

"Green is Beautiful"

Ontario Golf Superintendents Association

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



MICHIGAN & BORDER CITIES

JOINT MEETING
MEETING

O.G.S.A.

TUESDAY, APRIL 28, 1981

ESSEX'S GOLF & COUNTRY CLUB

TEE-OFF BEFORE 2:00 P.M.

DINNER 6:00 P.M.

(JACKET & TIE)

COST \$15.00 — \$20.00 PER PERSON

CONFIRM BY APRIL 24/81

PHONE (519) 734-1251

ATTENDANCE RECORD SET AT ANAHEIM

An all time record attendance of 7,713 people was set at the 1981 Convention at Anaheim, California. Included in the total were the largest group ever to attend from Ontario. 25 Superintendents participated in the G.C.S.A.A. Golf Tournament at Industry Hills. Dan Meyers from Temple Terrace, Florida was the low gross winner. Several Ontario Supt. took home prizes as there were gross and net prizes back to 13th position in all divisions. Industry Hills was a tough test of golf for anyone who hadn't played golf for a few months. The courses were in excellent shape considering the Zaharias Course was only seeded 8 months previous to the tournament.

Once again the Equipment show was the finest in the world. The lectures were very well attended with some sessions being hard to find a seat.

Special thanks to the Toro Company for their Annual Luncheon and to Duke Lawn for their hospitality suite for the Canadian Superintendents.

The golf courses in California welcomed all superintendents and we were able to play golf on some fine courses, including Riviera Golf Club where they hold the Los Angeles Open and the Los Angeles Country Club. The fellows who played the L.A. Country Club said it was one of the finest conditioned golf courses they had ever played in the South. They had just erected a new maintenance building at a cost of \$850,000.

"BEAUTIFUL BRITISH COLUMBIA, IT'S TRUE"

The C.G.S.A. Conference in Vancouver set a record attendance of 750 people. The B.C. Superintendents ordered us some sunny 50-55°F days. The daffodils were blooming and Crab Trees in blossom.

The C.G.S.A. Tournament was won by Rod Hermitage with Hugh Kirkpatrick taking low net prize. Congratulations Ontario. Shaugnessy G.C. and Point Grey G.C. were both fine layouts but extremely wet. 64 golfers participated in the Tournament.

The Convention was a great success. It was well attended and well organized. The educational part of the program was better than the G.C.S.A.A. Conference. If you have never attended one of these Conventions it is well worth it. Here is a list of Conventions until 1985.

G.C.S.A.	G.C.S.A.A.
1982 - Toronto	New Orleans
1983 - Edmonton	Atlanta
1984 - Toronto	Las Vegas
1985 - Vancouver	San Francisco

TID BITS

Congratulations to:

1. Jim Wyllie for becoming Vice-President of G.C.S.A.A.
2. Blake McMaster for becoming Ontario Director of G.C.S.A.A.
3. Dan Uzelac for becoming Director of Michigan Golf Superintendents Association.

4. Randy Price for becoming Course Superintendent at Markland Woods Country Club.
5. Bob Heron for becoming new Superintendent at Mississauga Golf and Country Club.

REPORT ON PESTICIDE SYMPOSIUM — MARCH 9, 1981

By Barry Endicott

New chemicals are not being developed because of a poor payoff, due to high cost of research and high safety regulations. In the future, fewer chemicals will be available.

Dioxin. Some are extremely toxic while others are not. Toxic dioxins are found in esters of 2, 4-D but never found in amine solutions. 2, 4-D amine is safe when used according to the directions and it is better and cheaper than other herbicide types which could be substituted for 2, 4-D. 2, 4, 5-T and 2, 4, 5-TP are the only herbicides which contain the hazardous 2378 TCDD dioxins. These dioxins move through the soil, yet resist leaching. They resist bacterial breakdown and once on the soil particle they don't breakdown in sunlight.

