THE

CONN. CLIPPINGS

CONNECTICUT ASSOCIATION OF GOLF COURSE SUPERINTENDENTS

APRIL 1973 VOL. 6 No. 1

CONN. ALSO WINS G.C.S.A.A. TEAM TITLE

Jan. 17 & 18 1973
PORT ROYAL INN & GOLF CLUB
HILTON HEAD ISLAND, S. C.

1973 has started out as the Conn. Assn.'s year. First of all, Charlie Baskin was elected to the Vice Presidency of the G.C.S.A.A. at the annual conference in Boston, Mass. Then it was off to the post conference golf tournament on Hilton Head Island.

John Campbell of St. Andrews, Scotland, (remember, that's where all this started) presented the G.C.S.A.A. tournament committee with the Scottish Greenskeepers Cup, to be used as the perpetual team trophy at the annual tournament. This trophy dates back to 1910. This most beautiful trophy will be suitably engraved and displayed at the National Headquarters office.

The Conn. Assn. Team of Ed Bedus, Dick Cook, Pierre Coste, and Frank Lamphier had the privilege of placing the Conn. Assn. name 1st. on this new trophy. They beat out a strong team from the Carolinas Assn. In 3rd. was the Mid-Atlantic Assn. Down by 3 shots after the 1st. round of play, our team put on a most determined effort the 2nd. day to arrive home victorious.

In the individual competition, the defending champ, Bob Martino of Vienna, Va. was again the winner, this time in a sudden death playoff. It took Bob 2 extra holes to defeat Frank Lamphier of our Assn. This was Bob's 3rd win in 4 years, having also won in Houston in '70 and Tallahasse in '72. Our congratulations to this fine competitor.

Ed Bedus and Dick Cook also finished high up in the individual competition, Ed having a 4th. place net finish and Dick tied for 3rd. in the gross category.

A special tribute should also go out

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THE GRASS CATCHER

by Bob Osterman

Congratulations to Charlie Baskin on his election to the Vice-Presidency of the GCSAA. Charlie is Supt. at the Country Club of Waterbury. He has held that position since 1962, prior to which he was Assistant Supt.

His education includes a B. S. degree in civil engineering from the University of Missouri School of Mines and Metallurgy, where he also did graduate work in soils. He also attended the turf management and landscapes design school at Rutgers University.

He is currently the past president of the Conn. GCSA and a honorary member of the Conn. PGA. He has been a member of the GCSAA since 1961. He was elected to a two year term as director of the GCSAA in 1971 and was appointed Secretary-Treasurer in 1972.

He is also serving a two year term on the Waterbury Board of Education.

If one was asked to describe our association, it would sound like a major football team who ended up in last place due to injuries.

Fred Bachand is hobbling around on crutches due to a ruptured Achilles' tendon.

Bob Tosh is recovering from major back surgery.

Ed Anderson spent a short time in the hospital, and all is well with Ed now.

Jim MacDonald came down with a good case of the London Flu during the Boston Conf. Jim recuperated in Florida for a few weeks with his wife Jan.

Anyone who has not returned his postcard that was sent to him two

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TURF MANAGEMENT

by John R. Hall,
Turf Specialist
ARSENIC TOXICITY

The use of calcium and lead arsenate for *Poa annua* control has been a common practice in the Mid-Atlantic region for many years. There have been more successful attempts at *Poa annua* control with arsenic than there have been failures, however, this year it seems that more superintendents than ever before had arsenic-related problems.

The physiological mechanism of arsenic toxicity in the plant involves the substitution of an arsenic molecule for phosphorus. After this substitution has taken place, plants lose the ability to produce Adenosine Triphosphate (ATP) at normal rates. ATP production is necessary in order for the plant to maintain normal energy relations. The arsenic substitution and eventual loss of energy storing capability, leads to the eventual depression of plant growth functions. The affected plants utilize stored energy to make up for the loss of their energy-making capability brought about by arsenic substitution for phosphorus. This continuous use of reserves leads to the weakening of the plant to a point where it cannot live through normal daily stresses.

Our understanding of arsenic reactions in the plant has been much better than our understanding of how it reacts in the soil. Recent work by Doctors Axley, Woolson, Kearney and Freeborg (1,4,5,6,7,), have added considerably to our understanding of the factors that influence arsenic toxicity. Many factors need to be considered in determining the toxicity of arsenic to the plant; among the most important are concentrations of reactive Iron (Fe), Aluminum (Al), and Calcium

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CONNECTICUT ASSOCIATION OF GOLF COURSE SUPERINTENDENTS

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The object of this association is to promote research, education and an exchange of practical experiences in the field of turf grass culture so that the increased knowledge will lead to more economic and efficient management of golf courses and related turf areas.

