Penneagle crowds out bluegrasses on Butler National's fairways



Triplex fairway mowing at The Butler National Golf Club, Oak Brook, IL

When Oscar Miles, CGCS, of The Butler National Golf Club, introduced Penneagle creeping bentgrass into his Poa annua infested A-20 bluegrass fairways in 1980, he took a dynamic step toward the beautiful fairways praised by the pros during the Western Open.

Utilizing a prescribed program of aggressive, deep core aerification, drop seeding and verticutting, Penneagle was expected to *aggressively compete* with the bluegrasses. With triplex mowing and clipping removal, the unwanted grasses are yielding to Penneagle. Oscar feels that his fairways are now 70-90% Penneagle.

With Butler National's reputation at stake, Oscar Miles couldn't chance anything less than Penneagle for his "immaculate" fairways.

Warren Bidwell is available to talk to your superintendents' group about Butler National Golf Course and the "Penn Pals," Penncross, Penneagle and Pennway Blend, on your golf course. Call or write TEE-2-GREEN Corp. for details. Penneagle blue tags earn cash or prizes.



Penneagle's Oregon certified blue tags qualify for cash awards to qualifying turf organizations for turf research. Call our toll-free number for details. Marketed by TEE-2-GREEN Corp., PO Box 250 Hubbard, OR 97032 1-800-547-0255 TWX 510-590-0957

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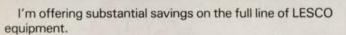
- To building uncompromised dependability into every Berkeley pump.
- To placing our customers first in everything we do—from fast delivery to top-notch service.

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The program is simple. The earlier you order, the more you save. Take delivery at our option and don't pay until April 1, 1988. Or pay early and save more.

That's not all. Pick up your equipment at our Sebring, Florida facility and I'll deduct another 5%.

Use the chart to determine your savings based on the month you order and the month you pay.

Sebring Pickup Allowance	PI	Early Payment Discount		Early Order Discount	Month
5%	5	6%	1 35	10%	September
5%	5	5%		8%	October
5%	5	4%		6%	November
5%	5	3%		4%	December
5%	5	2%		2%	January
5%	5	1%		1%	February
59 59	5 5 5 5	4% 3% 2%		6% 4% 2%	November December January February

For example ...

LESCO 500 Fairway Mower. Order in September. Pay in September. Pickup in Sebring.

Due Net by October 1, 1987
5% Sebring Pickup
6% September Early-Payment
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10% September Early-Order
Price of Mower

Note: Examples reflect total discounts of 20.4%. Sales tax not shown.

The LESCO Equipment Early-Order Program ends February 29, 1988.



LESCO 300 Greensmower. Order in September. Pay in September. Pickup in Sebring.

\$	8,400.00	Price of Mower
	840.00	10% September Early-Order
\$	7,560.00	
	453.60	6% September Early-Payment
\$	7,106.40	
_	420.00	5% Sebring Pickup
\$	6,686.40	Due Net by October 1, 1987

Remember, this program applies to all LESCO equipment. These are just two examples of how you can save.

I can offer these discounts because it's to our advantage to manufacture and ship year round. And because LESCO sells direct, we have no dealers or distributors to supply. That means we do our own warehousing and carry our own inventory.

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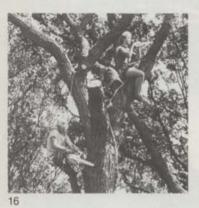
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Formerly WEEDS TREES & TURF



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12 CALCULATING COSTS

Is it better to buy a small mower at a cheaper price or an expensive large mower which will finish the job quicker? This article shows you how to calculate your costs.

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At Ohio University, the oldest institution of higher learning in the Northwest Territory, elderly trees help create a beautiful campus.

16 FROM A TO Z

The campus at the University of Minnesota-Waseca is a horticultural smorgasbord. Students design and maintain most of the campus, learning the ins and outs of landscape management along the way.

26 FALL MARKETING

Some companies have had great success marketing services in the fall. Before you start up such a program, here are some tips to follow from business consultants Rudd McGary and Ed Wandtke.

34 COVER STORY: 1988 BUYER'S GUIDE

As you begin to get ready to purchase equipment, chemicals and seed for the 1988 season, you'll want to refer to the annual LANDSCAPE MANAGEMENT Buyer's Guide, 32 pages with jam-packed information.

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Cover illustration by Joel Rogers

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NEWS/TRENDS by the Editorial Staff

Good news, bad news

Do you want the good news first or last? Okay, first the good news.

Because home mortgage rates are more than 10 percent, more homeowners are spending money to fix up their existing homes and residential landscaping is a big part of that. But "gardening" is not an "in" hobby as much any more, says Lawrence Chimerine, Ph.D., who has worked for the Department of Commerce and Bureau of Labor Statistics. "There has been a trend to use outside lawn services, and that trend seems to remain in place.'

