THE CONN. CLIPPINGS

CONNECTICUT ASSOCIATION OF GOLF COURSE SUPERINTENDENTS

AUGUST 1971 VOL. 4 NO. 3

GOOD-BYE ASTRO TURF

by Walter W. Lowell
Superintendent - Golf Professional
Canton Golf Club, Canton, Conn.

The golfers at Canton Golf Club can now enjoy the familiar feel of real turf again under foot on our second tee. For two seasons we had an Astro Turf surface on our par 3, second hole.

There are pros and cons on Astro Turf and I'll try to fairly describe them both.

The maintenance is easier on Astro Turf to the extent that there is no mowing except around the edges. Around theTurf we spread a three foot wide collar of washed pea stone which was kicked into the adjacent grass which provided a problem for the mowers cutting near the tee. We hosed the Astro Turf off to keep it clean.

We had to buy special Astro Turf tees, which are very pointed, that could penetrate the surface. Each golfer was given an Astro Turf tee for use on the second hole. Many golfers just dropped the ball on the surface and hit the best they could. Others teed up in front or on the side of the tee in the nearby grass. Teeing up the ball seemed to be the most objectionable feature of the Astro Turf.

Secondly, if the golfer's swing wasn't very accurate, a poor shot would result. If the club head came down too sharply, the golfer would have a jolt thru his club and body.

After two seasons we had to lift the turf and relevel the inside base sand. When we removed the Astro Turf the underside had thousands of tee points sticking thru the material that needed to be removed.

(continued on page 4)

CERTIFICATION OF GOLF COURSE SUPERINTENDENTS

The Golf Course Superintendents Association of America Certification Program will be ready for all eligible applicants by the end of August.

Application forms will be mailed to the membership in August. All GCSAA members will be sent the application forms as a matter of information regardless of eligibility.

All eligible applicants will then be sent study materials, including tables and formulas, which they should study in preparation for the examination. Dates and locations of examinations will be announced well enough in advance to allow ample study time.

Only GCSAA members are eligible. Basic requirements for certification are that the member: (1) be currently employed as a golf course superintendent; (2) have held a Class A membership for at least three years.

POLLUTION CURE MUST NOT BE WORSE THAN DISEASE

by F. Ritter Shumway, President
Chamber of Commerce
of the United States.

Not since politicians discovered the importance of praising motherhood has there been an issue quite as safe — or as politically attractive — as pollution control.

Unfortunately, as often happens with good causes, this one is in danger of turninto a counterproductive witch-hunt.

There is regrettable tendency in American society — perhaps in all socities —

(continued on page 3)

THE GRASS CATCHER

by Charles G. Baskin

The new Federal Environmental Protection Agency (EPA), headed by William D. Ruckelshaus, is now setting up a strong regional system which includes 10 offices covering the entire nation. EPA will bring together federal water quality, air pollution control and pesticides regulation authority from the Department of Agriculture and other pollution regulatory activities. Connecticut is located in Region 1 and Lester Klashman has been named the interim regional coordinator. His office is in the J. F. Kennedy Federal Building in Boston, Mass.

There are clubs actively seeking golf course superintendents for Fall employment. One Conn. club is in need of a golf course superintendent immediately. Salaries are continuing to rise with the economy and in many areas at a faster pace. As an example, one club in the East is openly soliciting for a superintendent in the $20,000 - $25,000 range.

Frank Lamphier, superintendent at Aspetuck Valley Country Club, has accepted an invitation to speak at the 1972 International Turfgrass Conference on "The Superintendent and The Golf Car". The conference will be held in Cincinnati, Ohio, February 13 - 18, 1972.

Dave Stimson, Tumble Brook Country Club's superintendent, reports that their third 9 holes opened on Memorial Day weekend. Dave has been doing an excellent job at Tumble Brook since assuming the superintendency upon the retirement of Andy Lentine.

(continued on page 2)

CONNECTICUT ASSOCIATION OF GOLF COURSE SUPERINTENDENTS

President .....Charles G. Baskin
Vice President .....Robert Viera
Secretary .....Pierre Coste
Treasurer .....Charles Traverse

Board of Directors

Richard Bator — James MacDonald
William Dest — Michael Ovian
Frank Lamphier — David Stimson
John Perry

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.

Charles G. Baskin, editor
22 Lee Street
Waterbury, Connecticut 06708

WHAT DOES AN EXECUTIVE DO?

