

Green is Beautiful"

ario Golf Superintendents Association

RNSHAW CRESCENT — ETOBICOKE, ONTARIO M9C 3M4 — TELEPHONE 622-9929



JANUARY 1978



PRESIDENT'S MESSAGE

At this time, I would like to take this opportunity to thank the Board of Directors along with all our members for the vote of confidence given me as your new President.

I would like to express my appreciation to Alan Beeney, the Past President, with all the Past Board of Directors for the successful year of 1977.

To the new Board of Directors, welcome.

My wishes for the New Year is that all our members of the association will continue to give their best effort so that we can continue the progress to achieve our goals in the association.

Best wishes to all our members and their families for a Prosperous and Happy New Year.

*Sincerely,
Paul Scenna
President.*

— O.G.S.A. EXECUTIVE FOR 1978 —

President, Paul Scenna. (519) 623-3292
Vice-President, Stuart Mills. (416) 270-0716
Secretary, Paul White. (416) 561-1216
Treasurer, Ken Nelson. (519) 433-5136
Past President, Al Beeney. (416) 877-2642
Golf, Bill Bowen. (705) 743-5010
Membership, Crests, Plaques,
Blake McMaster. (416) 451-1573
Meetings & Speakers, John Smith. (416) 878-7923
Bylaws, Rusty Waskman. (416) 623-4977

Roster, Bob Brewster. (416) 676-9777
Symposium 1979, Al Beeney
Nominating Chairman, Al Beeney
Executive Newsletter Editor, W. Hynd 239-9630
Social Committee, Stuart Mills
Turf Research Chairman,
Paul Dermott. (416) 247-9281
Welfare — East, Rusty Waskman
West, Ken Nelson
Central, W. Hynd

MONTHLY MEETING - OCTOBER 20th, 1977 BRAMPTON GOLF CLUB

Host: Blake McMaster

We have been fortunate the past 2 years in having a good day in October for this meeting, and as usual the golf enthusiasts were out in full force and enjoyed the playing condition of this fine golf course.

The meeting was highlighted by a colour slide show by Dave Gourlay and Bob Heron of last year's visit to Scotland and England on the occasion of the International Turf Grass Conference. This was a delightful trip obviously, and brought to a close a fine day.

O.G.S.A. ANNUAL MEETING - DECEMBER 13th, 1977 AURORA HIGHLANDS GOLF CLUB

Host: Alan Jones

This meeting had been postponed from the previous, due to a snow storm. Attendance was small but several lengthy discussions soon developed particularly on the subject of expanding the Association into Regions.

John Stoughton was presented with an Honorary Membership.

John has always been a regular attender of O.G.S.A. Meetings over the years and travelled further than most of us.

Golf Prizes were presented as follows:

Gross - 1st - Bill Bowen - Trophy

- 2nd - Hugh Kirkpatrick

Net - 1st - Doug Hoskins - Trophy

- 2nd - Ken Wright

Gross - Rod Hermitage - Green Cross Products

Net - Ron Craig - Spramotor



Paul Scenna presenting President's Plaque to outgoing President Al Beeney

O.G.S.A. CHRISTMAS PARTY ST. GEORGE'S GOLF & COUNTRY CLUB DECEMBER 2nd, 1977

Thirty-one couples had a good time in the Old World Charm of St. George's Golf Club, featuring rum punch by the fireside; turkey dinner and a live band.

Paul White snapped the following pictures:



Hosts Alice and Bill Hynd



L-R: Diana and Paul Scenna, Frances Wyllie



L-R: Barbara and Bob Brewster and Friend



L-R: Paul Dermott and Kimmo Salonen and friends



L-R: Bob and Daise Moote, Al Beeney

EIGHTH ANNUAL MANAGEMENT SYMPOSIUM HAMILTON GOLF CLUB JANUARY 12, 1978

Host: Stuart Mills

President, Paul Scenna, opened the proceedings with a few brief remarks; then host, Stuart Mills, presented a brief history of the famous Hamilton Golf Club as follows:

Welcome Gentlemen to the Hamilton Golf & Country Club in Ancaster. I am pleased to be your 1978 host Superintendent for this annual Symposium. At this time I believe a short history of HGCC would be of interest to you. Our Club dates back to 1894 when the Hamilton Golf Club operated a Golf Links on the Central Fair grounds in Hamilton adjoining the former Hamilton Jockey club property.