Chimerine, chairman and chief executive officer of Wharton Econometrics (formerly Chase Econometrics), made his observation at July's Outdoor Power Equipment Expo in Louisville, Ky. Now the bad news, via Chimerine's other predictions:

• This has been the most uneven period of economic performance, at least back to the 1930s. And a number of sectors haven't recovered from the recent recession at all. "We may continue to muddle along for the next six or seven years," he says.

The recent surge in consumer spending and housing activity are both being reversed. "The consumer is already drowning in debt," Chimerine says. "The forward momentum is just about over, and I think you have to look at your industry now."

• There will be income tax changes. "Maybe not until we get another President," he observes. "Many (of the next new laws) could impact on the upper income groups" who are purchasers of lawn and landscape services.

Yuppie power and horticulture

Growth in the horticulture service industry has been increasing steadily over the past few years for a number of reasons, but one horticulture professor thinks it has something to do with yuppies.

"It is part of the yuppie image, having a beautiful garden along with an expensive car and a swimming pool," says David J. Beattie, Ph.D., professor of horticulture at Penn State University.

He adds, "Europeans have been ahead of us in wanting beautiful gardens." He notes that American society is picking up on this.

Job opportunities are up while candidates for those jobs are down. Penn State has about 125 undergraduate students in horticulture compared with 400 in 1983. Beattie attributes this decline to students, desire for green other than plants.

Bruno C. Moser, Ph.D., Purdue University concurs. "I think the association in students' minds with agriculture and the poor farm economy is a reason because most horticulture classes are in schools of agriculture."

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GREEN INDUSTRY NEWS

PESTICIDES

ChemLawn employees will be scrutinized

Health records of ChemLawn employees who handled pesticides from 1969 to 1980 are being studied to identify possible risks from 2,4-D exposure. ChemLawn sanctioned the study after the National Cancer Institute released a report last year suggesting a link between the herbicide and lymphatic cancer in farmers.

The NCI is conducting the study, which will include an estimated 5,000 ChemLawn employees and former employees who handled pesticides. It is the first such examination of lawn care employees' health records.

"We fully expect to find there is no problem with 2,4-D," says ChemLawn's Steve Hardymon. "This was at our request after their (NCI's) original study came out. We've got much better information than they've got on the Kansas farmers."

The NCI study on Kansas farmers concluded that long-term exposure to herbicides, particularly 2,4-D, increased the risk of non-Hodgkins lymphoma. ChemLawn immediately suspended its use of 2,4-D.

(The NCI's conclusions were disputed by three of four epidemiologists hired by the U.S. Environmental Protection Agency.)

NCI researchers hope to find out if mortality rates of ChemLawn employ-

ees are higher than for people who do not handle pesticides. If they are, researchers will examine what products the employees worked with and what other activities they were involved in.

Sheila Hoar Zahm, Ph.D., of the NCI's occupational studies section, is in charge of the study. She says it will take about a year to examine the histories of present employees who were with ChemLawn from 1969 to 1980 and another year to examine the histories of those who have left the company.

A full report will probably be released in two years, Zahm said.

PRODUCTS

Fungicide label OK'd

The Environmental Protection Agency has given label approval to Banner fungicide, manufactured by Ciba-Geigy. The product is registered to control a number of diseases on cool-season grasses only. The two main diseases it controls are dollar spot and brown patch.

"We've been expecting EPA approval on Banner for a couple of years," notes Houston Couch, Ph.D., a plant pathologist at Virginia Polytechnic Institute and State University.

Banner is a broad spectrum, systemic fungicide which is concentrated enough to have recommended application rates of 1-2 oz. per 1,000 sq. ft.

According to the company, 1 oz. per 1,000 sq. ft. will control dollar spot for two to four weeks; 2 oz. controls brown patch for two to three weeks.

Banner has entered market distribution and is available from Ciba-Geigy. "We're confident that the product will perform well," says Mike Joyce of Ciba-Geigy.



15th anniversary

Bob Russell, left, accepts a plaque honoring his 15 years as secretary-treasurer of the American Seed Trade Association's Lawn Seed Division from Lawn Institute executive director Eliot Roberts, Ph.D.

TURFGRASS Midnight, Blacksburg tie in national bluegrass test

Midnight and Blacksburg tied for first with mean quality ratings of 6.1 on results just published from the National Kentucky Bluegrass Test. These ratings are the first obtained on the test, which was established in 1985.

In the USDA's rating system, 9.0 is ideal turf, 1.0 the worst.

Midnight scored best in Maryland and Ohio while Blacksburg's top scores were reported from Maryland, Oregon and Rhode Island. Midnight scored best (6.5) in September, Blacksburg in January (6.8). The two also tied for first in percent of living ground cover left in the fall with scores of 72.5. Midnight was rated second in spring green-up and first in genetic color.

Next highest scorers were Rugby, Asset and BA 72-500, each with 6.0s.