Pesticide Regulations. Re-evaluation is a normal procedure and it happens to all chemicals. At this time butyl ester formulations have been banned and manufacturers have been asked to remove dioxins during the manufacturing of 2, 4-D herbicides by 1982.

Alternatives to 2, 4-D:

- Use nothing—can we tolerate weed?
- Mechanical —too expensive
- Biological —not practical or possible.
- Mecoprop —acts slowly and not good on dandelion.
- Dicamba —long lasting residue and not good on plantain.
- Glean —a new chemical that appears to have good results at low dosages.

Alternatives to 2, 4, 5-T in brush control:

- Round-up —non selective and should only be used as a spot treatment.
- 2, 4-D —less active for many woody species.
- 2, 4-D/dichlorprop (Silvaprop) —control many species and is 2378 TPDD dioxin free.

Summary: 2, 4, 5-T was banned because of a study that has now been proven invalid. We must continue to oppose the banning of chemicals that are reported to be hazardous if these claims cannot be backed-up by scientific evidence. Since future trends are the development of fewer pesticides, we cannot afford to lose the pesticides we have today which are safe when used according to directions.

ANTHRACNOSE — REDISCOVERING THE WHEEL

By J.M. Vargas Jr., Associate Professor
Michigan State University

Anthracnose, caused by *Colletotrichum graminicola* (Ces) Wils., is an important disease on annual bluegrass, fine leaf fescue and perennial ryegrass. Anthracnose was originally described as a disease of annual bluegrass (*Poa annua* L.) in 1954 by J. Drew Smith (3). He demonstrated its pathogenicity and included excellent photo micrographs (pictures taken through a microscope) of the infectious process in the article. Couch (1), in his book on turfgrass diseases, described anthracnose as an important disease on many turfgrasses, although not annual bluegrass. However, in a more recent article, he reversed his earlier opinion and now believes *C. graminicola* is only a saprophyte (2). Vargas and Detweiler (6) and Vargas (4,5) found severe anthracnose infections associated with the loss of annual bluegrass fairways and greens during the warm summer weather. *Colletotrichum graminicola* was isolated and subsequent inoculation experiments in the laboratory supported Smith's (3) earlier conclusions that *C. graminicola* was a pathogen on annual bluegrass and caused the disease called anthracnose. This research was not published per se since the pathogenicity of *Colletotrichum* on annual bluegrass was demonstrated 20 years before. To publish date showing *C. graminicola* to be a pathogen of annual would be equivalent to someone publishing an article on how he had rediscovered the wheel in light of Smith's earlier work (3) and the fact that it was described as a disease in Couch's Diseases of Turfgrass.

The significant discovery was not that *C. graminicola* caused anthracnose on annual bluegrass, but that something other than direct high temperature kill or "wilting" was responsible for annual bluegrass loss during high temperature stress. Anthracnose appeared at the time to be the major factor responsible for the annual bluegrass loss (4,5,6,7,8). This belief was based on the large amounts of anthracnose (acervuli) present on the diseased plants, inoculation studies with *C. graminicola* and the fact that the only other pathogenic fungus isolated was *Helminthosporium sorokinianum* (syn *Drechslera sorokinianum*), the cause of leaf spot. *H. sorokinianum* was originally ruled out as a major factor because the benzimidazole systemic fun-

gicides (benomyl, thiophanate-methyl and thiophanate-ethyl), which gave excellent anthracnose control, were reported not to be effective against *Helminthosporium* disease whereas laboratory bioassays showed the benzimidazole fungicide to be very effective against *C. graminicola*. It was logically concluded based on these facts that anthracnose was the major cause for the annual bluegrass dying.

Based on subsequent research three factors are now believed to be responsible for annual bluegrass loss during the warm summer weather where the symptoms are a yellow-bronzing of the turf, followed by tan to brown withering and eventually, death. The term used to describe this disease complex is HAS decline of annual bluegrass - *Helminthosporium* leaf spot caused by *H. sorokinianum*, Anthracnose caused by *C. graminicola* and Senescence or the dying of a plant due to "old age". Research is currently underway to evaluate these factors to determine the role each plays in HAS decline of annual bluegrass during heat stress periods.

