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

1988 Board of Directors

President	Mike Nass (Jean) Cantigny Links	Home: 462-1547 Office: 668-3730
Vice-Pres.	Dave Meyer (Penny) Indian Lakes C.C.	Home: 820-1040 Office: 529-0200
2nd Vice Pres.	Bruce Williams (Roxane) Bob O'Link G.C.	Home: 680-1074 Office: 432-0088
Sect'yTreas.	Roger Stewart (Sue) Riverside G.C.	Home: 961-2803 Office: 447-1049
Exec. Sec.	Penny Meyer (Dave) Office: 820-8181 MAGCS (Mailing Address) P. O. Box 248, Eola, IL 60519	
Board	Alan Fierst Oak Park C.C.	Home: 456-7815 Office: 453-7525
	David E. Louttit Innsbrook C.C.	Home: 219-663-3830 Office: 219-980-3107
	Joel Purpur (Debbie) River Forest C.C.	Home: 953-8410 Office: 941-1651

Ray Schmitz (Jan) Home: 815-469-2773 Flossmoor C.C. Office: 798-2498 Dennis Wilson (Pat) Home: 441-8387 Sunset Ridge C.C. Office: 446-5222 Pres. Emeritus Jim Evans (Debby) Home: 815-455-3994

Office: 815-459-8570

Official Photographer Raymond Schmitz

Dr. Randy T. Kane, Turfgrass Advisor (312) 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 1022 Shady Lane Glen Ellyn, IL 60137 Phone (312) 469-3444

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 570 issues per month.



President's Message

Hopefully by this time, with the cooperation of Mother Nature, everyone will be well on their way to having their courses in top condition. Naturally the condition of the course is the main criteria used to judge the performance of a superintendent. There are, however, other more subtle ways by which our performances are evaluated.

The importance of personal dress and grooming has often been mentioned as a way to improve image, but what about the appearance of the crew you have hired. If torn blue jeans and sleeveless t-shirts are the norm maybe you could benefit from providing uniforms for the entire crew. Besides the professional image your crew will have with the golfers, it is probable they will have a higher sense of self esteem and this in turn could increase productivity. Here you have two pluses with relative little effort or expense.

Another area that is often overlooked is the one around our own maintenance shops. Even though a visit at your shop from a club member may be rare, the first thing they see should not be an equipment graveyard and a disorganized shop. You may have the best manicured course in the world, but if your own base of operations is not, at the very minimum, neat and orderly, the impression it creates could carry over to the course.

A third area that might use some improvement is your relationship with other members of the club's staff. Of course most importantly the pro and the club manager. It doesn't mean you have to be best friends, it just means getting along on a professional basis. In effort to help in this direction, the MAGCS and the Illinois PGA are jointly planning a Superintendent-Pro golf tournament. It is going to be held at Turnberry Country Club, June 2, and with mutual cooperation it should be a worthwhile event. Full details will be forthcoming.

Lastly polish up those clubs and get down to Dudley's this month for the annual joint meeting with the Central and Northwest Association. Remember this is held for the benefit of the Illinois Turfgrass Foundation. See you all there.

Mike Nass

Director's Column



What's New in I.P.M.

by Ray Schmitz, CGCS Flossmoor C.C.

After recently attending an Intergrated Pest Management fact gathering forum I am able to provide an I.P.M. update and offer some of my personal views as well. What brought my attention to the popularity of I.P.M. was the landscapers discussing bids on jobs where prospective customers requested I.P.M. procedures. We as golf course superintendents must also become familiar with I.P.M. practices and procedures.

What is Integrated Pest Management? It is a system, or process in selecting and using pest control alternatives that will keep pests below a damaging level while avoiding adverse affects to humans, animals, and the environment. Chemical suppression treatments are made when monitoring has indicated that the level of damage will be unacceptable asthetically, and economically.

Actions to be taken by the property manager are as follows -

- 1. Identification and knowledge of the pest and controls.
- 2. Monitor levels of pests and keep records of activity.
- 3. Determine acceptable injury level.
- Determine action to be taken keeping in mind pests response to variables such as weather.
- Treatments are made which are least hazardous to man and the environment.
- Evaluate I.P.M. approach and make adjustments as new methods for control become available.

