BRIEFS



SEED RESEARCH HONORS FERRIN

CORVALLIS, Ore. - Seed Research of Oregon, Inc. (SRO) has presented Jim Ferrin of Granite Bay (Calif.) Golf



tendent of the Year Award. A certified golf course superintendent, Ferrin was given the award for "his dedication to inte-

Club its 1995 Golf

Course Superin-

grated pest management, turfgrass variety testing, and innovative cultural practices," according to SRO.

...... **MAINE HONORS LEWIS**

ROCKPORT, Maine - Pat Lewis of Portland Country Club in Falmouth Foreside was presented the Distin-



guished Service Award at the Maine Golf Course Superintendents Association annual conference and show here in March. Lewis is a certified course superinten-

dent and former president of the MGCSA. Greg Holder was given the Vern Putney Award and outgoing President Jim Hodge the Presidents Plaque.

AUDUBON CERTIFIES LORDS VALLEY CC

HAWLEY, Pa. — Lords Valley Country Club has been designated a "Certified Audubon Cooperative Sanctuary," becoming the second course in the state and 62nd in the country to receive the honor. "The membership at Lords has enjoyed the diverse and prolific wildlife population of our club since the ... club was established," said superintendent Dennis Watkins. "The Audubon ... program has been a tool to help us protect, enhance, and develop a greater appreciation for our environment.

...... **PASSIOS MOVES ON**

NANTUCKET, Mass. — Charles T. Passios, former member of the board of directors of the Golf Course Superintendents Association of America, has been



Charles Passios

hired as superintendent at Nantucket Golf Club, construction on which began this spring. A certified golf course superintendent, Passios has been golf course manager at

Hyannisport (Mass.) Club. The new course is being designed by Rees Jones. GOLF COURSE NEWS

USGA, supers confront concerns over unstable Bermudagrass

By MARK LESLIE

OUSTON, Texas - Believing that "Bermudagrass greens are on the ropes," the U.S. Golf Association (USGA) Green Section, superintendents, university researchers and others are hoping for vast improvements - quickly.

Convening at Houston Country Club here, some 150 golf course superintendents heard USGA agronomists and university researchers explain that cultivars of hybrid Bermudagrass are becoming increasingly unstable and some sort of research must be done to solve the problem.

"If what was going on with Bermudagrass greens and fairways existed for bentgrasses, there would be an eruption," said Green Section Southeast Region Director Patrick O'Brien. "It's amazing how it's not getting publicity because it's simply Bermudagrass.'

A summary of the Houston meeting will be presented in May to the USGA Research Committee which will develop requests for proposals for projects dealing with the issues at hand, said Green Section National Director Jim Snow. "It may not require a lot of money - perhaps just defining what can be done and finding the people to do it.

"I'm encouraged. It was a good meeting that opened people's eyes about other peoples' viewpoints."

Continued on page 34

Significant advances in genetics foster nat'l conclave of scientists

By MARK LESLIE

EAST LANSING, Mich. -Geneticists are progressing at lightning speed in this "very, very new" area of turfgrass research, and to get scientists up to speed on these advances the U.S. Golf Asso-

ciation Green Section and Michigan State University (MSU) are hosting a Workshop on Biotechnology of Turfgrass here, Aug. 11-13.

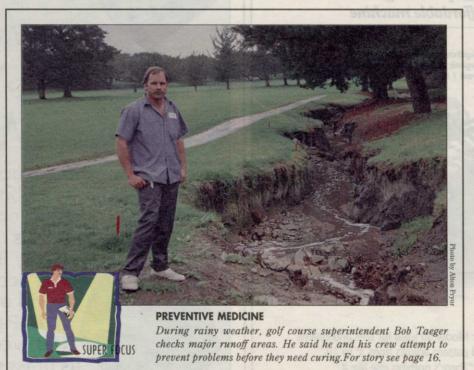
"This is the growth area where future significant changes will be made," said Dr. Michael Kenna, director of Green

Section research and workshop coordinator. "Whoever can learn the most the fastest and patent significant parts of it will be able to springboard into the future. That's the race."

Scientists from around the country have been invited to

the conference, and 26 45-minute talks are scheduled. Ranging from molecular biology to gene cloning and in vitro culture and somaclonal variation, many of the subjects have never been discussed in a national or international workshop

Continued on page 35





Dr. A. J. Powell Univ. of Kentucky



Ed. — This month we begin a continuing series of interviews with leading university professors and researchers affecting the golf course industry.

UK's Powell shares transition zone turfgrass know-how

Andrew J. Powell, Ph.D, is a professor in the University of Kentucky Department of Agronomy. He has also taught and conducted research at the University of Maryland and Virginia Polytechnic Institute and State University (VPI and SU). Among his accomplishments are the release of Quickstand Bermudagrass, a new grass for the upper transition zone; and identification of Vamont Bermudagrass, a grass released by VPI and SU and historically the major turf used in the transition zone.

Golf Course News: With the increasing emphasis on prudent pesticide usage, are you seeing more courses converting to warmseason grasses in the transition zone? If so, why?

