

BRIEFS



DON SWEDA DIES AT 48

COLUMBIASTATION, Ohio — Don B. Sweda, a certified golf course superintendent at Columbia Hills Country Club here, has died at the age of 48.



Don B. Sweda

Elected president of the Ohio Turfgrass Foundation (OTF) in December 1993, Mr. Sweda had served six years on the OTF board and was also a past president of the Northern Ohio Golf Course Superintendents Association. He had previously worked at Beechmont Country Club in Cleveland.

WHITE JOINS RUTGERS

NEW BRUNSWICK, N.J. — Dr. Jim White, a world authority on endophytes in turfgrass, has left Auburn University in Alabama to join the staff at Rutgers University. White, who began his duties in September, has eight years experience in turf mycology.

POSTER HIGHLIGHTS BENEFITS

A new color poster that highlights the environmental benefits of golf courses is appearing at golf facilities across the country, thanks to a cooperative effort by the Golf Course Superintendents Association of America (GCSAA) and the United States Golf Association (USGA). The poster lists some of the key ecological and social benefits provided by the more than 15,000 golf courses in the United States, including protecting wildlife habitat and improving air quality.

BENTGRASS RESEARCH GREEN ENLARGED

NEW BRUNSWICK, N.J. — The Golf Course Superintendents Association of New Jersey and Rutgers University's Center for Turfgrass Research are collaborating to double the bentgrass area for bentgrass research here. The enlargement will allow researchers to evaluate the changes in construction recommendations for U.S. Golf Association-specification putting surfaces. More information is available from Drs. Bruce Clarke and Jim Murphy.



PENN STATE CONCLAVE SET

The Penn State Golf Turf Conference will be held at Nittany Lion Inn here, Nov. 7-9. More information is available from Dr. Peter Landschoot of the Department of Agronomy at 814-863-1017.

GCSAA, chapters float dual membership requirement

By PETER BLAIS

LAWRENCE, Kansas — A proposal that would have required anyone belonging to a local superintendents' association to also join the national organization by the year 2010 was hotly debated during September's Golf Course Superintendent's Association of America chapter relations meeting here.

What eventually emerged from the two-day conclave was a compromise measure mandating dual membership for new members beginning July 1, 1997. Anyone joining a local chapter after that date would also have to join the GCSAA. Likewise, anyone joining GCSAA would also have to join a local chapter. Existing members would not be required to join both organizations.

The proposal could be enacted on the national and local levels over the next few months.

Most of the 95 chapter representatives who met here to discuss the proposed chapter affiliation agreement agreed dual membership would increase the professional image of all superintendents.

But many disagreed with the requirement proposed by the GCSAA Chapter Relations Committee that all superintendents and assistant superintendents join both organizations. The proposal would have required that 51 percent of a local chapter's Class A, B and C members hold joint membership by the year 2000, 75 percent by 2005 and 100 percent by 2010.