The key environmental factor in the development of HAS decline appears to be high nighttime temperature or this is not to say high daytime temperature or high humidity are not predisposing factors, but unless 70 degree plus temperature is experienced for 2-3 nights in a row, severe HAS decline epidemics will not occur. The past two seasons (1978-1979) the daytime temperatures were above 85 degrees many times including several days above 90 degrees, but HAS decline was not serious. A widespread problem occurs because the warm nighttime temperatures did not occur. HAS decline was only a problem in 1978-79 where no fungicides at all were used, where annual bluegrass herbicide control programs were being used, where phytotoxic fungicides were applied during warm weather, or where poor soil and air drainage were present, but, there has not been a severe HAS decline epidemic since 1977 in the northern areas of the cool season grass regions.

Preventing annual bluegrass loss through the use of fungicides meant a golf course superintendent no longer had to stand by and helplessly watch his annual bluegrass die during the warm summer weather. Nor did he

have to feverishly rush around syringing or irrigating to prevent his annual bluegrass from "wilting", only to have it die anyway. He could treat his annual bluegrass with a fungicide and have it survive the warm summer weather.

For the scientific community, it meant a re-evaluation of annual bluegrass as a potential desirable turfgrass species and the subsequent research on its fertility requirements, mowing requirements, cultural requirements, disease and insect problems. This has now begun, even if begrudgingly, and even if sometimes only through the pressure from golf course superintendents associations for answers on how to maintain bluegrass. This pressure is understandable when you consider the superintendent has been bombarded with annual bluegrass chemical controls for the past 50 years, none of which have been very successful. The reasons include: 1) lack of chemical efficacy, 2) lack of thorough research on these herbicides before they were introduced, and 3) the belief that a chemical is going to selectively remove a "weedy" grass species from an environment it is adapted to and replace the weedy grass with an unadapted "desirable" species without changing the management regime. Such reasoning is ludicrous and has directly contributed to past failures. If annual bluegrass could be removed selectively and prevented from returning through the use of herbicides what grass is going to replace it? If it is replaced with Kentucky bluegrass maintained at 1/2 inch mowing height and irrigated frequently to maintain soft fairways, then the question has to be, what will replace the Kentucky bluegrass when it dies if annual bluegrass is prevented from doing so? Creeping bentgrass? *Poa trivialis*? Or perhaps bare soil? The problem is not the annual bluegrass, but the cultural regime under which the turf is being maintained. Annual bluegrass is simply replacing Kentucky bluegrass which is not adapted to close mowing and frequent irrigation because it is adapted to such a management regime and no chemical is going to change that! The selective herbicide may prevent the annual bluegrass from returning but it will not prevent the Kentucky bluegrass from leaving.

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ANTHRACNOSE (Cont'd)

What is wrong with annual bluegrass? Nothing. It is not better or no worse than any other cool season turfgrass species. They all have their strong and weak points. Annual bluegrass is adapted to the 1/2 inch mowing height and frequent irrigation regimes employed on golf courses where the golfer insists on low-cut soft fairways. It does have its share of disease problems, but so do all the other turfgrass species. (Table 1). If a healthy annual bluegrass turf is to be maintained, these diseases have to be treated. The same is true of all the other species. If the diseases on annual bluegrass are not controlled, it will die and the voids will be filled in when the annual bluegrass reseeds itself. If disease prevention is not practiced on the other species they will also die and the voids in the turf will be filled in by another bluegrass. Therein lies the difference. Kentucky bluegrass, creeping bentgrass and perennial ryegrass only die once. Annual bluegrass dies year after year after year if its disease problems are not treated. The fact that the other turfgrass species died is forgotten because they only died once. The problem did not occur year after year. The fault is never placed on the disease that caused the "desirable" turfgrass species to be lost, the fault is placed on the annual bluegrass which replaced it. Annual bluegrass didn't make the voids, it simply filled them in. The voids occurred from diseases, insects, wear or mismanagement. If annual bluegrass had not filled in these voids some other "weedy" grass or broadleaf weed would have. The reason annual bluegrass persisted was because it was the species most adapted to the cultural regime under which the turf was being maintained.