The more familiar I become with I.P.M. the more I realize that golf course superintendents have been using some of its procedures for years. Some examples are — light weight mowing to reduce Poa Annua. Spot spraying trouble areas instead of the fence to fence approach. Judicious use of water. Use of more disease resistant trees and grasses. Concern for employee safety during chemical applications. Generally we use all factors possible to promote vigorous plants which can ward off attacks of insects, fungi, and weed invasion.

One example of I.P.M. at work is in the area of soybean production. A soybean plant resistant to Roundup (glyphosate) is being developed. To control weeds the entire field is sprayed with Roundup and all vegetation is killed except the resistant soybean crop. The positive action taken is that the Roundup is less hazardous to the groundwater and the food chain than other herbicides presently available.

I.P.M. is not a cure all but a positive step which requires monitoring, record keeping, and evaluation. Also it is important to pass on useful information to our peers. If we take positive steps in chemical safety perhaps the government will not step in and force us to use what we already have and need to survive with in this business; and that is good common sense.

1987 Review and 1988 Preview of Turf Insects and Control

Roscoe Randell, Entomologist University of Illinois

1987 Situation

The pest growing season was unique in that the above average temperatures accumulated heat units until insect development in July and August was about 19 to 20 days ahead of a normal schedule. Ataenius grubs, if a problem, hatched in late May and damage appeared by mid June. Black cutworms on the other hand were delayed as the adult moths didn't fly into Illinois in April but did arrive later to lay eggs in bentgrass turf. There has been a light to moderate population of Japanese beetles infecting turf as grubs from Lake Bluff on the north boundary proceeding downward along the earth side of the state to Paris. The heaviest populations have been Iroquois County around Sheldon and Watseka. In 1987, the numbers of adults greatly increased and tree defoliation occurred. Eggs were laid in July and grub damage appeared in August.

Annual white grub beetles emerged in late May to lay eggs in late June and grub damage was apparent in August. High populations of grubs — 40 to 50 per square foot — were not uncommon. These grubs fed on bluegrass roots from August until early November. Skunks and raccoons further added to the damage by turning over grub infested sod to feed on the grubs.

Control Results

Effective control of black cutworms was achieved by sprays containing either Dursban, Proxol, or Dylox. Repeated generations every five weeks required additional treatments. Grub control was much more complicated. Insecticides applied for control of ataenius grubs, Japanese beetle larvae, and annual white grubs included Oftanol, diazinon, Turcam, Proxol, Dylox, Mocap, and Sevin.

Since 1983 when Oftanol received a state label for use on turf insects, this insecticide performed well as a soil insecticide to control grubs. Less than normal control occurred in 1986 and again during 1987 on some golf courses. In other instances control was similar to results of 1983 through 1985. Diazinon was labeled at a 20 percent reduction in 1987 compared to previous years. The new rate reduced control results in some instances or lengthened the time period between application and acceptable control. Turcam, Proxol, Dylox performed if the applied spray was not allowed to dry on the grass foliage. Granular Dylox and Turcam was applied with good results. Mocap granules were used for grub control on some courses. Sevin as a spray was applied for grub control in some locations.

In grub control trials applied in small replicated plots Oftanol controlled grubs in some instances and not in others. Diazinon and Oftanol required three weeks after application for satisfactory control. Proxol and Dylox required less time for grub control. Turcam and Mocap were intermediate in time required for control results. Sevin is not a new product by the LS formulation is relatively new and is being promoted for grub control. Plots results were variable at the eight pounds active ingredient per acre.