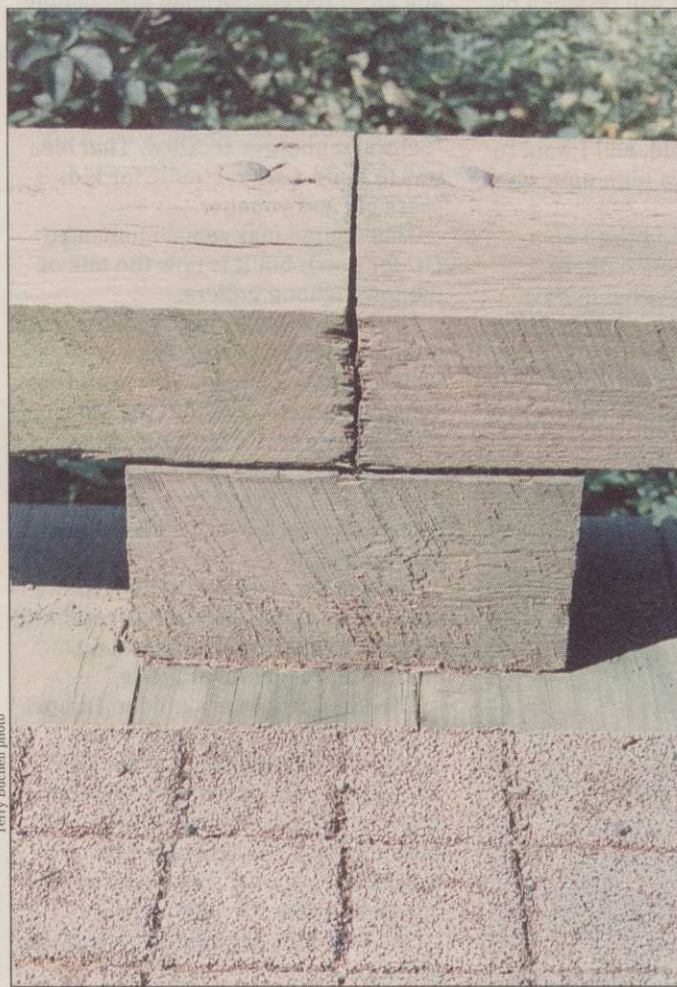
"There are some existing members

who just don't want to join the national association," said Jim Hodge, president of the Maine Golf Course Superintendents Association (GCSA) and head superintendent at Val Halla Golf Club in Cumberland. "Most of us want to see 100-percent participation in both organizations. But there are other avenues to get there rather than simply requiring everyone to join by the year 2010."

A recommendation from the floor that the proposed chapter affiliation agreement be amended so that only new members be required to join both organizations gained the support of better than two-thirds of the chapter representatives, Hodge said.

"Requiring just new members to join

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Terry Buchen photo

Flexigran and Play Bound make wooden walkways safe and aesthetic.

New products for wood ensure soft-spike safety

By TERRY BUCHEN

We are fortunate to have new technology available in the form of spikeless golf clubs. These spikeless alternatives have made our jobs easier in providing better playing conditions, and it will be interesting to see if they will survive the test of time. Many golf courses have banned metal golf spikes, favoring the "greens-friendly" spikeless varieties.

The only disadvantages: They sometimes will come loose and can become lost when used on an older set of golf shoes; and they are slippery on wooden bridge surfaces (especially if they have an incline) from the elements

of heavy dews, irrigation, rainfall and sometimes even fog.

To help eliminate golfers from potentially "falling to



their knees," a couple of products can be applied to any wooden bridge surface with excellent results. Flexigran and Play Bound are two types of rubberized or urethane surfaces that are "poured-in-place" just like convert.

On wooden bridge applications, one-half or five-eighths of an inch top-grade waterproofed plywood is nailed to the bridge surface in any widths or configurations the superintendent desires. The rubberized or urethane prod-

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Low pH can destroy pump stations as well as turf

By TOM LUBIN

Normally the most acidic rain and the most acidic lakes are found in the North-eastern United States and Southeastern Canada. In many cases the low pH has been traced to industrial air and water pollution in both countries. When the pH of lakes falls below 6.0, some species of fish and other organisms are affected adversely. Depending on the plant material pH values, lower than 6.0 may affect the plant metabolism adversely.

Acidic irrigation water available for use on golf courses and other irrigated facilities may cause problems not only for the plant material. It can literally dissolve the pump station. A case in point is at Banyan Tree Country Club in Phuket, Thailand.

Tom Lubin is a professor of chemistry at Cypress College in Cypress, Calif.

SECOND OF TWO PARTS

This golf resort was built on a site near an old abandoned tin mine. A combination of the very acidic irrigation water with a pH of 2.7 with an appreciable tin ion concentration literally dissolved the pump station over three months. A number of attempts to solve the problem failed, and for a period of time a welder was on call to repair leaks as they occurred.

The water at a pH of 2.7 essentially contained none of the buffering provided by the bicarbonate ion normally found on less acidic water. The only way to provide a long-term answer to these problems would be to re-establish the bicarbonate buffer. This was accomplished using dolomite (calcium and magnesium carbonate), the best quality powdered carbon-

ate containing material available locally. If a reliable source of calcium carbonate were available, it could have been used instead of the dolomite. This is the safest and most efficient method of both raising the pH of the water and creating a buffer to further pH change both in the water and ultimately in the soil.

At the Banyan Tree Country Club site, acidic deposits had built up over the many years of operation. Runoff from the old tin mine had acidified the ground water in the area and effectively destroyed the buffering capability of the irrigation water and the soil.

