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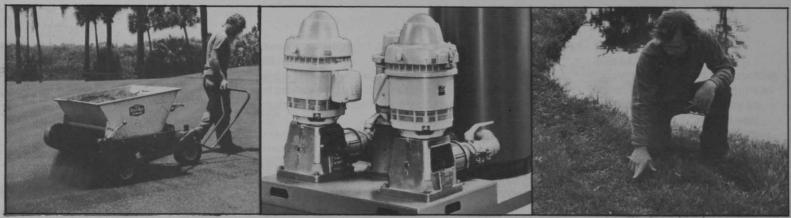
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FRONT COVER:

Superintendent Marvin Laird provided this photo of sand topdressing in progress at his course, Lincoln Greens, in Springfield, III.



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FEATURES

Sand topdressing: Would it work for you?
One of the hottest topics in golf course maintenance in many years, sand topdressing can solve a lot of problems on your greens — but it may cause problems, too
Pump maintenance program can make your job easier
An insider in the pump business suggests a plan for eliminating costly repairs and complaint- causing downtime of irrigation pump systems

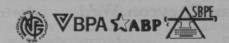
Growth regulator cuts hand-mowing time 50%

A chemical innovation can drastically reduce hand-mo grass growth. This is one superintendent's experience	owing on low-traffic turf areas by retarding with the product	
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Viewpoint

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CONFERENCES

Superintendents gather at Purdue

Purdue University's campus provided an ideal setting for the annual Midwest Regional Turf Conference, and the Purdue basketball team's first National Invitational Tournament game added some extra excitement for the more than 500 superintendents and other turf managers gathered in West Lafayette, Ind., last month.

After an initial afternoon of general topics, the conference was divided for a day into three simultaneous sessions: private golf courses, public golf courses, and lawn care and general turf. The public golf program began on a positive note with old Bill Lyons, owner of Lyons Den Golf in Canal Fulton, Ohio, and vice president of the National Association of Public Golf Course Owners, talking about "care of the golfer." Probably no one takes better care of his golfers than Lyons - from putting litter bags and towels on every golf cart to providing fresh, cold drinking water on the course to operating a storm alert service during golfing hours - and he presented about two new ideas per minute during his 30-minute talk.



Schwartzkopf: Turf 2001?

Cecil McKay Jr., a Lansing, Mich., real estate broker who handles sales of golf courses nationwide, told the audience that although slow play may indeed be a problem on many courses, "We have more golf courses looking to find play than to speed it up."

McKay offered a raft of ideas to increase play, including:

• get your course accurately

measured and marked condition and equip the course

for the ease of players

 make the course enjoyable for women to play since a pro shop is essential to

the overall atmosphere of a successful golf facility, keep it even

if it doesn't make money • "strong promotion of green fees is more profitable than trying to promote food sales"

• have "fun" activities, but be sure to explain special rules and handicap methods to participants - don't assume everyone knows what "best ball" or "Callaway" mean.

In the private golf course session, Kent McFarland of the Indiana Seed Co. explained some of the many changes occuring in turf seed varieties. Among the bentgrasses, in his opinion, McFarland said, Penncross is still the most popular; Penneagle shows promise; and Emerald is next.

Superintendents today have 50 varieties of bluegrass to choose from, McFarland said. Indiana Seed Co. sells 18 varieties - seven "actively." "Merion, Fylking, and some others are being eliminated by turf diseases," McFarland said, and are being replaced by new varieties. He named Sydsport, Barron, Adelphi, and Touchdown as the most popular new bluegrasses and predicted that Touchdown would be the bestselling bluegrass in 1979.

"The most revolutionary changes in turfgrass lately,' McFarland noted, have been in the perennial ryegrasses. The revolution started with Manhattan in the early 1960s and has escalated in the past year or two, with many fine new varieties just released or about to be.

Of the fine fescues, McFarland said that "we really don't have any today for fine turf areas. In development, the ryegrasses are supposedly 20 years behind the bluegrasses, and fine fescues are 20 years behind the ryegrasses."

USGA Green Section Agronomist Carl Schwartzkopf went on to predict future developments. He foresees a number of things that will necessarily help to decrease energy, labor, and water costs: mowing equipment that rides on a cushion of air, remote radiocontrolled maintenance equipment, developing a sub species of Poa and grass that tolerates drought, resists disease, discourages insect infestation, and maintains a dwarf size.

Some "equipment of the future" is beginning to show up on golf courses now, according to Carol Colein of Irrigation Design Associates in Royal Oaks, Mich. She explained that microprocessor chips are revolutionizing irrigation equipment just as they have pocket calculators, cash registers, and other electronic applications. The initial cost of conversion may seem high now, she said, but it will come down and microprocessor irrigation controllers will be much cheaper.

Massachusetts' show draws large crowds

About 1,350 attendees and 125 exhibitors took part in the 48th annual University of Massachusetts Turf Conference and Industrial Show at Springfield, Mass. in February. The highly attended golf

favorably to Poa pratensis (Kentucky bluegrass).