The CONN. CLIPPINGS is an official publication of the Connecticut Association of Golf Course Superintendents.

Robert W. Osterman, Editor
937 Black Rock Turnpike
Easton, Conn. 06612

GOLF COURSE SUPERINTENDENTS ASS'N. OF AMERICA

The Golf Course Superintendents Association of America announced that Anaheim has been selected as the site for the organization's 45th International Turfgrass Conference and Show, which will be held February 10-15, 1974, at the Anaheim Convention Center. GCSAA's last appearance in the Los Angeles area was in Long Beach in 1956. It also met in San Diego in 1963.

"The Conference this year has been the best ever both in terms of our meaningful educational program and the broad and extensive display of equipment and products at our show", stated newly elected GCSAA president Clifford A. Wagoner, who is superintendent of Del Rio Golf & Country Club, Modesto, California. *"Record crowds are attending the current Conference. We expect to exceed thes records in 1974."*

The Association over which Mr. Wagoner presides has a 3,800 worldwide membership. Headquartered in Des Plaines, Illinois, GCSAA serves as the clearinghouse of information in the production and maintenance of the world's finest golf turf.

GOLF COURSE SUPERINTENDENTS ASS'N. OF AMERICA

FACT SHEET

Membership — The Golf Course Superintendents Association of America is an international organization with over 3,800 members in the United States, Canada and other countries.

Local Chapters — Total of 91; 61 affiliated, 2 associated and 28 unclassified.

History — Organized on September 13, 1926, as the National Association of Greenskeepers of America; name changed to Greenskeeping Superintendents Association in 1938; became the Golf Course Superintendents Association of America in 1951.

Objectives — dedicated to better turf and better golf, specifically:

1. To promote research and the interchange of scientific and practical knowledge relating to the care of golf courses and turfgrass operations.
2. To emphasize more efficient and economical golf course operations and increase prestige for GCSAA and its individual members as well as the profession of golf course superintendency, which encompasses the production, maintenance and improvement of turfgrass.
3. To encourage cooperation with other associations and organizations whose interests parallel or complement those of GCSAA and to stress justice, benevolence and education to and for its members.

• INTERNATIONAL TURFGRASS CONFERENCE AND SHOW sponsored annually by the GCSAA; recognized as the most important and outstanding annual forum of the turfgrass industry. Special emphasis placed on golf turf development and its allied fields. The Equipment Show, a show within a show, enables manufacturers and suppliers to exhibit the latest products designed for golf course maintenance. First meeting held in Chicago in March 1927.

• SCHOLARSHIP AND RESEARCH FUND separately incorporated in 1956 to fulfill a recognized obligation to the future of golf through financial assistance to qualified and deserving students seeking careers in golf turf. Research grants are directed toward original research and to further expand knowledge of turf and turf management practices. *Nearly* $250,000 *has been distributed to worthy students and original research since the fund's inception. In* 1972-73 *a total of* $23,450 *was awarded to* 53 *scholarship recipients and nine research grants were made totaling* $13,170

• THE GOLF SUPERINTENDENT, GCSAA's official magazine (published 10 times annually) is specifically written and edited for the superintendent.

• CERTIFICATION provides a yardstick by which the capabilities and qualifications of superintendents can be measured and establishes defined levels at which he is expected to perform.

The Golf Superintendent's Job — Primary objective: to promote efficient, economical and up-to-date maintenance on golf courses. Duties: keeping tees, fairways, greens and landscaping in tip top shape; purchase, storage and inventory of equipment and supplies; hiring, training and directing personnel; keeping records on expenditures, weather and material application; preparation and administration of annual budget for his department; making reports on planning and progress to green committee; working with other committees and department heads; and progressive education by participating in GCSAA chapter activities, reading turf and golf publications, and attending Turf Conferences.

National Headquarters — 3158 Des Plaines Avenue, Des Plaines, Illinois 60018 — Telephone: (312) 824-6147.

COUNTRY CLUB MEMBERSHIP COST DEDUCTIBLE TO CORPORATION

A new revenue ruling illustrates that in appropriate circumstances a corporation may deduct the cost of purchasing country club membership for its employees.