In 1895 a 9 hole course that was later expanded to 18 holes was laid out on Paradise Farm located where the present City of Hamilton course known as Chedoke Golf Club is situated.

In 1914 the Club purchased property here in Ancaster and retained Herbert S. Colt of Sunninghill, England, to lay out a new course. John Sutherland, the course Superintendent, cleared the grounds and seeding was completed in September of 1914. The course formally opened for play on June 1st, 1916.

On August 2nd, 1975 the "new nine" was officially opened and designated the East Nine. As well, several changes were made to the existing nine hole Short Course. Today, we have 27 Championship holes, plus, a Short Nine, consisting of par 3's and 4's, for a total of 36 holes for Golf.

This Clubhouse was officially opened on June 27, 1929.

The Club at Ancaster has had only 3 professionals in it's long history. The first was Nicol Thompson, who was succeeded in 1945 by Dick Borthwick, who retired in 1974, and was followed by Ken Steeves, who is here presently.

Also there have been only 4 Superintendents. The first was John Sutherland, then Ed Walls, father of our present Senior Assistant, then Mr. John Harris, whom many of you know. Mr. Harris retired in 1975.

Chairman, Norm McCallum, presided over the morning session in his usual efficient manner.

TERRY DWYER, Meterological Officer, Mount Hope Airport, spoke about "Understanding the Weather", and showed an interesting film "In All Seasons".

For specialized weather information across the Province of Ontario, Golf Superintendents can call:

Mount Hope	679-6065
St. Catharines	688-1847
Kitchener	648-2571
London	451-3390
Kingston	389-3252

Sarnia	542-6065
Windsor	969-2740
Peterborough	743-5852
Toronto	676-3020

GEORGE CUMMING, Superintendent and Assistant Director, Royal Botanical Gardens, Burlington, Ontario, then gave us ideas on "Clubhouse Landscaping" with a colour slide presentation.

DR. JACK EGGENS, University of Guelph, who is well-known to all of us concluded the morning lectures with a report on the effects of over-seeding on Poa Annua swards. It appears that several cultivars of Kentucky Bluegrass competed favourably the first 50 days, but over 150 days Poa Annua was the dominant species.

This is an interesting study to Superintendents, and Jack expects to have more on this subject at a later date.

Alan Beeney chaired the afternoon session in which six golf superintendents spoke on varied problems and projects.

The topics were very well delivered and received, and intend to include them in later editions of this magazine.

KEN NELSON, opened the afternoon proceedings with a talk on "Association Re-organization". This proposal was well aired at our Annual General Meeting and a committee is being set up to investigate the possibilities.

STEVE MILLER, gave an excellent presentation on how to go about "Building the Maintenance Facility", assisted by a slide presentation.

JIM WYLLIE, "The Spring headache that lasted all summer 1977" and "Hailstorm damage 1976" proved how fickle Mother Nature can be.

We all know how fickle our members are and very quickly forget the good years. Jim was aided by colour slides.

RUSTY WASKMAN, "Turf Pests" - gave an account of his headache with nematodes on greens last year, the job doesn't get any easier.

DOUG SUTER, "Riverbank Control" and "Bridge Construction". The Credit River can be a monster to the golf courses in which it passes through. It looks like Doug is gradually winning the battle in controlling the problems.

JOHN SMITH, "Golf Course Drainage". An excellent account at relieving a problem efficiently and economically.

It is significant that all speakers had slides and graphs to back up their talks - as the saying goes, a picture tells a thousand words.

Thanks to Paul White, Symposium Chairman Host Stuart Mills and everyone involved.

Altogether a great day for the seventy odd Superintendents, Assistants and Associates present, and the food was terrific.

**J. L. EGGENS - ASSOCIATE PROFESSOR,
DEPARTMENT OF HORTICULTURAL SCIENCE
UNIVERSITY OF GUELPH**

Annual bluegrass continues to be an unreliable grass during the middle of the growing season and the summer of 1977 was no exception. We received numerous calls about problem fairways which for no apparent reason began to turn brown and die out in large patches in spite of good irrigation and high management.