Preview of 1988

First, there will be no new insecticides for use on golf courses

(continued on page 4)





Fertilizers • Control Products • Grass Seed Spreaders • Pendulum Spreaders • Sprayers Greensmowers • Gang Mowers • Aerators Replacement Parts • Safety Products • Golf Course Accessories • Lawn Service Brochures

(800) 321-5325 NATIONWIDE (800) 362-7413 IN OHIO



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

Turf Insects & Control cont'd.)

for the coming season. If the insect control program you now are following is working, follow it in 1988. Chances are good that the season of insect activity will return to normal — ataenius adults laying eggs in late May, grub damage appearing in late June or early July; Japanese beetles feeding on tree foliage in July, grub damage in September; annual white grub adults laying eggs in mid July, and grub damage beginning about Labor Day. There will be experimental insecticides for use on surface feeding insects, but not much promise for new soil insecticides. There is much interest in grub control in the future with the use of applied parasitic nematodes. Dr. Michael Klein, Research Entomologist at the Japanese beetle Laboratory, Wooster, Ohio, has been conducting research in this area with good results. Yes, there are bad nematodes and good nematodes! More nematode information will appear later.

Finally, the various adult Japanese beetle traps with the food and sex attractant lures are effective in reducing both sexes of the beetles. One suggestion is to attach a larger plastic bag under the trap to collect the beetles.



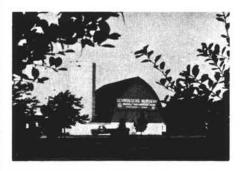
Pictured above from left to right are:

Richard S. Mattioda, V.P., Leopardo Construction, Inc.; Ronald H. Jones, President, Chicago Turf & Irrigation, Inc.; Debbie Armstrong, Commercial Loan Officer, NBD Elk Grove Bank; James A. Leopardo, President, Leopardo Construction, Inc.; Mary P. Jones, Chief Financial Officer, Chicago Turf & Irrigation, Inc.

Champagne toasts highlighted Chicago Turf & Irrigation's recent ground breaking celebration. The new 34,000 sq. ft. facility will be located on the corner of Rohlwing and Ardmore Roads in Itasca. Construction has begun and completion is expected this fall. Leopardo Construction, Inc., Glendale Hts., IL, is the general contractor and Richard Borvansky, Inc., Riverside, IL, is the architect.

According to CTI's president, Ron Jones, this project has been in the planning stages for the past year. Ron expressed his excitement about the move by stating that CTI can now serve the demands of its industry even better through this custom designed facility conveniently located less than one mile from the Thorndale Rt. 53/I-290 exit and future Rt. 53 extension. Serving the entire Northern Illinois area and part of Indiana. CTI distributes commercial mowing equipment and turf irrigation products, TORO being its primary supplier. CTI also represents approximately 40 other allied brands.

Schroeder's Nursery, Inc.



TREES

SHRUBS

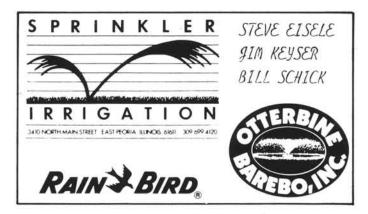
EVERGREENS

RICHARD A. SCHROEDER DON VIRGENS CARL DRAVIS

Specializing in Large Caliper Trees We offer complete installation

TELEPHONE: 312 - 546-9444

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





LAWN CARE

Weed, Insect, Disease Control; Fertilizing, Core-airifying, Slit Seeding TREE CARE

Tree Spraying, Feeding, Surgery, Trimming, Removal

HYDROSEEDING PRAIRIE SEEDING

3524 LONG GROVE ROAD LONG GROVE, ILLINOIS 60047 (312)438-5161

PAR EX PROFESSIONAL PRODUCTS® with IBDU®...with IBDU/SCU®... with ADDITIVES.



RONSTAR® is a registered trademark of RHONE-POULENC, INC. DURSBAN® is a registered trademark of DOW CHEMICAL, USA

PROFESSIONAL PRODUCTS for PROFESSIONAL TURFGRASS MANAGERS.

We formulate our products to satisfy the regional nutritional requirements of *your* turf. Many of these mixes contain our exclusive nitrogen source, IBDU,* or our exclusive mixture IBDU/SCU. We are now offering the best additives in our mixes: Ronstar,* Dacthal,* Balan,* Dursban,* Oftanol,* and others. Check with your local Par Ex
Territory Manager or Par Ex Distributor.

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

Turf Products Ltd.