Some anonymous and tormented business executive once asked himself the above question and then sat down to write the following definition:

A business executive really has nothing to do, except . . .

1) Decide what has to be done; explain to someone why it has to be done; tell someone to do it; listen to reasons why it cannot be done, why is should be done by someone else, or at some other time.

2) Follow up and see if the thing has been done; discover that it has not been done; listen to excuses from the people who should have done it; and think up logical arguments to overcome the excuses.

3) Follow up a second time and discover that it has been done, but done incorrectly.

4) Reflect that it has taken two weeks to get something done wrong when in twenty minutes he could have done it right by himself. And to realize that such an idea would be demoralizing to his subordinates because it strikes at the very heart of their belief that an executive really has nothing important to do.

GET-TOGETHER FOR CHET JENKINS

On June 17th at the Lyman Meadows Golf Club, Chet Jenkins was honored by many of his friends, both new and old. (It was real nice to see Charley Baskin, Sr. there.)

Chet was presented with a watch and check.

It was a fitting tribute to a grand old guy who has serviced the golf industry so enthusiastically these many years and was a friend to most all those he met. All those attending that evening and those who could not attend, but took the time to write, extended to Chet their desire that he continue to remain with us in the years ahead. Congratulations Chet . . . .

William Dest

THE BALD EAGLE

The journal *Ecology*, published an article in 1921 titled, "Threatened Extinction of the Bald Eagle." The article states in part, "It is now fast becoming a rare bird in the United States proper, much rarer than most people, even most ornithologists, are aware."

Note the article appeared about 25 years prior to the start of civilian use of DDT and the other persistent pesticides.

In "Nature Ramblings", carried in Science News Letter, July 3, 1943, Frank Thone called attention to the declining bald eagle population. He pointed out that most eagles lived in trees near fish-filled rivers and not on inaccessible cliffs as popularly thought.

Thone went on to say, "So when the timber was cleared it was inevitable that the eagles had to go. Moreover, the cities grew and befouled the rivers with sewage and industrial wastes. The once teaming fish population vanished".

With their main source of supplies taken away, it was only natural that the eagles should vanish also.

These comments were printed about three years prior to the general use of DDT and other persistent pesticides.

Another reason for the decline in the bald eagle population is that the Territory of Alaska paid a 50 cents per head bounty on 115,000 bald eagles slain between 1917 and 1952. It has been only since 1940 that the eagle has been given Federal protection in the U. S.

Because of concern for this species, dead bald eagles have been autopsied and analysed for pesticide residue at the Patuxent Wildlife Center during the past several years.

Of the 76 bald eagles that died from 1960 through 1965, 54 (71 percent) died from causes related to man. Of these, 44 were shot, seven died of impact injuries, one was stabbel, one was trapped, and one was electrocuted. There were four cases unrelated to man, probably due to disease or old age. In the remaining 18 cases, the cause of death could not be determined.

An unemotional examination of the evidence indicates that man is primarily responsible for the decline of the bald eagle (through destruction of his habitat) and that the role of pesticides has been greatly exaggerated.

(Adapted from Dr. R. V. Gruenhagen,
Virginia Polytechnic Institute)
Pesticide Pointers, Univ. of Nebraska

EDITOR'S NOTES

This article is moving around the country at a good rate. I borrowed the article from Vaughn Holyoke, editor of the Maine Golf Course Supt. Assn's Newletter. Vaughn borrowed it from Kansas State Univ. Task Force Reports where it was already second-hand information.

THE GRASS CATCHER

(continued from page 1)

The Connecticut Agricultural Experiment Station Valley Laboratory at Windsor, Conn. marks its fiftieth year in 1971. Starting out as a facility to solve the problems of wildfire disease on tobacco, it has since been the means for productive research in many areas of Connecticut agriculture. Some of the many problems worked on at the Valley Laboratory have been blue mold disease, cyst nematode, air pollution damage, tobacco curing, root patterns in relation to tillage, plant water use, new fertilizers, insect control and behavior, weed control in nursery stock and turf, mixes for container nursery stock, potato insects and diseases, tomatoes and even cucumbers. Conn. can be proud of the work that has been accomplished at the Valley Laboratory.

Severe defoliation has been in portions of Connecticut's hardwood forests, most notably from Waterbury, south and west. This is the second straight year of massive defoliation in this area. Many of our Connecticut trees, especially oaks, have died because of repeated defoliation and many more will die as a result of this Spring's infestation of gypsy moth, canker-worm and elm spanworm. The use of plant protectants helped in the reduction of defoliation on many golf courses. Both aerial and ground spraying methods were used to protect the trees.