During a telephone conversation one day in the middle of August, Mr. Ken Wright, Superintendent of the Northwood Golf and Country Club, was expressing exasperation about the difficulty of maintaining annual bluegrass on some bad fairways, particularly #3, while #18 fairway was comparatively easy to maintain. The "bad" fairways continued to show drought stress despite a good irrigation program while the "good" remained relatively stress free and in good playing condition. He was under the impression that the annual bluegrass on the "bad" fairways were of an inferior type to that which populated the better fairways. He felt that the tendency to overmanage the grass, because the facilities were available, particularly irrigation, was promoting the growth of a selection or strain of annual bluegrass which was more intolerant to summer stress conditions.

Ken was kind enough to provide me with representative samples of his good and bad fairways, particularly #3 and #18 for examination under controlled conditions. The plugs were potted up in a Fox sandy loam soil and grown on as source material in the greenhouse under daily 2 cm (¾") mowing height and good fertility using a soluble 20-20-20 at 200 ppm.

It has been shown that while annual bluegrass is generally classified as a tufted, bunch-type annual, it will persist under low mowing and good management as a prostrate creeping type which roots at the nodes and has a perennial nature. Hovin (1957) in an article in the Golf Course Reporter attributed this variability to its hybrid origin. Beard (1973) in his book, "Turfgrass; Science and Culture", provides a good review of the characteristics of the annual and perennial types in his section on annual bluegrass. In a comprehensive paper "Poa annua" presented to the California golf course Superintendents in 1974, Gibeault summarized the main differences normally attributed to the annual and perennial types as follows:

Table 1: "Annual" annual bluegrass "Perennial" annual bluegrass

1. Upright growth habit	1. Creeping growth habit
2. None or few secondary tillers per culm	2. Numerous secondary tillers per culm
3. Prolific seed production	3. Minimal seed production
4. Seed following formation is dormant	4. No seed dormancy
5. Minimum rooting on tillers	5. Several adventitious roots on prostrate tillers
6. Six nodes or less per tiller	6. Greater than six nodes per tiller

Turgeon, from the University of Illinois in his research on chemical control of annual bluegrass, also noted that the perennial biotype was more hardy, required a greater concentration of endothall to kill, tended to develop in regularly irrigated areas and was more stress tolerant.

To determine if the apparent lack of drought stress tolerance on the "bad" #3 fairway was due to a reduced capacity to produce a good root system, the rate and amount of adventitious root formation of the annual bluegrass samples was evaluated. Some cuttings were taken Monday, August 29th and rooted in petri dishes.

Table 2: Mean adventitious root length and root number after 8 days

Fairway	Mean Root Length (mm)	Mean Root Number
#18	29.3	3.5 a*
# 3	27.4	4.5 a

*means followed by same letter do not differ significantly at the 5% level of probability.

There was no difference (Table 2) in the ability of annual bluegrass plants from #3 and #18 fairways to produce adventitious roots nor in the mean length of roots produced. As the absorbing root system of annual bluegrass is produced and maintained by adventitious root production, it appears that the annual bluegrass on #3 fairway had as good a root system or at least the potential to develop as good a root system as the annual bluegrass from #18 fairway. The lack of stress tolerance, described by Ken as an apparent drought stress, is not readily correlated with a poorer root system.

On Monday, August 29, 48 pots each of annual bluegrass from #3 and #18 fairways were established. The method was to gently tease rooted tillers apart and prick them out into a Fox sandy loam soil in a 3 inch pot. Considerable attention was paid to the after-transplanting care. All plants established successfully. After 25 days, the vigour of each potted annual bluegrass plant was evaluated by rating the plants from 1-10, with 10 being the largest, most vigorous plants. From the problem #3 fairway, there were more smaller plants, (Figure 1) plants which did not produce many tillers or spread quickly, than from the more easily managed #18 fairway. A large percentage of plants from #18 fairway were more vigorous and more prostrate in habit. Perhaps poor nutrient status or some undetected disease or condition might have accounted for the difference in vigour of annual bluegrass plants from #3 fairway. However, any detrimental factor such as smaller plants, significantly lower carbohydrate status, or disease, would have influenced adventitious root production. Since the rate and quantity of adventitious root formation was not significantly different (Table 1), the rate of establishment of the tillers in the 3" pots should have been essentially the same. During the establishment period, no different response to stress was noted and both appeared to establish equally well. The differences noted in Fig. 1, would appear to be as Ken Wright has suggested, a weaker, less vigorous strain of annual bluegrass being promoted or developed on some fairways.