Cultural regimes of the various turfgrass species can be seen in Table II. You will notice a cultural regime for perennial ryegrass is missing. Little research has been done to determine the optimum cultural system for growing perennial ryegrass in spite of the fact that it is widely recommended as a desirable turfgrass species, because of its improved mowability over common perennial ryegrass.

The other failure of annual bluegrass chemical control programs has been the lack of understanding of the turfgrass plant itself. There are two subspecies of annual bluegrass: *Poa annua* var. *annua* L. Timm., an annual type, and *Poa annua* var. *reptans* (Hauskins) Timm., a perennial type. The annual

type is supposed to be a winter annual which germinates in the fall, lives through the winter, produces seed in the spring and then dies. but in the cool season grass regions, seed production is usually followed by a resurgence of vegetative growth, suggesting that the perennial type is dominant. When death does occur, it is usually later in the season during warm weather stress. If it was a true annual or if the annual type was dominant, should not death occur soon after seeding? If it was a true annual, or if the annual type predominated, should annual bluegrass not die every year? Yet, on well-drained, adequately irrigated fairways, severe annual bluegrass loss occurred only in 1975 and 1977 during the past five years in the upper Midwest and Canada. This is even true of areas where no fungicides were applied! If it was a true annual, should not all the plants die everywhere every year? The fact is that most of the plants present in a fairway or greens do not die every year. All the annual bluegrass plants are not lost on a fairway green even in years of severe HAS decline. It is predominately annual bluegrass plants that are growing in stress areas (poor soil or air drainage, slopes, heavily trafficked areas) that most frequently die, suggesting that something other than normal dying of a winter annual is occurring. The exception is where annual bluegrass herbicides, like the arsenicals, have been used, nearly all the annual bluegrass plants in a treated area will be destroyed during heat stress periods.

WILT

The term wilt is often used to describe what happens to annual bluegrass when it dies during heat stress periods. When grass wilts, it turns dark blue to purple in color. Annual bluegrass does not wilt in the northern areas of the cool season grass region without mitigating circumstances. The circumstances can be knolls or slopes where adequate irrigation is not applied, or where irrigation cannot be applied fast enough. This form of wilt is controllable with soil modification, proper irrigation, timing, and an adequate irrigation system. Wilt can be found on annual bluegrass fairways where irrigation is adequate, but recent studies have shown much of this is due to grubs, either the common large white grub, or the small Black *Ataenius* beetle grubs. Both can be controlled with the application of an effective insecticide.

The fact that annual bluegrass normally does not wilt from high temperature alone where adequate irrigation is properly used first has to be accepted. Next time annual bluegrass begins to wilt, tear back the sod to determine if grubs are present before reaching for the irrigation system. It could help save your fairways!

HAS Decline of Annual Bluegrass

However, wilt is not the problem being referred to. The problem being referred to is one that causes an annual bluegrass turf to turn a dull yellow to bronze in color and eventually die. The disease involving these symptoms is called HAS decline. The symptoms are very different from the bluish-purple color turfgrass turns when it wilts.

HAS Decline Management

HAS decline management involves a cultural system for maintaining annual bluegrass plus fungicide application at the proper time. The cultural system will probably change with time because it is currently based on a limited research. This is due to the fact that past research on annual bluegrass has been limited to means of controlling it. Research on how to culture annual bluegrass has been conducted only in the past few years. At the current state of the art, the following is the best program available for maintaining annual bluegrass fairways.

Mowing Height - 1/2-7/8 inches.