West Chicago, IL 312/668-5537

DACTHAL® is a registered trademark of S.D.S. BIOTECH *OFTANOL is a registered trademark of the Parent Company of Farben Fabriken-Bayer, GmbH. Leberkosen

Golf Course Management Course

American College of Technology; 102 N. Center; Bloomington, IL 61701, is adding to their program offerings a new course called Golf Course Management. To the best of our knowledge, the same structure, curriculum, and content is not available anywhere else in the country.

The goal is to provide an entry level management trainee that is versed on many of the skills necessary to manage a golf course; the graduate will have both theory knowledge and hands on training experience.

GCM, which will begin its first session in September of 1988, is 1080 clock hours and will be approximately 50% classroom theory and 50% hands on training, with a class schedule of 41/2 hours per day at 5 days per week (12 months training period).

One quarter will be dedicated to turf grass science, including preparation for and taking the chemical applicators test. One quarter will be pro shop procedures, including everything from marketing, computer accounting, bag storage, to golf club repair. The other two quarters will be a combination of small engine repair, equipment maintenance, building a golf course, sharpening and rebuilding mowers, golf car repair, irrigation systems, and as much time on the course as possible.

Although American College of Technology has run a concentrated, condensed version of the same course for three years with 100% placement, this will be the first one year long program.

Graduates will receive a diploma upon successful completion of the complete program, and may be eligible to earn credit towards a Lincoln College Associate Degree.

ACT's goal is to supply the golf industry with as well trained entry level management trainee as can be anticipated given the time allowed. In performing this service, we welcome any imput or suggestions you may provide.

For additional information, please contact Fred Clark at American College of Technology.

Guidebook — "Experiencing Golf in Scotland", 400-plus course descriptions, colored maps, photos, indexed, personal autograph travelogue: \$7.95. Send check to: Jerry Mosca, P. O. Box 3371, Mankato, MN 56001.

In Water Soluble Bags

- SAFE
- CONVENIENT
- **ECONOMICAL**





1049 Somerset Street, P.O. Box 10 Somerset, NJ 08873 (201) 247-8000

Toll Free Numbers:

1-800-524-1662 (East of Mississippi)

1-800-524-1663 (West of Mississippi)

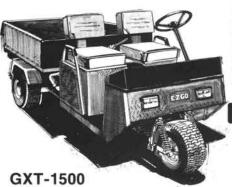


(608) 836-7041

LEE BRUCE GOLF COURSE CONSTRUCTION

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

HOW TO HANDLE THE TOUGHEST TURF ON EARTH



For every job you've got, there's an E-Z-GO designed specifically to handle it - quietly, efficiently and with the least amount of labor. With carrying capacities up to 1500 pounds, a complete range of trailers, and adaptibility to almost any accessory, they're a team of superbly versatile workers.

Z-GO Chicagoland P.O. Box 548 24404 N. Highway 12 Lake Zurich, IL 60047

Call Bruce Johnson or David Davis at 312-438-5511.





KING OF THE LOADERS



New Holland "Super Boom" loaders have many features that set it apart from the competition, including:

- * Long dump reach. Loader lifts the payload forward as the boom
- * Long wheelbase. Provides excellent stability.

MARTIN IMPLEMENT SALES, INC.

16400 SOUTH 104th AVENUE ORLAND PARK, IL 60462 PHONE: 349-8430



INTRODUCING the **BROUWER** GREENSMOWER



- . RELIABILITY
- . SERVICE

THE NEW BROUWER GREENS-, built to meet the challenge of the modern golf course. For a superb "tournament finish" on your greens trust the Brouwer Greensmower to deliver, cut after cut. Compare it to the competition and see that feature after feature it comes out ahead.

Features like: special har-dened alloy steel bedknife and cast iron holder; bearing mounted gears in the traction and reel drives; gear engage from main drive on the reel clutch; 1/8 in. to 1-3/16 in. setting for height of cut; self pre-load taper roller bearings; transport sulky and many more.

A combination of built-in quality engineering features that no other greensmower can match and that guarantees your greens will be the envy of others who choose to miss the "finest cut" — CUT THE BROUWER WAY.



Manhattan-Monee Road 815-469-5898

Irrigation Engineering Co.