The corporation in question purchased memberships from a country club located in the city in which it does business. The facilities of the club included dining room, golf course and swimming pool. Memberships were issued to the corporation under an agreement pursuant to which the corporation agreed to pay the annual membership dues for a specified period of years. The membership was limited to the use of the dining facilities.

Under the arrangement, the country club dining facilities were regularly used by designated employees of the corporation only for the purpose of entertaining prospective customers, negotiating business transactions and for the corporation's holiday and retirement parties.

The Service ruled that the amount paid by the corporation for the memberships constituted deductible business expenses. REV. RUL. 72-273.

TURF MANAGEMENT

(Continued from Page 1)

(Ca) in the soil. Other related factors are soil texture, soil moisture, pH, phosphorus availibility, and soil temperature.

The amount of *Fe, Al, and Ca* in the soil solution affects arsenic toxicity because these elements are *active in tieing up applied arsenic.* If equal amounts of all three elements were present in the soil solution, *Fe would tie up the most arsenic and Ca would tie up the least.* The arsenic released in solution from pure tricalcium arsenate would be one million times greater than the arsenic released in a solution from pure iron arsenate (5); Therefore, it is quite likely that higher amounts of arsenic would be necessary in soils where high reactive iron concentrations exist. Woolson, *et al* (7) indicate that Aluminum arsenate (Al(H2AsO4)3) is 62% as toxic, Calcium arsenate (Ca(H2As04)2) is 54% as toxic, and Iron arsenate (Fe(H2AsO4)3) is 13% as toxic as Sodium arsenate (Na(H2AsO4)). This means that the arsenate forms in the soil vary in toxicity. Superintendents utilizing arsenate in *Poa annua* eradication must content with different concentrations of Fe, Al and Ca in their soils. This indeed makes the annual use of arsenate a difficult complex venture.

Soil texture affects arsenic toxicity because the amount of sand, silt and clay in a soil indirectly determine the amount of applied arsenic that will be tied up by the soil. We know that for satisfactory control of *Poa annua,* more arsenic is required on clay soils than in sandy soils (2). The most likely explanation for this relates to the fact that sandy soils are generally lower in reactive Fe than clay soils (5). Therefore, the application of equal amounts of arsenic to a sandy soil and a clay soil results in more arsenic in the soil solution of the sandy soil. More arsenic in the soil solution means higher arsenic toxicity to the plant.

Soil moisture becomes important under conditions where it causes physical movement of surface-applied particles to low areas. The movement of applied arsenate to low areas often leads to toxic arsenic concentrations which kill both the undesirable *Poa annua* and the desirable bentgrass. A far more serious consequence of excessive soil moisture are the anerobic conditions that could bring about the reduction of the arsenate radical (H2AsO4) to the arsenite radical (AsO2). The *arsenite radical is* 100 to 1000 times more toxic to the plant than is the arsenate radical (3).

Soil acidity (which is expressed as pH) affects arsenate toxicity through its effect on the reactive concentrations of Fe, Al, and Ca. If we raise the pH of a soil from 5.0 to 6.5, iron and aluminum availability in the soil generally decreases. If reactive lime is deficient in this soil, the arsenate fixing capacity of the soil will have been reduced by this pH change. This means that amounts of arsenic safely applied before this pH change occurred could now cause increased toxicity because of the lower amounts of reactive Fe and Al present. The overall effect of soil acidity on arsenate toxicity is difficult to determine because consideration for the simultaneous effect of variable concentrations of Fe, Al, and Calcium would have to be made.

Phosphorus (P) availability in the soil affects arsenic toxicity because it, and the amount of arsenic applied, affect the final ratio of phosphorus to arsenic (P/As) in the grass plant. This ratio of P/As at the uptake sites on the plant roots will determine the final probability of arsenic substitution for phosphorus. If the arsenic is high or the P/As ratio is low at these sites, then it is likely that more arsenic than phosphorus will be taken up by the plant, leading to the eventual death of the plant. The addition of phosphorus to soils exhibiting arsenic toxicity has not always decreased arsenic toxicity. *The addition of phosphorus to arsenic-laden sandy soils low in reactive iron has actually* increased arsenic toxicity, however, *in soils where reactive Fe concentrations* are high, phosphorus additions generally decrease arsenic toxicity (4).