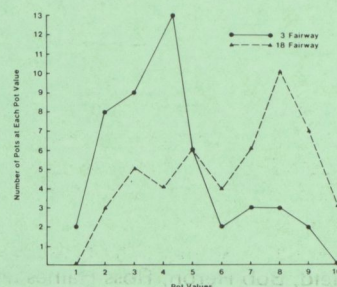


Figure 1 Evaluation of vigor of annual bluegrass plants from Northwood 3 and 18 fairway by showing number of plants at each value at a rating of 1 (poor) to 10 (strong vigorous plants).

What does this mean? Are the plants on #3 more 'annual' and on #18 fairway, more 'perennial'? From Table 1, both should be perennial as both came from consistently irrigated fairways. Cordukes, in the Greenmaster, reviewing his work on annual bluegrasses collected across Canada found both the upright and the prostrate forms in his collection but "found no association of growth habit with sampling site". In other words, those annual bluegrasses obtained from putting greens were not mainly prostrate, perennial types and those from lower management areas were not predominantly upright annual types.

What's happening now? The plants from #3 and #18 fairways are being evaluated for their response to fertility levels and drought stress under conditions which simulate golf course fairways. Bill Cordukes has sent seed of 20 of his "best" annual bluegrasses collected from across Canada. These have been established in 3" pots for evaluation. One thing is for certain, all of the annual bluegrass plants collected from a local unirrigated site were upright, tufted plants and fitted Gibeaults "annual" description very closely. More on the progress of this project in future newsletters.

HOW TO BE A PROFESSIONAL

It is my precept (principle) that professionalism cannot be taught, for example, as a down lineman can be taught to block an opponent or a golfer to strike a particular shot. I believe it to be inherent in the individual. There is no recipe, and even if there was, it would be useless. We are all different and each of us is capable of reaching within ourselves to do something we didn't know how to do at a moment when we didn't know we had to do it. That requires that one always be prepared for anything that may develop. A professional is always prepared to move in on a problem. Lack of movement, or preparedness, would indicate that one has not been aware of what has been going on around him. The true professional has assembled in his mind all the events (civic, sociological and political) that daily occur around him and that assemblage of information dictates automatically what his actions will be for the next minute, the next, and the next, and on into time. Superimposed on that, and interrelated with the foregoing, is his goal for his existence. If the attraction of the attainment of the goal is strong enough, there will be no wavering from the course toward it. Usually, the course for the goal is set early in life, yet, it is natural for some delays to occur and some sidetracks of short duration may have to be taken. If the course is changed permanently, then the original goal must not have been very attractive. The goals associated with true professionalism are like a railroad with two termini. One starts at one terminus as the beginning of the trip and ends at the other, perhaps having to go "into the hole" on sidetracks at times before reaching the other terminus.

So, the true professional is in reality an actor on the stage of life and his direction comes from forces off-stage. The performance of the role which he acts out is determined by the attributes he possesses.

To achieve professionalism at its best, we must start with the individual. What kind of a professional is a GCS or other turf manager? What are his attributes? I submit that the goal of a GCS, in its whole, is SERVICE; service to the entire turf industry through his employer, the golf course. The service will be LOYAL and MORAL under **any** and **all** circumstances! Primarily, we must adhere to the principle that the golfer must be satisfied. Without this individual we would not have a turf industry of any consequence. It doesn't matter that he knows nothing about our part of the business yet thinks he does; he must be satisfied! Certainly, we won't condescend to his every wish but we will, subtly, educate him into believing that he has the fairest, finest, and most enjoyable track he can get for his money. It is the same with our administrative superiors, regardless of administrative structure. We will communicate with them in our best manner all the time.

It matters not how obstinate they are; it's up to **you** to find and exploit the weaknesses in their defense. You don't become piqued and resentfully retaliate; because, if you do, you're no longer a professional. It may be necessary to take a side track to regroup your thoughts. And it's true that you may not be able to get out of that side track. So what? If you did the best you could, that's all that can be asked of you! Anger is never to be used in our relationships with anyone. Not only does it degrade, it may lead to violence and most importantly, it is the best way to get a heart attack. Your job produces enough tensions leading to heart attack without being helped by anger. Finally, loyalty, a two-way avenue, will insure the success of any enterprise in time regardless of the differences existing between administrator and manager and other co-workers.