STOMATA AND THE POTASSIUM PUMP IN PLANTS

B. L. Sawhney
Department of Soil and Water

I. Zelitch
Department of Biochemistry

Conn. Agricultural Experiment Station,
New Haven

Stomata, the tiny pores on the surface of plant leaves, permit flow of carbon dioxide, oxygen, and water vapor for vital processes of plant growth—photosynthesis and respiration. Thus, if these processes could be regulated through artificial control of the stomatal aperture, savings in water consumption and increases in food production could result. For successful control of the stomatal aperture, however, an understanding of the mechanism of opening and closing of stomatal pores is essential.

We know that stomata in most plant species open in the light when the guard cells on either side of the stomata take up water and become more turgid than the adjacent cells on the leaf surface. Opening of stomata thus requires the movement of water into the guard cells and the adjacent cells. Sugars produced by photosynthesis in guard cells have long been thought responsible for water movement.

Recent investigations, however, suggested that accumulation of potassium in the guard cells is necessary for water movement, and hence for stomatal opening. We have tested this hypothesis by using the electron microprobe technique which permitted quantitative determination of potassium concentrations in regions smaller than one-millionth of an inch within individual guard cells. For qualitative estimates we obtained pictures of the potassium distribution in larger areas containing a pair of guard cells and adjacent cells. Our results show that stomatal opening is controlled by active transport of potassium into the guard cells.

We used tobacco leaves from greenhouse-grown plants and placed them in the dark for several hours so that the stomata closed. From these plants, leaf discs were cut, placed on water and illuminated to obtain open stomata. Then the discs were placed in the dark for varying periods to obtain different stomatal apertures. After these treatments, portions of the lower surface of leaves were quickly stripped off and freeze-dried under vacuum. The freeze-dried samples were then analyzed by the electron microprobe.

The number and brightness of the white spots is proportional to the concentration of potassium. It is clear that the guard cells of the closed stomate contain less potassium than the guard cells of the open stomate. The quantitative measurements of potassium concentrations showed that potassium in guard cells increased linearly as the stomatal aperture increased and the guard cells of a fully-opened stomate contained more than two and one-half times as much potassium as that of a closed stomate. The potassium concentration in guard cells of open stomata was sufficient to provide the solute needed to increase guard cell turgidity.

These findings therefore provide direct evidence that stomatal opening is controlled by active transport and accumulation of potassium in the guard cells. Movement of potassium (and an accompanying anion) into guard cells is thought to be caused by a potassium ion pump. The energy required to operate the pump may be supplied by metabolic processes that take place in the guard cells in light.

POLLUTION CURE

(continued from page 1)

to search for a villian behind every problem. Thus pollution must be the "fault" of "greedy" industrialists, concerned only with their "excess" profits.

Such reasoning ignores the fact that a few years ago industrialists were no more aware of the damage they might cause than were the citizens who permitted their municipal sewage to discharge — untreated — directly into local bodies of water.

And the citizens of those days demanded low taxes and inexpensive goods. they still do.

So we are faced with a problem that was many years in the making, and to which we all contributed.

But the militant environmentalists demand action NOW! They are blind and deaf to the ample evidence that in pursuing illconsidered solutions to long-term problems we may create short-term disasters.

We already have.

Because DDT remains in the environment, many areas have rushed to ban it. In the tropics, such bans have resulted in new waves of malaria. The World Health Organization estimated that a million cases of the disease resulted when Ceylon banned DDT.

Closer to home, the State of Maine was forced to rescind a 1967 ban on DDT to save its forests from destruction by the spruce worm. Nature, too, can kill a tree.

There are, of course, alternatives to DDT. But not all of them are readily available everywhere, and not all of them are equally effective.

The detergent industry was nearly compelled to adopt a chemical called nitrilotriacetic acid (NTA) as a partial substitute for the phosphate compounds suspected of contributing to one type of water pollution. But now NTA itself is suspected of being a far more direct threat to our health than phosphates.

The electric power industry, and its fuel suppliers, have been hounded to the point of irrationality.

Offshore drilling for oil, oil pipelines through Alaska, and oil tankers are all in disfavor for environmental reasons, yet we are seriously short of alternate domestic supplies.