Irrigation - infrequent and deep during cool weather to encourage deep root growth.

light, frequent during warm weather. May involve daily syringing during warm weather depending upon : soil type, spring weather, capacity of irrigation system.

Fertility - Nitrogen

1/2 lb. of actual N June, July, August
1 lb. of actual N September and dormant.

New research data (Illinois) indicates annual bluegrass survives better with no nitrogen in July in the warmer areas of the cool season grass region.

Phosphorus and potassium as needed, based on soil test. Preliminary evidence indicates high phosphorus levels favor annual bluegrass survival.

Fungicide Program

There are 4 major annual bluegrass diseases which occur during the growing season: *Sclerotinia* dollar spot,

(continued on next page)

ANTHRACNOSE (cont'd)

Pythium blight, Rhizoctonia brown patch and HAS decline. Trying to maintain annual bluegrass without managing these diseases is futile. The following is an idealized fungicide program for managing these diseases. It is not a hard and fast program which should be followed to the letter. It is a framework from which you can build your own fungicide program.

The program incorporates all fungicide types at the most appropriate time. The best contact fungicides for HAS decline management are chlorothalonil, mancozeb, and maneb zinc sulfate. The best systemic fungicides

are benomyl, thiophanate-ethyl, and thiophanate-methyl. This is not to say other fungicides may not be appropriate. Substitutions should be made based on personal experience.

Table I. Major Turfgrass Diseases on the 4 Major Cool Season Turfgrasses

	KENTUCKY BLUEGRASS	CREEPING BLUEGRASS	ANNUAL RYEGRASS	PERENNIAL
Melting-out		Dollar spot	Dollar spot	Brown blight
Fusarium blight		Brown patch	Brown patch	Brown patch
Stripe smut		Pythium blight	Pythium blight	Pythium blight
Fusarium patch		Leaf spot	Leaf spot	Anthracnose
		Typhula blight	Anthracnose	Red thread
		Fusarium patch	HAS Decline	Rust
			Fusarium patch	Typhula blight
			Typhula blight	

Table II. Comparison of Survival Requirements for Fairway Grasses

	KENTUCKY BLUEGRASS	CREEPING BENTGRASS	ANNUAL BLUEGRASS
Mowing height	1-1/2"	1/2"	1/2"
Irrigation	Minimal	Minimal	Frequent
Nitrogen	1-4 lbs/s	1-4 lbs/s	3-4 lbs/s
Phosphorous	Adequate	Adequate	High

	June	July	August	September
	7	1 10	1 10	1
	RC	C S	C S	C or RC
Dollar spot	—————			
Brown patch		—————		
Pythium blight			—————	
HAS decline		—————		
RC — residual contact		S — systemic	C — contact	

— From Michigan Border Cities Publication

**RULES MEETING AT
KITCHENER WESTMOUNT —
MARCH 26/81.**

Forty Superintendents, Associates and guests attended a Rules of Golf Meeting at Kitchener Westmount. Keith Nisbet spent the day talking on the Rules of Golf, covering nearly the whole rule. Special thanks to Keith, Hugh Kirkpatrick and Westmount Golf Club for a fine day.



Everyone Enjoyed Buffet Lunch



Norm Explaining Some Research to Vince Piccolo



Enthusiastic People?

AN ASSISTANT SUPERINTENDENT

By Ron Heesen (Assistant Superintendent
Board of Trade Golf Club)

This afternoon I would like to form a type of job description for assistant superintendents. I want to discuss his duties on the golf course, duties amongst Club Management and what formal education he requires. I want to pinpoint his position and clearly define his roles. Many people feel that some clubs do not need an assistant, but still have one anyway. I am not going to single out assistants that shouldn't be or assistants that should be superintendents, but rather give a complete job description that you can all play with. If your assistant does not qualify for any or all of these categories, you be the judge and decide whether or not you need the man you hired as assistant. I hope to also enlighten the assistants here today and maybe when I'm finished you can go back to your club and discuss your position. Decide for yourself whether or not you are fulfilling your title as assistant superintendent.