Excerpts from paper by George M. Kozelnicky, Assistant Professor of Plant Pathology and Plant Genetics, University of Georgia at 12th Annual Wisconsin Golf Turf Symposium, October 26-27, 1977.

EDITOR'S NOTE

I had the occasion to play Brampton in the summer, the course was beautiful, but the most impressive feature at Brampton Golf Club is the flowers, they always look so luxuriant and brilliant.

Brampton Golf Club, when seen from the air looks featureless and flat, having been built on flat, sparsely treed property. This is a deception though, the layout has always been an interesting one, with many dog legs and strong finishing holes, and maturing tree plantings.

The O.G.S.A. have had meetings at this Club since the course was built in the early 1960's, host Superintendents being Roy Cornfield, Bob Heron, Ross Haines and now Blake McMaster.

It seems a shame that during this time of active participation, there are many golf clubs in the area which have never hosted an O.G.S.A. meeting during this time.

GREEN IS NOT GREAT

By Alexander M. Radko

A group from Britain visited the Green Section research grounds at Beltsville, Md., early in the 1950s when interest was high in the warm-season grasses in that area. Dr. Fred V. Grau, who was Green Section Director at the time, escorted the visitors through the grounds and enthusiastically described the studies that were being

done. One was the Zoysia plot, which happened to be bleached tan in color because it was late October and Zoysia was dormant. After Dr. Grau finished his glowing discourse on Zoysia, one visitor, whose voice was exceptionally heavy and whose whisper could carry a long way, said, "That's the first bloody time I've heard so elegant an address on dead grass!"

This remark typifies what most people think about turfgrass—if

it's green, it's alive; if it's any other color, it's dead or dying! Many people also have the mistaken notion that the greener the grass, the healthier the turf. Unfortunately this notion is especially strong among golfers. They equate dark green with good playing turf, and they often refer to it as beautifully lush turf! Those trained in the study of turfgrass cringe at this description. To them lush means undesirable, soft, succulent, out of

condition, filled with juice or liquid—as the case may be. A lush growth often results from the needless race for color despite the fact that color has minimal effect on turfgrass quality for golf.

Nature has provided grasses with much genetic diversity. This includes wide differences in color, ranging from dark blue-green to light yellow-green and every intermediate shade. It is interesting to note that Europeans prefer the light green grasses while Americans very definitely favor a deep blue-green, similar to the dark color of Merion bluegrass. There are bentgrasses referred to as the Washington types that take on a purple cast with cold weather. Cohansey (C-7) creeping bentgrass is an example of yellow-green, and although it makes an outstanding putting turf, it isn't widely accepted because of its very light color.

Grasses also turn tan with cold weather. During the winter, northern and southern grasses turn differing shades of tan depending upon the location where they are grown. Despite this, even the most drastic color change does not affect the playing quality of well-managed turf, a fact that is strikingly evident with warm-season grasses during the winter. Although dormant and off-color, grasses hold the ball nicely for fairway play. Color, therefore, is not the most important consideration. **GOLF IS PLAYED ON GRASS, NOT ON COLOR!**

Why this obsession with color? Golfers like to brag about the color of their golf course; they equate dark green with health, they take pride in saying that "our course looks healthier than yours!" They also complain about their courses; they compare some neighboring course from a distance (where, indeed, the grass always looks greener) or they compare the course they played when growing conditions were ideal with the condition of their own clubs at times of stress when growing conditions are poor. Unfair? Yes, but it's difficult to overcome such pressure once it circulates within a membership. Too often such comments force management to say, "If

that's what they want, that's what we have to give them." It takes a very strong personality to stand up to 300 members and say, "You are wrong! My program is the best long-range direction for the club, we'll do it my way completely and totally!" The usual result is a compromise in program, sometimes doing things more for cosmetic purposes and not because it's the best thing to do.

The pressure of a membership indeed has great bearing on the golf course management scene. It has spawned *Poa annua*-oriented thinking because in reality this is what some memberships want. (*Poa annua*, an unreliable annual grass, is considered a weed by some, but a good turf cover by others.) The result is a forced growth of grasses that makes them uniformly greener, but this does not necessarily mean the condition is better for golf. A forced growth is not a healthy growth! Without question it is also a large part of the reason why so-called "winter rules" prevail at many golf courses today despite adequate budget expenditure. If memberships occasionally would accept off-color areas throughout their courses during the playing season, they would be able to play the ball as they find it for a greater part, if not for all the golfing season.