New fossil-fuel generating stations in town are often opposed because of air pollution. They cannot locate out of town because of opposition to transmission lines, which are considered esthetically displeasing. They cannot use most of the available fossil fuels because of their high sulfur content. And the alternate use of nuclear power plants is opposed because it is feared that their coolant discharge may raise the temperature of the water which receives it.

Yet, the power companies are also criticized for increases in the cost of electricity, and for shortages of electricity.

The message of all of this is quite simple: It took us years to foul our environment, and it is going to take us years to clean it up. In the process, we must take great care to avoid creating new problems even bigger than the ones we are trying to solve.

Extremism in any cause, however noble, usually provokes a counterraction. The environmentalist cause is a good one. I would hate to see it discredited and forgotten by the American people because of immoderate conduct on the part of some overzealous crusader who are more adept at generating emotions than in digging out facts.

Extracted from the
Evergreen Chapter Golf Course
Superintendents
Edited by Dick Malpass

GOOD-BYE ASTRO TURF
(continued from page 1)

I was happy, to a point, with the Astro Turf, but the majority of my customers and members were not. We are in a business to make playing conditions as pleasant as possible and not to aggravate the golfers.

This past Spring a golfer asked for an Astro Turf tee and when I said he didn't need one anymore as the Astro Turf is gone and regular grass is there, he said, "Great, now we can enjoy golf again."

TAX INCREASE DENIED BY COURT

A District Court has ruled that golf courses must be taxed as "unique properties." Judge Irving Iverson made the ruling when he rejected a revaluation of the Minneapolis Golf Club that would have increased the club's taxes by 400 per cent. An assessor found the fair market value of the club's property to be $2,589,510. Judge Iverson, however, denied this increase and determined the market value to be $675,000 without the buildings. Judge Iverson said the assessor erroneously based his valuation on the assumption that the land was "ripe for residential development," and that the new assessment was "discriminatory, unfair, and unreasonable." Judge Iverson called the increase "almost confiscatory," and noted that the valuation was substantially higher than that on other private clubs in the same county. He pointed out that there was no indication that the club was interested in selling its property for any purpose, and that the assessor was not justified in valueing it as residential land.

An article in the Minneapolis *Star* noted that Judge Iverson has said that society is presently "deeply concerned with preserving open spaces for recreational purposes," and noted that the Minnesota Legislature recognized that concern when it established a special tax category for recreational land in 1969. The new assessment of the Minneapolis Golf Club had already been made when the 1969 law was passed, and so it did not effect this case directly. Under this law, recreational land is taxed as open space, so long as it is used for recreational purposes. When it is sold, or no longer used for recreation, the difference in taxes between the recreational rate and the rate for its other presumed use must be paid, going back as far as seven years.

Judge Iverson noted that there has been a trend toward the elimination of privately owned golf courses, either by sale to the community for public recreational purposes, or by sale for development. In the first instance, he said, the property is taken off the tax rolls completely; in the second instance, although it may bring in more taxes than when it is used for recreation, "open space is forever lost to the community."

Reprinted from:

USGA's Golf Journal

THE FOLLOWING COMPANIES ARE CONTRIBUTING TO THE SUPPORT OF THE CONN. CLIPPINGS:

William Dest, CAGCS member
Stolens - C-1, Arlington
C-19, Congressional
246-6279

The Chas. C. Hart Company
Wethersfield, Conn.
Robert Kennedy, CAGCS member
529-2537

Irrigation and Equipment Supply Co.
Milford, Conn.
Richard Hosking, CAGCS member
Richard Smith, CAGCS member
874-1096

Tom Irwin Co.
Rowley, Mass.
John P. Callahan, CAGCS member
677-7054

C. M. Jenkins Co.
South Glastonbury, Conn.
Chet Jenkins, CAGCS member
633-1256

The Magovern Company
Windsor Locks, Conn.
John Colt, CAGCS member
Lloyd Russell, CAGCS member
Curtis Stimson, CAGCS member
623-2508

O M Scott & Sons
Marysville, Ohio
Al Arison, CAGCS member
336-9890

Somers Turf Supplies
Orange, Conn.
Bill Somers, CAGCS member
795-4320

Turf Products Corp.
East Windsor, Conn.
Ed Swanson, CAGCS member
Alfred Purdy, CAGCS member
800 - 842-7333

CONN CLIPPINGS
Charles G. Baskin, *editor*
22 LEE STREET
WATERBURY, CONN. 06708

4

FIRST CLASS

Mr. W. R. Somers
208 Nan Drive
Orange, Conn. 06477