According to the USDA report, "interpretation should be done with caution because results may be modified with additional experimentation."

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America
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BA 73-5405.8
Sydsport
Victa
Lofts 1757
Cheri
Haga
Baron
239

SHORT CUTS

GOLF

New real estate booms with building of new golf courses

Approximately one out of two real estate projects under construction for year-round or resort living includes golf site lots for potential buyers, according to the American Society of Golf Course Architects.

One reason for the golf boom is the aesthetic appeal to both golfers and non-golfers. Also, demographics show that, though the number of golf courses has doubled since 1960, the number of golfers has increased fourfold since then.

Further—and perhaps most important—is the excellent return of profits for developers and soaring property values for homeowners.

Buyers at a New England resort and conference center who paid \$90,000 for units were able to turn around and sell them for \$150,000 just two years later.

Industry experts believe this trend will continue as more and more people take up the sport of golf.

ATHLETIC TURF

Reprints available on safe fields

Athletic turf managers now have easy access to information on maintaining safe fields. LANDSCAPE MANAGEMENT magazine is selling reprints of two athletic turf issues. The reprints can be given to parent-teacher organizations or school boards to illustrate the importance of quality fields.

The two issues were originally published in September 1986 and June 1987. "Sidelined" deals with how to construct and maintain safe fields, and "Hard Knocks" explains in detail a test which may become a necessity for natural turf field managers.

Reprints sell for \$5.50 each (\$2.50 plus \$3 handling) or field managers can order both "Sidelined" and "Hard Knocks" for \$8. The price is tax-deductible since profits will go to the National Sports Turf Council.

To place an order, call HBJ's Business Information Services at (216) 826-2839 or send a check payable to HBJ to: Business Information Services, 7500 Old Oak Blvd., Cleveland, OH 44130. Be sure to specify which reprint you want.

BENT GOING NATIONAL?... Jack Murray, Ph.D., says the USDA Beltsville (Md.) facility may establish a National Bentgrass Test. comparable to other national tests for bluegrass, perennial ryegrass and fescues. "There is some interest," Murray notes. "We discussed it during the Southern Turfgrass workshop." Murray says 1988 is too early to expect the tests to be implemented, but that they could be in operation by 1989 or 1990.

DESERT—REAL DESERT—GOLF... Using the resources of Sheikh Mohammed Bin Rashid Al Maktoum, the first all-grass golf course in the Arabian Gulf will open just outside Dubai, Arabia, by the end of the year. According to "Parks, Golf Courses & Sports Grounds" magazine (Middlesex, England), constant watering is done through 740 Toro pop-up heads fed by two lakes containing 10 million gallons of desalinated sea water. Greens at Emirates Golf Club (and you should see the clubhouse!) have been seeded with Tifton 328 bermudagrass and fairways with Tifton 419 to cope with daily temperatures of 104 degrees and more.

A LIVING MEMORIAL...Workers broke ground June 15 on the Henry C. Soto Water Conservation Garden at the Los Angeles State and County Arboretum in Arcadia. The memorial is a tribute to Soto, a pioneer landscaper in Southern California who died a year ago. The garden was designed by Soto's friend Robert Cornell to exemplify Soto's determination to "never throw anything away." The garden emphasizes water conservative plants and the usefulness of recycled materials such as broken concrete, railroad ties and large trees rescued from the paths of bulldozers.

STAMP OF APPROVAL...A national campaign has begun to increase public awareness of arboriculture through a postage stamp honoring the industry. The Citizen's Stamp Advisory Committee has received a proposal for such a stamp. Should the committee approve the proposal, about 100 million stamps would be printed. Those in favor of such a stamp should write: Citizens' Stamp Advisory Committee, 475 L'Enfant Plaza SW, Washington, D.C. 20260-9998.

SEEDSMEN MEET... The 35th annual convention of the Atlantic Seedsmen's Association will be held at the Summit Hotel, Hartford, Conn., on Oct. 28-30. The seedsmen will begin their program on Wednesday with their annual member roundtable, according to president Jim Harris. The annual banquet will be held Thursday evening.

Additional program and registration information is available from John Baylor, Ph.D., executive director, Atlantic Seedsmen's Association, 298 E. McCormick Ave., State College, PA 16801. Baylor's phone number is (814) 237-0330.

NEW ADDITIONS... Arid turf-type tall fescue and Foltz alkali grass have been added to the American Seed Trade Association/Lawn Seed Division Variety Review Board's list of recommended turf cultivars. Dropped from the list were Clemfine tall fescue and Citation and Omega ryegrasses.

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The walk-behind greens mower delivers tournament-quality cuts with solid aluminum driverolls and a high-strength steel bedknife. The power is split to each roller to improve tracking and turning performance.

Four hydraulic reel mowers provide quality cuts on fairways, tees or other wide-area applications. The 303 and 305 are 3- and 5-gang pull-behind units. The 756 and 856 each feature three tractor-mounted