Turfgrass, as any plant, has varied cycles of growth. Warm-season grasses begin growth in the spring and show their strongest growth in summer. When cold weather comes they go into a period of semi-to total dormancy, depending upon the degree of cold experienced in any specific location. All growth begins in spring as air temperatures rise above freezing. Growth is slow until the soil warms and winter moisture disappears. Cool-season grasses go into their stress period in summer; they enter a period of semi-dormancy, which is a resting stage of reduced metabolism, until cool nights prevail in late summer. Then they resume good growth throughout the fall. During winter they go dormant with freezing weather and remain in that condition until spring. This is their yearly cycle; there is no way to change it and

attempts to force growth or to force color can have only a harmful effect on their *healthful* growth. In spring, therefore, cool-season grasses take time to regain their normal color. Don't hurry it by watering and fertilizing too early. These practices weaken the turf, make it soft and succulent, and more often than not impose a greater stress on the turf during difficult periods of summer.

Early watering is difficult to justify. Grasses don't die in the spring from lack of water! Normally, winter and early spring precipitation is adequate to provide for early season grass needs. It is at this time that grasses have the opportunity to develop deep root systems that are so necessary for healthful growth throughout the rest of the growing year. Early irrigation encourages shallow roots. Grasses are much the same as humans; they, too, can be conditioned to a way of life and never know any other. The time to be rough and still get away with it is in the early spring. What is done during this stage of growth has a strong bearing on how the grasses perform during the rest of the year, especially during stress periods.

So the grass isn't green! So the greens don't hold well for the first month of play! So what? This is the time of year for the player to work his swing into the groove for better summer play; similarly, this is the time for grasses to work themselves out of dormancy, to condition themselves for the tough road ahead. There is a big difference between growing grasses for golf and growing grasses for exhibitions. Utility grasses must be hardened so that they can serve their purpose. They must be disciplined and conditioned for traffic, abuse and wear under trying conditions of close cut. This is tough treatment but toughness is necessary for their healthful performance when the chips are down. If members would accept this as a way of golf course life, it would be easier to develop permanent grasses in place of *Poa annua*.

There is another fact of life in irrigating golf courses. Terrain is varied. Slopes, mounds, hills and depressions complement whatever

level areas are to be found. Soils vary too, in depth as well in as composition. Sand, gravel, rock or ledge permeate areas of golf course property, and soil types vary, sometimes slightly, sometimes greatly. How is it possible, therefore, to irrigate uniformly when water runoff and water penetration are so variable?

You can't!

If you want to keep the high spots and rock ledge areas green in summer, you must overwater the adjacent areas. If you set your pattern of irrigation to favor the low areas, then the high spots suffer. The point is that there is no uniform way to satisfy all conditions of soil and terrain in irrigating golf courses. Something must suffer, and the agronomically sound direction to pursue is to water only enough to keep grasses alive without serious regard for the development of off-color areas.

Overwatering is one of the cardinal sins of turfgrass management. If your course doesn't have off-color areas under conditions described, then chances are your turf is being overwatered to satisfy the membership's "keep it green at all costs" edict—whether it favors *Poa annua* or not!

This is another reason why turfgrass managers throw their hands up and sooner or later follow the path of least resistance. Why fight it if their members play golf on color?

Poa annua is the perfect answer for a good portion of the year. From the members' viewpoint water is the answer to keeping grass green. After all, when an expensive system is installed, the members will take no excuses for grasses turning off-color; if the grass isn't solidly green, then the man doesn't know his business. Let's fire him and get someone new! What a misconception! What an unfair, amateurish appraisal! However, the old axiom applies: "The boss may not always be right, but he's always boss!"

Fertilizer also promotes color in turfgrasses. Nitrogen can modify the natural color of grasses slightly, making them a shade darker green than normal, especially when they are heavily fertilized. Color can be

induced early in spring by applications of nitrogen. This is forced growth, inducing faster growth than the plant would make otherwise, an accepted practice, but only if it is timely and controlled. We have already said that grasses, too, are creatures of habit. If you feed them heavily, they come to expect it. Heavy feeding, however, induces heavy and thick-bladed growth. If grasses are overstimulated and are fed too early, their growth is soft, succulent and less capable of supporting the golf ball. Hungry grass, on the other hand, is tough grass; blades that are hungry and lean support the ball well and interfere least with the clubhead's progress through the ball. When the grasses are ready to move, only a little help from fertilizer will provide healthful growth. It's important to wait for signs that they are ready for food. This is good agronomic practice. This is what most superintendents would do if they managed only for the turfgrass needs.