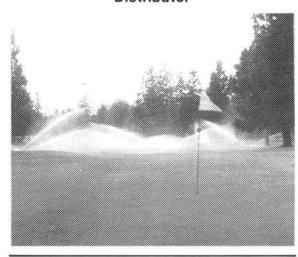
... SOUND ENGINEERING and QUALITY MATERIALS

Your Exclusive

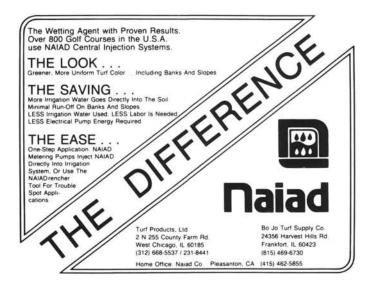




Distributor



2612 S. 9TH AVE. • BROADVIEW, IL 60153 (312) 450-1400



PEERLESS FENCE CO.

3N381 Powis Rd. West Chicago, IL

Chain-Link Fencing

Driving Range Fencing

Wood Fencing

•Tee Protection Fencing

•Wood & Steel Guard-Rails

•Golf Course Work Our Special 312/584-7710

Hal Laman

"Golf Course Work a Specialty"

LEMONT PAVING CO.

Lemont, IL 60439

Jim, Tracy, Ray Murphy

257-6701

WHOLESALE SUPPLIER for



Landscapers ● Nurserymen ● Golf Courses

- Turf and Agricultural Chemicals
- Common and Elite Turf Grass Seed
- Union Fork Tools
- Peat Moss Bark Mulches
- · Root Lowell Sprayers
- · Shaws and F.S. Fertilizers

CUSTOM BLENDING OF BULK FERTILIZERS OUR SPECIALTY

Pickup or Delivered from our Bulk Fertilizer Plant Custom Fertilizer Spreading Available

DISTRIBUTORS OF F.S. PETROLEUM PRODUCTS

GASOLINE • LUBE OIL • DIESEL FUEL



LAKE COOK FARM SUPPLY

PETROLEUM DIVISION 101 E. MAIN ST. LAKE ZURICH, IL 60047 540-0100 TURF DIVISION 1214W NORTHWEST HWY. PALATINE, IL 60067 991-4800 BULK FERTILIZER PLANT 170 CEDAR AVE. LAKE VILLA, IL 60046 356-9600 United States Golf Association® Green Section Great Lakes Region



Anticipation — 1988

by James M. Latham, Director Great Lakes Region, USGA Green Section

After the many difficulties experienced in 1987, an air of optimism seems to pervade the golf turf management groups throughout the Great Lakes Region. After all, how could things get worse? The growing season is already shorter than last year. The folks out west had another dry winter, so there may be more water woes and winter injury again this year. Elsewhere, superintendents say the winter was so-so, which indicates that few problems are anticipated this spring. We can, however, expect a pretty weedy year unless good, dense turf coverage can be developed before warming sunlight reaches the soil and triggers seed germination — especially crabgrass and goosegrass.

The USGA/GCSAA Research project is beginning to produce results. Superintendents were helped last summer by some of the stress management techniques. Others are making good use of the management studies in successful programs of **Poa annua** suppression in bentgrass fairways. Still others have made use of the Turf Grass Information File in writing reports and in project proposals. New grass varieties are approaching the production pipeline which will benefit golf turf in southern and western areas. Up here, we hope to see limited field evaluation of **Poa annuas** this summer. The status of the projects will be described in the next issue of the **Green Section Record**.

The issue will include all presentations made at the Green Section's educational session during that fantastic GCSAA International Conference and Show in Houston. Of particular interest to every superintendent (except perhaps Ed Fischer and Bruce Williams) is the discussion on women's golf by Judy Bell, the first lady to serve on the USGA Executive Committee. It is must reading, particularly at this time of the year. Her comments on yardage could be valuable references in certain instances, such as siting new forward or Red Course tees.

The Green Section Specifications for Green Construction is in the process of an updating rewrite. The good printer willing, it **should** be available for distribution by June 1, 1988. There are no major changes, because the basic principles of soil physics involved in this construction method do not change. This updating is to tighten some of the specifications on components and procedures and to clarify some ambiguities found in previous editions.

Other Recommended Reading: Four publications from the Council for Agricultural Science and Technology published in 1987.