Powell: Yes, many perennial ryegrass courses are converting. They are determining that the risk of bermuda winter kill is less than perennial ryegrass summer dieback. Also, the cost of establishing bermuda may actually be less than the annual cost of their previous fairway fungicide program. Fungicides are seldom needed on Ber-

GCN: What are the warm-season Bermudagrass varieties that work well? Can you briefly describe their advantages and disadvan-

Powell: For the upper transition zone, I would only consider Quickstand, Vamont or Midiron. Other new vegetation varieties such as Midlawn may also prove to do well, but we have little experience with them. In addition, the new seeded varieties such as Mirage,

Jackpot and Sundevil are much more winter hardy than previous seeded varieties, but it appears that they still lack some hardiness dur-

Continued on page 19

GCSAA sending team to first international tournament

LAWRENCE, Kan. - Six representatives of the Golf Course Superintendents Association of America (GCSAA) will travel to England in September as part of the Americas team to participate in the inaugural Hayter Challenge golf event. GCSAA President Bruce R. Williams also will attend as non-playing captain.

West Lancashire Golf Course in Blundellsands, Liverpool, and Fairhaven Golf Course in Lytham, St. Annes, will

More GCSAA news, pages 32-33

host the event Sept. 15-19. Sponsored by European equipment manufacturer Hayter, the tournament is designed to promote international relations and communications among golf course superintendent organizations. Plans call for the event to be held biennially at locations alternating between the United States and Europe.

The GCSAA representatives for 1996 are Vice President Paul McGinnis of Moon Valley Country Club in Phoenix, Ariz.; Secretary/Treasurer George Renault III of Burning Tree Club in Bethesda, Md.; Immediate Past President Gary Grigg of Royal Poinciana Golf Club in Naples, Fla.; Past President Randy Nichols of Cherokee Town and Country Club in Dunwoody,

Continued on page 32



Turf geneticists making strides toward perfection

Continued from page 15

format. And little collaboration exists between scientists working on different aspects of turfgrass improvement.

"This is an exciting time," said MSU biotechnologist Dr. Mariam Sticklen. "This is Step Two in the Green Revolution. Step One was plant breeding. Genetic engineering research is taking even greater steps."

The associate professor in MSU's Department of Crop and Soil Sciences explained genetic engineering as "tailored plant breeding."

"With breeding, you are mixing up genes with the hope that you get rid of the bad genes, essentially," she said. "But with genetic engineering you are tailoring the whole process. You are cutting the genes that you are interested in and putting them in the plant.

"Also, in plant breeding you can not take a gene from a pathogen, which would be herbicideresistant, or a bacterium which controls insects, and put it in turfgrass. With genetic engineering, you can..."

Saying that problems still need to be solved, Sticklen added: "This is just the beginning. I'm talking about [dealing with] pathogens, insects, stress factors... We have a long way to go in the evolution of turfgrass science."

But already, MSU has developed a creeping bentgrass that is resistant to herbicide, brown patch and dollar spot. And, she said: "We have the capabilities to develop dwarf turfgrass, insect-. pathogen-, heat-, drought-, cold- and salt-resistant turfgrass — anything that anyone could wish.

"If we had the finances, we could do this in a very short period of time — a maximum of three to five years for the laboratory work."

MSU is using bentgrass in its research because "we had it here and when we started working on it, it became a model system," Sticklen said. "Some of the turfgrasses may be more difficult than others. It's not that genetic engineering would be much different. It's that the efficiency of *in vitro* culture or regeneration in vitro might be different."

The work of cell and molecular genetics — which ranges from gene cloning to genetic engineering to bringing [the results] to breeding and to the field level and so on — is "very laborintensive, highly technological and it's information-intensive," Sticklen said.

The USGA-MSU conference will address that information intensity

Researchers, breeders and

others in the industry will hear talks under the general topics Turfgrass Molecular Marker Analysis; Biological Control, Including Endophyte Strategies; Genes with Potential for Turfgrass Improvement; In Vitro Culture and Genetic Engineering of Turfgrass; and In Vitro Culture and Genetic Engineering of Turfgrass.

More information on the conference is available from Kenna at 405-743-3900, or Sticklen at 206 Pesticide Research Center, MSU, East Lansing, Mich. 48824; 517-353-9140, or FAX 517-353-1698.



HEAVEN-BENT AT HELL'S BUNKER

Superintendent Tony Gustaitis of Whitemarsh Valley Country Club in Lafayette Hill, Pa., prepares to blast out of the infamous Hell's Bunker during a round at St. Andrews Old Course in Scotland. People might remember Jack Nicklaus taking five strokes to get out of this bunker during the British Open last year. Gustaitis slapped the ball out in one attempt. Gustaitis' round was part of the expense-paid trip for two to Scotland that he won from American Cyanamid Co. during the International Golf Course Conference and Show last year. The trip included five rounds of golf at various courses in Scotland.

PREVENT

SUMMER PROBLEMS CAUSED BY WATER REPELLENCY!

UNTREATED

Summer stress conditions can prompt a rapid reduction in turf quality in tees, greens and fairways. By mid-summer, effects of extensive wilt, Localized Dry Spot (LDS) and turf decline are evident on this untreated tee (ladies tee box). Soil cores from symptomatic areas (inset) were powder dry, even after irrigation.



TREATED

Monthly applications of Primer 604 (started in late spring) on the men's tee box (of the same hole), showed superior turf quality. Even under conditions of severe summer stress, no afternoon wilt or LDS was observed. Soil cores from treated tee (inset) were uniformly moist, indicating improved penetration, infiltration and distribution of applied water (rainfall or irrigation).

D B Soil Surfactant

NO WATERING IN REQUIRED • WILL NOT BURN



Call 1-800-257-7797

for information about Primer, a unique new chemistry that puts an end to summer stress concerns.

IAQUATROLS Making Water Work Efficiently

5 North Olney Avenue Cherry Hill, NJ 08003 USA 1-609-751-0309 • 1-800-257-7797 FAX: 1-609-751-3859