Mowing also has a bearing on color. The higher the cut, the easier it is to keep grasses green and the better the color, especially during periods of stress. The mowing height, the mowing frequency and the mowing pattern each influences health and color. The closer the grasses are cut, the better they play. The closer they are cut, the more difficult it is to keep them uniformly green. Again, terrain and soils have a strong bearing on the performance of grasses on certain areas. The closer the cut, the more difficult it is to manage water properly. Water application is more critical here again, if it is pointed towards the preservation of the permanent grasses. This means a low amount of watering. *Poa annua* always benefits from overwatering. In the days before fairway irrigation, grasses were often mowed at 1¼ to 1½ inches. When the grass was dry, this cut was not objectionable because dry grass blades are thin and rigid and the clubhead can move through the ball easily. The unwatered grass is light and firm, while the watered grass is soft and heavy. Unwatered grass allows a firm surface; heavy watering results in a soft, spongy

turf and soil and, therefore, the golfer loses some control over his shots. A good example of this phenomenon now exists on unwatered rough areas. Find a spot and try it for yourself. The problem, however, under completely unwatered conditions is a lack of turf uniformity and density. Eliminating water obviously is not the answer, just as too much water is not the answer, either.

The solution lies in a management program somewhere in between. The British system of course management for the most part represents the least watering principle, the tough management of grasses, the *laissez faire* doctrine of allowing grasses to fend for themselves and encouraging the fittest to survive. They describe the American way of management as "the manufactured look," one that tends to favor weaker grasses through management and maintenance techniques, thereby promoting a weak overall stand.

Somewhere in between is the answer, but for better golf, in my opinion, the British style of management is the system to follow. This is especially true since economic, ecological and environmental factors are now so much a part of golf and will become even more influential in the future.

Finally, the race for color has had a solid impact on budgets. Water, energy, fertilizer, chemicals, manpower and equipment are now more costly. As grass growth is forced with excesses of water and fertilizer, more disease, insect and *Poa annua* problems result. The more the grass is forced, the more the need for additional man-hours of mowing time.

Equally important are the increased time and cost of parts required for conditioning and repair of equipment. The race for color has had a solid impact on golf course management. It's time to get away from the manufactured look. Let's go back to emphasizing natural turf growth, to growing tougher grasses. Let's go back to playing golf on grass, and not on color!

ALEXANDER M. RADKO is the National Director of the USGA Green Section.

President
PAUL SCENNA
Cambridge, Ontario
(519) 623-3292

Vice-President
STUART MILLS
Ancaster, Ontario
(416) 270-0716

Secretary
PAUL WHITE
Hamilton, Ontario
(416) 561-1216

Treasurer
KEN NELSON
London, Ontario
(519) 433-5136

Directors
BILL BOWEN
Peterborough, Ontario
(705) 743-5010

BLAKE McMASTER
Brampton, Ontario
(416) 451-1573

JOHN SMITH
Milton, Ontario
(416) 878-7923

RUSTY WASKMAN
Oshawa, Ontario
(416) 623-4977

BOB BREWSTER
Mississauga, Ontario
(416) 676-9777

PAUL DERMOTT
Etobicoke, Ontario
(416) 247-9281

BILL HYND
Islington, Ontario
(416) 239-9630

Past President
AL BEENEY
Georgetown, Ontario
(416) 877-2642

FOR SALE

1977 TORO WORKMASTER

**MUST BE SOLD TO
REDUCE INVENTORY**

Used Only 150 Hours

**This Machine is Virtually New at
\$4,000.00**

Apply To:

**AL DRAPER,
Greenhills Funland Ltd.
R.R. #3,
Lambeth, Ontario N0L 1S0
Telephone: 519-652-5553**

— MEETING DATES —

February 12-17, 1978

**G.C.S.A.A. Conference
San Antonio, Texas, U.S.A.**

March 5-8, 1978

**C.G.S.A. Conference
Hotel Toronto
Toronto, Ontario**

ONTARIO GOLF SUPERINTENDENTS ASSOCIATION

Box 63, Islington, Ontario M9A 4X1