Although Duff did not advocate developing a selection program for Poa annua, he did say it may be time to give poa a "second look. Instead of trying to come up with a herbicide program that is going to completely eliminate poa," he said, "if you have the right type you may find you can live with it pretty well."

An informative discussion focusing on sand topdressing by Dr. Robert N. Carrow, a professor at Kansas State University in Manhattan, was also enthusiastically received by a large number of the attendees.

Carrow said there are many benefits to sand topdressing if it is done correctly, but he warned, "If you don't do it right, you're better off not doing it at all." Carrow said proper topdressing aids in thatch control, creates a better microenvironment for turf plants, smooths the turf's surface, and can





course sessions featured a variety gave a brief history of turf care, then of topics ranging from professional ethics to more technical discussions of topdressing and Poa annua.

> Dr. D. Thomas Duff, a professor at the University of Rhode Island in Kingston, discussed his success in annua which is more perennial than typical Poa, withstands mowing at putting green height, tends to creep, and compares



UPPER LEFT: Dr. **Robert Carrow** discusses sand topdressing. UPPER RIGHT: Dr. Thomas Duff recommends giving Poa annua a "second look." LEFT: George Cleaver, past president of the GCSAA.

be used to modify the soil surface.

Of all the topdressing mixes (high sand, pure sand, and low sand), the most effective is high sand, according to Carrow. "It has excellent physical properties, fairly good chemical properties, and good biological properties," he said. High sand mixes contain about 85 to 90 percent sand.

However, Carrow added that calcine clay or expanded shale can be substituted in the mix if sand is not available. "If you can't get a



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Model 657 handles the big jobs easily.

good sand go with them, but they are going to be expensive," he said. Carrow said the key to success in applying a good high sand topdressing involves mixing the three components (sand, organic matter, and soil) properly.

The 3-day conference also featured less technical sessions on professional ethics and golf course personnel. Discussing the need to upgrade personnel, George W. Cleaver, superintendent at Chestnut Ridge Country Club, Lutherville, Md., said course management must be "restructured" in the near future to improve the golf course labor force.

"We have fallen short... of attracting quality workers and I see little future for the present golf course worker," he said. The reason the industry has failed to attract good employes is because of low pay and a lack of benefit packages, according to Cleaver. "A living wage is an absolute necessity."

Cleaver, who is past president of the GCSAA, said there are two major "challenges" regarding labor in the golf industry: employing the large number of graduates currently being trained by turf schools, and developing a reliable labor force. Restructuring golf course management could be the solution to both problems, according to Cleaver. "The most important change . . . is the addition of another level," he said. "Why not employ turf graduates as golf course workers." The graduates would be given a title, receive more pay, and the type of work they performed would be upgraded. "This solution would provide the golf course superintendent with a reliable labor source and with knowledgeable turfgrass personnel," he said.

CLUBS & COURSES

Private club charges "unfair" competition

The golf director at a private golf club in Pennsylvania has termed competition from a nearby taxpayer-subsidized municipal course "unfair."

Phil Cassidy, golf director at Westover Inn and Golf Club, West Norriton Township, Pa., said he is losing customers to Jeffersonville Golf Club because he cannot compete with their low prices.

"My basic complaint is these people are not charging a fair price," he said. "They charge the lowest rates in the area and are underpriced about \$2 from other courses."

Jeffersonville's greens fees are \$3 for township residents and \$5 for non-residents during the week, while Westover charges \$8 to all golfers.

The township used a 35-year, \$1.5 million bond to purchase the Jeffersonville course in 1972. According to *Today's Post*, the local newspaper, under the terms of the bond "Wes Norriton Township may pay \$104,000 annually to its municipal authority, which issued the bond."

Further, "Acocrding to township officials, the golf club has never produced more than \$85,000 towards the \$104,000 and the rest has been subsidized through the township's general fund. In 1978 the township contributed \$27,000 towards the bond payment," the paper stated.

Cassidy said the course would not have to be subsidized if it would raise its fees about \$1 per round. "About 26,000 rounds are played at Jeffersonville each year and the course has been subsidized about \$25,000 per year," he said. "There is no reason the golf course shouldn't break even if they charge \$1 more a round. They would also be priced more competitively," he added.

Theodore Heske, president of the township Board of Commissioners, said the primary reason the township purchased the course was to "preserve about 130 acres of recreational land."

"We have no quarrel with Westover. Westover is a private club and their rates should be higher, but we cater to senior citizens, duffers, and people who can't afford higher greens fees," he said. "There's bound to be a difference in price between a Cadillac and a Ford." Heske added that they plan to raise greens fees at Jeffersonville "a little bit" in 1979.

Cassidy is not only displeased with the disparity in golf rates, but also with the tax structure. "We are required to pay a 10 percent amusement tax just like Jeffersonville," he said, "but they get some of the tax money back in

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AQUATROLS CORPORATION OF AMERICA 1432 Union Ave. Pennsauken, New Jersey 08110 (609) 665-1130 the form of subsidies to run their course."