When the pH of any water or soil is lower than 6.0, the bicarbonate ion buffer is converted to carbonic acid. The carbonic acid can decompose and the buffer may be lost as carbon diox-

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Beware low pH — destructive to pipes and turf

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ide from the water solution. If the pH of the irrigation water is maintained at a very low value for an extended period of time, the buffering process in the water or soil may be destroyed completely.

The problem was so severe that the first pump station was dissolved by the excess hydrogen ions and the tin ion dissolved in the irrigation water.

Increasing the pH value alone is not adequate to solve the problem. Basic compounds such as lime (calcium hydroxide) could be added to raise the pH, but there is no buffer created. This would mean that with only a slight excess of the lime the pH would raise to approximately 11.0.

If a buffer were created the pH could be easily controlled to and maintained at a safe pH. The buffering allows the pH to be raised and maintained at the desired pH value.

As the carbonate is metered into the irrigation lake, the pH is quickly raised to 7.4. Bicarbonate ion is formed in the irrigation water as the solid carbonate is reacted with the

acidic irrigation water.

A system was built to allow insoluble calcium or magnesium carbonates to react with the excess hydrogen ion in the water to form the soluble calcium bicarbonate and raise the pH of the irrigation water to 6.0 within a minute of mixing and to a pH of 7.0 within 30 minutes.

The irrigation water now will contain much less free hydrogen ion, about 10,000 times less free hydrogen ion than before the reaction with the calcium carbonate.

The concentration of the tin ion in solution is decreased by reaction with the bicarbonate that is formed in solution. An insoluble soil tin (II) carbonate is formed and can be dropped out of solution.

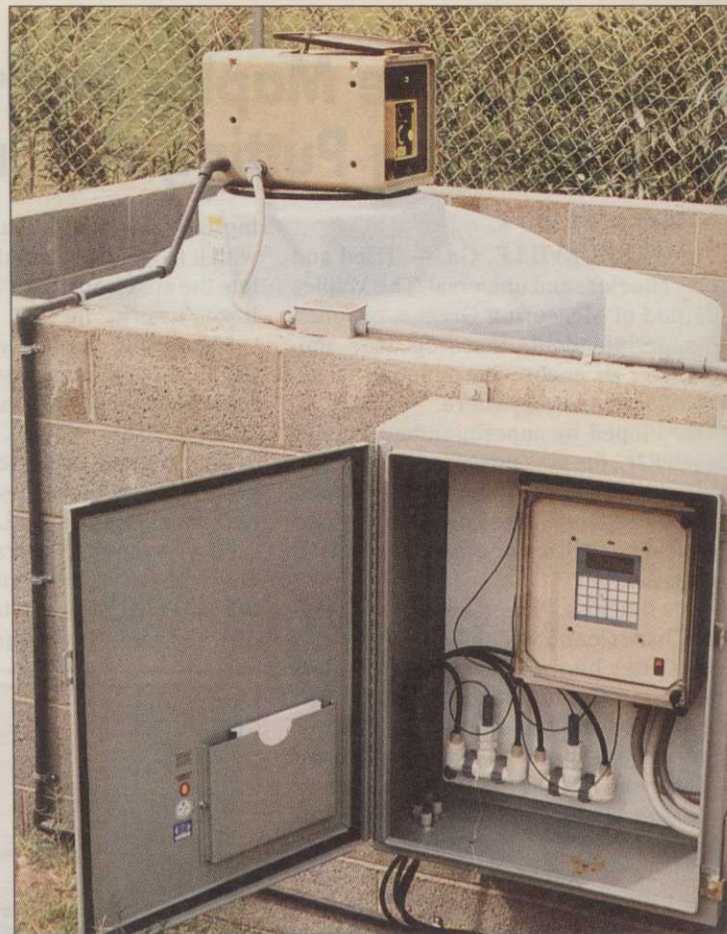
The bicarbonate ion concentration, HCO_2 , has been increased from essentially zero PPM to a point where the concentration where the bicarbonate ion (HCO_3^-) can reach with the problem tin (II) ion in the irrigation water.

Raising of the pH to near 7.0 in combination with a decrease of the tin concentration will

greatly decrease the corrosive effects. In layman's terms: Raising pH of the irrigation water by one pH unit (one pH units is 1/10 the concentration of hydrogen ion) the rate of corrosion will be approximately 10 times slower, and if the concentration of the tin were decreased to 1/10 of the original concentration, the rate of corrosion should be slower by a factor of 10.