Soil temperature affects arsenic toxicity through its affect on arsenic availability. Higher soil temperatures increase the rapidity of arsenic fixation (1), and therefore one might expect applied arsenic on cool soils to remain in the soil solution for a longer period of time than an equivalent quantity applied to a warm soil. The true interpretation of the soil temperature effect is complexed by the fact that at higher temperatures, less arsenic is required to achieve a 50% growth reduction of *Poa annua* (1).

As you can see, a complete understanding of the factors affecting arsenate toxicity is difficulty. There are other factors, such as organic matter, and light intensity, that might affect arsenic toxicity. Superintendents contemplating the use of arsenicals for *Poa annua* control should be well aware of these complexities.

GOLFER'S GOLD IN CONN.

This area is fast becoming the Gold Coast of the professional golfing world.

For years the Westchester Classic has offered one of the largest bonanzas on the tour. Its $250,000 prize money puts it in second place among all the events on the PGA circuit.

Now the Greater Hartford Open (GHO) has gone big time and fattened its purse from $135,000 to $200,000. The astronomical increase can be credited to the new sponsor, Sammy Davis Jr. who is a member of the Highway Safty Foundation.

Both will use the GHO as a publicity vehicle.

The tourney will henceforth be known as the Sammy Davis Jr.-Greater Hartford Open. As a result of the increased pot and the Davis connection, the GHO should reap several benefits.

Many of the big names in the PGA world made a habit of skipping the competition at the Wethersfield Country Club because its Labor Day date caught them at the end of the season when the prize money offered did not seem as attractive as a weekend of rest.

Now the GHO with the seventh largest purse on the tour will be too inviting for the Palmers and Nicklauses to pass up. Their presence and Davis' cavorting should make the tournament a natural for network television.

With the Westchester, the GHO, and the women's Heritage Village Open in Southbury only a pitch shot away, local fans will have as good an opportunity as anyone in the country to see golf at its finest.

All this goes to prove is the Golf Course Superintendent's in Conn. must be doing something right.

CAGCS ANNUAL DUES

Annual dues statements were sent out after our annual meeting in November. As of now, there are many members who have not paid their dues yet.

It is clearly stated on our by-laws that dues are payable March 1st. Any member who has not paid his dues after 30 days from due date, may be suspended from his association without further notice.

All dues are made payable to the Conn. Association of Golf Course Superintendent's and sent to Mr. James MacDonald, 420 Hartford Tpke., Hamden, Conn.

CAGCS MEETING SCHEDULE

MAY 8, 1973 TUESDAY
Lyman Meadow G. C.
Golf 10:30 A.M. to 12 Noon
Business Meeting 5:00 P.M.
Dinner 6:30 P.M.
Host: George Groton
Speaker: "SHRUBS & FLOWERS ON GOLF COURSES"
Harry Meusel, Supt. Yale G. C.

Tee off time for golf will be from 10:30 A.M. to 12 Noon rather than 11:00 A.M. to 1:00 P.M. The board of directors will have a meeting one week before the monthly meeting, allowing the open business meeting to be held at 5:00 P.M., rather than 6:00 P.M.

THE GRASSCATCHER

by Bob Osterman

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months ago by our secretary, Dave Stimson, requesting correct address information, please do so immediately so we can have our new directory printed. If you have lost your card, please contact Dave.

During the Boston Conference, I attended the Newsletter Editor's Meeting and learned that the O. J. Nore Library at Michigan University will keep on file in binders, any chapter newsletters sent to them. I have sent to the library a copy of every issue of "*Conn. Clippings*" since it first came out in 1968. Anyone wishing information from these newsletters contact:

DR. RICHARD CHAPMAN
Director of Libraries
c/o O. J. Nore Library
Michigan University
East Lansing, Michigan 48823

CONN. ALSO WINS G.C.S.A.A. TEAM TITLE

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to Lloyd MacKenzie, the host Supt., Steve Huggins, the host pro, and both of their staffs. Along with Lloyds wife who handled the ladies program, they combined to make this most successful G.C.S.A.A. tournament to date. Start making plans now to compete at Anaheim, Calif. next year. We promise you won't be disappointed.

CHECK FIRST AID FACILITIES

It amounts to a black mark on an OSHA checklist if you haven't. The Occupational Safety and Health Administration says that if your place of business is not "in near proximity" to a hospital, clinic or infirmary, you are required to have a First-Aid kit approved by a consulting physician and an employee who is trained to render first aid. A member of your work force who has received special first aid instruction will qualify for the latter requirement.

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