I had hoped to get board voting rights at the Board of Directors meeting. We were not seeking general voting rights but just a

say-so at the board meetings. This had been brought before the board as an idea but has not been acted on. Board voting rights will require a change in the bylaws. I support this idea and challenge the new chairman to accomplish this mission.

I have enjoyed my tenure on the board. I have a better insight now as to the direction of our association. I have real appreciation for each and everyone of the Board of Directors. The time and effort that each one of them volunteer each and every month is innumerable. Hats off to them all for a job well done. 

CLEAN UP SPILLS WITH ENVIRONMENTALLY SAFE SPILLAWAY+BRANDS™



Microbial Technology,
a better way for golf courses
to clean equipment,
turf and water spills,
parking lots, carts, (even golf balls).

*"I highly recommend SpillAway+Products to my
fellow superintendents". Ed Braunsky, Geneva Golf Club.*

Palatine Oil Co., Inc. ■ P.O. Box 985 ■ Palatine, IL 60078

1-888-358-POC1 ■ FAX 847-358-5904

"One Call Does it All"



FULL SERVICE GROUND WATER SPECIALISTS



Meadow Equipment Sales & Service, Inc.

Well Drilling Contractors / Pump Service
27 W. 021 St. Charles Road
Carol Stream, IL 60188

- Water Well Drilling
- Pump Sales and Service
- Water Well Sealing & Capping
- Complete Waterwell Systems
- Large Selection of Pumps
Line Shaft / Submersible
- Well Rehab & Chlorinations
- Maintenance Programs
- 24 Hour Emergency Service



**Authorized Sales and Service for
Leading Pump Manufacturers**

WHEATON: (630) 231-6250
ST. CHARLES: (630) 584-6210
TOLL FREE: (800) 704-2415

*"Where Meadow Goes,
the Water Flows"*

Introducing Landpride Multi Injection Systems



The Only Unit On The Market
To Inject Dry Or Liquids
To The Root Of The Problem.
And Introducing The Star Of
The 1998 Masters - **SubAir**
Control The Root Zone
Through Science



Give Your Roots Some Air
With SubAir Precision
Injection Of Dry Or Liquid
Amendments With LandPride
Exclusively Distributed
By: Lewis Equipment
55 E. Palatine Rd.
Prospect Heights IL 60070
(847) 537-6110 fax: (847) 537-5736
Represented By: John Berarducci
Call The Bear: (847) 367-7728
mobile: (847) 347-5105

The Fungus Among Us

Rex Bastian, PhD.
Hendricksen the Care of Trees

We usually relate the words "fungus" or "fungi" with a negative connotation. With trees, fungi are associated with plant diseases such as scab, rust and anthraenose. However, many of us do not realize that some types of fungi are very important for proper tree health and development. In fact, many species of trees may not develop at all, or may even die if these fungi are not present.

The name given to these special fungi is mycorrhizae. Mycorrhizal fungi are found in the soil and form associations with tree roots. The derivation of the term is from the Latin words "myco" and rhzi," meaning fungus and root, respectively.



There are many different types of mycorrhizae. They can be found either inside or outside tree roots, or both. The fungus and the tree root form an intimate

association with each other. The result is a true symbiotic, or mutually beneficial, relationship.

The mycorrhizal association creates a thicker, more fibrous, farther reaching root system. The fungi provide an improvement in water and nutrient absorption, especially phosphorus. Phosphorus is difficult for trees to extract from the soil. The fungi help absorb the phosphorus and pass it on to the tree roots. In return, and tree provides its root system as a place for the fungi to grow and supplies 15% to 20% of the energy it produces to support the fungi.

Most of these beneficial organisms are found in our urban soils. Research has shown that the addition of mycorrhizal spores during fertilization procedures

(continued on page 24)

CONSERV FS

INTRODUCES.....

LEGEND

PROFESSIONAL TURF GRASS SEED

**Use CONSERV FS LEGEND
Professional Turf Grass Seed for
your fairways, roughs, tees and
greens.**

Call one of our Certified Turf Specialists today...

TINLEY PARK	WAUCONDA	KANSASVILLE, WI
6730 South Street	27310 W. Case	4304 S. Beaumont
(708)532-4723	(847)526-0007	(414)878-2048

PRECISION BLENDED TOP DRESSING

Custom blended to your specifications
by our modern equipment.

*Buy when you need —
Eliminate costly storage*

We sell an air-dried, uniform and
free flowing top dressing.

ASK THE MAN WHO HAS USED IT.

HENRY FRENZER

Area Code 847
658-5303

620 Webster St.
Algonquin, IL
60102