1. Reprint from January issue Science of Food and Agriculture — How Risky are Pesticides?

(cont'd. on page 10)

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.

HUMUS — BLACK SOIL

HENRY FRENZER

Area Code 312 658-5303 620 Webster St. Algonquin, IL 60102

BIGTREES

Serving northern Illinois



Please, call us today! Whatever your tree needs . to buy, relocate, or transplant . . .

312/481-5224

Member of: ILCA, ISNA

From the first tee to the 18th green, nothing controls turf diseases like Chipco® 29019.







P. O. Box 12014, 2 T. W. Alexander Drive Research Triangle Park, NC 27709 919/549-2000 (Anticipation - 1988 cont'd.)

- Comments from CAST, 1987 (1)-May. Health Issues Related to Chemicals in the Environment: A Scientific Perspective.
- 3. Comments from CAST, 1987 (2)-May. Pesticides, Cancer and the Delaney Clause.
- 4. Comments from CAST, 1987 (3)-December. Perspectives on the Safety of 2,4-D.

These papers were written by eminent scientists in the fields of agriculture, medicine, environmental toxicology and statistics at major universities, in industry, the USDA, etc. They deal with the **facts** of pesticide usage in an objective, scientific and readable manner. It is the kind of information needed when (not if) we are asked about pesticide safety. For more information write CAST, 137 Lynn Avenue, Ames, Iowa 50010-7120. This organization, incidentally, accepts individual members. Their publications are worth the \$25 fee.

I was stunned last summer when a graduate of two Major universities featuring turfgrass science told me he had never seen the classic time-lapse movie Water Movement In Soils. It dates from 1959, but the principles of soil physics do not change. There has never been a better illustration of what happens to water in a layered soil, why rolling helps seed germination, how salts accumulate and which aeration holes work while others do not. It's only a 25 minute movie, so I cannot believe that any straight lecture can be so enlightening. If anyone who was similarly deprived would like to see the new turf-oriented version, give me a call. We can arrange for either a 16 mm movie or a VHS tape.

About this time of the year when everything is just about ready and the turf conference information and conversations are not yet filed, it gets to be Ponder Time. That's when we try to get oriented and just ponder about something that is unlikely to happen, but ...

All the Joneses are getting bentgrass fairways for a variety of reasons, but basically because good golfers play best from tight fairway lies. (The last US Open played on bluegrass was in 1950 at Cherry Hills in Denver). We are learning that good bentgrass fairways don't come free for nothing — lightweight mowing, intensive aeration, some vertical mowing, well-balanced irrigation and better than average drainage.

Now this is the ponderable: What kind of playing quality could be developed for the vast horde of non-championship-calibre golfers if we voluntarily put that much effort and care into some of those new, high powered Kentucky bluegrass cultivars? One of the greater Chicago area superintendents came close to this on a test fairway last year and produced very good turf. He is nameless because that really wasn't the intent of the test.

But it shore is a ponderable.

Dr. Randy Kane reports that the EPA is cancelling Diazinon for use on golf courses and sod farms. More information will be forthcoming.

SAVING YOU THE GREEN



PestCaster Disease Forecasting and Weather Monitoring System

PestCaster. Neogen's new disease forecasting instrument, is going to save you the green! On the course and in the bank!

With PestCaster you can actually **anticipate** the onset of Pythium Blight. Seedhead Formation and Anthracnose. Then you can make a preventive spray **before** those costly, unsightly symptoms blemish your green—and your image.

PestCaster provides the following information at the touch of a

- · Hourly Weather Data
- Current Pythium/Seedhead/Anthracnose Risk
- · Spray Recommendations
- Data to Determine Irrigation Needs and Monitor Turf Stress For more information contact your local distributor or Neogen Food Tech.

Send me FREE information on how PestCaster can save me the green!

NAME

GOLF COURSE

STREET ADDRESS

CITY. STATE

PHONE ()

NEOGEN FOOD TECH 620 Lesher Place Lansing, Michigan 48912 • 517/372-9200

PestCaster is distributed in the Chicago area by

Turf Products 2N255 County Farm Rd. West Chicago, IL 60185 (312) 668-5537