If the pH is raised from 3.0 to at least 6.0, three pH units, the hydrogen in concentration is decreased by a factor 1/1000. As the carbonate dissolves, the bicarbonate buffer can also be re-established in the water solution. The tin ion or other metal ions such as copper, etc. in solution should decrease by at least 1/1000 as the ions react and drop out of solution as insoluble carbonates. The overall corrosion rate of iron parts of the irrigation system should be at least 10,000 times slower. This change can provide longer irrigation equipment life.

The plant material irrigated with this water buffered to near 7.0 can, over time, help to re-establish the soil buffer near 7.0.



The unit developed to control water pH in an irrigation system.

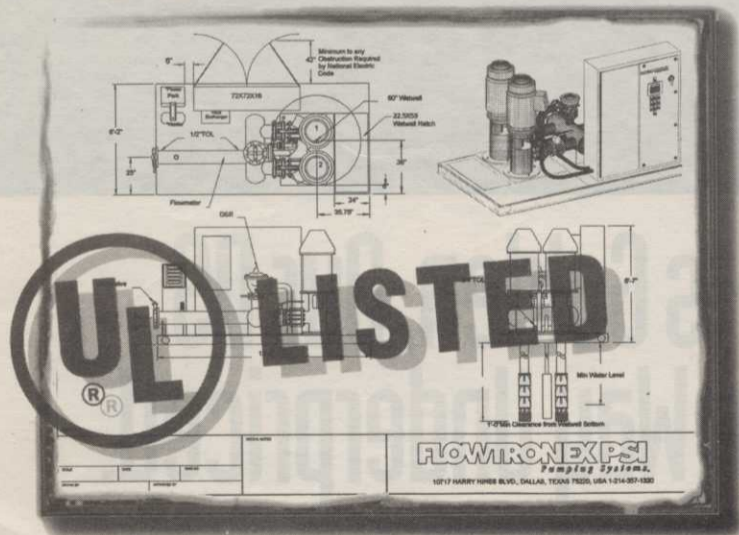
The plant material is under much less stress because of not having to work against the pH gradient, and the trace minerals are more in balance.

Beneficial soil organisms are more able to attain a desirable balance in a soil if the pH were maintained near 7.0 than in acidic soil conditions.

Another First

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'They bought me a nice fishing rod and reel and we had all kinds of parties and all. But I never got the line wet.'

— Richie Valentine
not retired

Un-retired Valentine: Open for business in consulting and sales

By MARK LESLIE

BRYN MAWR, Pa. — Merion Golf Club kept his rapt attention as superintendent for 42 years. Now the "retired" Richie Valentine has set his sights on advising other people on agronomic problems at their golf courses.

Under the name Valentine Golf Associates Inc., Richie is offering his expertise as a consultant, while sons Tom and John run Valentine & Sons, a golf course service and supply business.

When he retired from Merion in 1989 at the age of 62, "they bought me a nice fishing rod and reel and we had all kinds of parties," Valentine said. "But I never got the line wet."

Instead, he made his time available as

a turfgrass consultant. Requests for his services grew and grew until he had to "level off," he said, adding that he is trying to remain in the Pennsylvania area, near his family.

"A superintendent works nearly seven days a week. At least he worries about it [his course] seven days a week," Valentine said. "I had offers [to work], but I had to level off."

Reducing the consulting work, Valentine decided with Tom — a communications and marketing expert — to enter the service and supply arena. John has since joined them.

"We rep for eight companies," Valentine said. "I try to pick companies I think are unique."

Turfgrass producers revise guide to sodding

ROLLING MEADOWS, Ill. — A newly revised and expanded edition of *Guideline Specifications to Turfgrass Sodding* is now available from Turfgrass Producers International. The 20-page booklet offers the turfgrass sod industry's most up-to-date recommendations for the sod itself as well as specifications for topsoil preparation and materials, pre-installation fertilization, installation techniques and post-installation maintenance.

The newest edition divides a turfgrass

sodding project into six distinct areas. This will enable a firm to adopt specifications necessary for any or all of a project's segments, in a comprehensive, business-like and manageable way. The guidelines also contain an expanded section to help specifiers understand, determine and detail the type or quality of turfgrass sod necessary for a particular site.

Individual, complimentary copies may be obtained from TPI, 1855-A Hicks Road, Rolling Meadows, Ill. 60008.