"They're just taking it out of their left pocket and putting it back in their right pocket," Cassidy said. "Technically, they're paying it to themselves. All we want is a fairer tax base or fairer competition," he added.

PROMOTION

Ad agency formed for golf courses

"When it comes to promoting their product, the golf industry is years behind other fields," according to Gary Brooks, director of Golfpromotion of Limerick, Pa.

Golfpromotion is a new, fullservice advertising agency designed to help generate business for public and private golf courses. "I've never felt the golf industry has gotten any assistance from anyone specialized in promoting golf," Brooks said. "Golfpromotion's goal is to further the sport of golf and the business of golf through the use of modern marketing, advertising, and promotional techniques."

Brooks said response to the agency, which he formed in September, has been encouraging. "I didn't know how well it would be received, but the response has been very good."

There are about 43 public golf courses in the five-county area surrounding Philadlephia, from which Brooks has set up advertising campaigns for ten. He has not yet contacted any private golf clubs.

The agency provides a variety of promotional services including television, newspaper, radio, and direct mail advertising. "Course owners don't have to have a lot of money before we will talk to them," he said. "We can set up an entire campaign for them based on their particular budget."

He added that his fees are "consistent" with those charged by most small advertising agencies (\$100 retainer per month plus commission).

Brooks said historically courses have not advertised much and the result is many have no advertising budget. Therefore, at least to begin with, those courses contacted by Brooks have limited themselves to the cheapest advertising technique available, direct mail.

"Our direct mail campaign consists of a discount coupon merchandising program to try and get new people to try different courses." The direct mail campaign may not be the slickest advertising technique, but as Brooks said. "The people involved in golf course advertising have got to gearn to walk before they can run."

SEED

Kentucky bluegrass cultivar introduced

North American Plant Breeders recently introduced a new cultivar of Kentucky bluegrass which is the most disease-resistant variety currently on the market, according to NAPB.

In a number of turf trials the cultivar, named Enmundi Kentucky bluegrass, has proven to be very resistant to turf disease, particularly Fusarium blight and helminthosporium. It has also exhibited excellent resistance to rust and brown patch, according to NAPB.

Studies at Penn State University also indicated that the cultivar performs well under low mowing heights. Limited quantities of Enmundi bluegrass seed are now available in 50-pound bags.

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MILESTONES

Dey honored at architect's meeting

Joe Dey, a member of the World Golf Hall of Fame, has been named the 1979 recipient of the Donald Ross Award by the American Society of Golf Course Architects.



Joe Dey: Award winner

Dey, who has been actively involved in golf for more than 40 years, received the award last month at the ASGCA's annual meeting in Pinehurst, N. C.

The recipient of many golf honors, Dey is a former United States Golf Association executive secretary and former commissioner of the Professional Golf Association's Tournament Players Division.

The award was first presented in 1975 to recognize those individuals in golf who have helped create a greater awareness of the role of golf course archititecture in the overall enjoyment of the game.

RESEARCH

Too much N can increase winterkill

Heavy applications of nitrogen fertilizer on bermudagrass and St. Augustinegrass in the early spring can increase winterkill and impair the turf plant's ability to survive, according to researchers at Texas A&M University, College Station, Texas.

Researchers studying the root systems of these two grasses have discovered that leaf growth greatly exceeds root production in the first few weeks of "green-up" in late March. Heavy applications of nitrogen, the fertilizer element that encourages leaf production in plants, can worsen the situation and cause the new growth to starve.

Dr. James Beard, agronomist in charge of turfgrass research for the Texas Agricultural Experiment Station, said, "Previous research has shown that excessive nitrogen applications promote shoot growth at the expense of the roots, while increasing potassium fertilization promotes root growth."

"In light of this, delaying nitrogen applications beyond this critical period may prove to be a valuable practice for these two turfgrasses," he added. "On the other hand, early potassium applications may prove to be beneficial."

According to Beard, the delay in new root replacement in the spring is probably a major cause for winterkill and spring dead spot.

J. M. DiPaola, an Experiment Station scientist working with Beard, said, cultural stresses such as verticutting, use of growth retardants, and herbicide and pesticide applications should be delayed until after the root loss period. Water should also be supplied as needed to prevent wilt.

"Raising the cutting height (of mowers), delaying the first mowing, and lengthening the intervals between mowings may all be helpful in minimizing turfgrass injury and stand reductions during this critical period," Beard added.

CORRECTION

Homelinks will keep all 18 holes open

Contrary to what was printed in the February issue of GOLF BUSINESS and in other publications, Homelinks Golf Course in Olmsted Township, Ohio, will not close nine of its holes due to construction of cluster housing on the property.

According to Homelinks Manager Al Delmonti, the entire 18-hole golf course will remain open "for the next 100 years," even though construction of condominiums around the course is "contemplated."

Homelinks was one of six Cleveland-area courses which were said to be threatened by construction of housing developments on all or part of their land.

Yet another course, Parkway Country Club, located just a few miles from Homelinks in North Olmsted, already has concrete streets for fairways and model homes instead of tees and greens.



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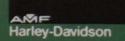
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