Much discussion over the assistants role on the golf course recently, has still left his job and purpose unclear. Some superintendents are almost afraid to promote their own assistants for fear they would be putting their jobs in jeopardy. I feel this is a lot of nonsense. If any superintendents are afraid of their assistants, this just adds to the assistants merit, and detracts from the superintendents. As an assistant I feel we are there to do a specific job, but we're definitely not here to steal jobs. But, obviously, if a superintendent is worried about an assistant taking over, then maybe he is incompetent! A good assistant should be able to keep his superintendent on his toes. He should have a minimum of 3 years practical experience as well as some formal training. It should be known that while working as an assistant we are still in a type of training period for the time when we ultimately will become a superintendent. A successful assistant in the Metro Toronto area can expect to earn anywhere from \$12,000 to \$20,000 plus benefits per year. But lets determine his duties and position on the golf course first.

In the alignment of staff on the golf course the assistant should be next to the superintendent. And not just on paper! He must have full responsibility when the super is not present. He must show and express a concern for the condition of his golf course. At all times he must have an input with the superintendent. He simply cannot function as a "yes" man. A good assistant should be decisive and to the point and not hesitate to make decisions when the superintendent is unavailable. By the same token the superintendent must also realize that he is needed by his staff to make a successful combination work. More and more we see superintendents join the golf tour in the Fall, instead of teaming up with their staff when they need them the most. It must be a team effort, otherwise even the most successful assistant will only be functioning at half throttle. Remember, if the two people at the top of golf course management are not functioning properly, you cannot expect your staff to operate efficiently, and when all this breaks down, the end product "The Golf Course" suffers drastically.

A successful assistant has to be able to deal with a variety of staff at any given time. Staff members in the summer may vary from 12 to 25 and in the winter from 2 to 8. As an assistant he must be able to get along with and understand his staff. Here he must be very flexible, and realize that his ideas and goals are not going to be accomplished unless his staff understands him clearly. At times an assistant will act as a link between staff and superintendent. If the super is in doubt over certain staff, or over a job decision we have to fill the void and he able to provide the information necessary. Once again, know your staff, know how to utilize them most effectively, and by doing so provide the members or public with a better golf course.

Amongst club management the assistants role is somewhat varied. At certain clubs he may be required to attend greens committee meetings or at times be called upon for information from the general manager. But at other clubs none of these jobs would be required. In any case the assistant should represent himself properly. He must be neat and courteous especially around the clubhouse.

He should be able to demonstrate his authority and possess the ability to delegate jobs. Above all he must be a symbol of confidence to the members and club officials at all times, no matter how large or small the golf club.

A qualified assistant must be educated. He must have at least some formal education in turfgrass management, at either a University or Community College. To go along with his education he also needs the practical training on the golf course. We must know and understand chemicals - know how to spray, when and why. A good assistant must know the cultural requirements for turf in Ontario. He has to understand mowing and fertilization, spraying methods, chemicals. We must also know why we topdress, or aerate, understand spiking and verti-cutting. Most importantly an assistant must understand watering practices and know the particular system on the course like the back of his hand.

More and more golf courses are installing automatic watering systems. They are "automatic" in their mode of operation but not in their maintenance. Anyone who wishes to become a top notch assistant must possess an understanding of an automatic system, and be able to make necessary repairs or adjustments without any hesitation. I've heard superintendents say their mechanics are the most important men on their staff. Well, I'd like to know how many mechanics know the water systems and are there to repair it on a Saturday or Sunday on a hot summer weekend when its needed the most.

Once again, knowing how to water and understanding an automatic water system are two assets that we must have to be successful. Without this asset an assistant can be competent in all areas I'll cover and still be doomed to failure.

In any operation, whether it be a golf course or a steel mill a certain element must be present to be a success. That element is communication. We must know how to communicate. If disease is spotted on a green or a fairway and we don't bother to mention it, we may as well be blind and see nothing. We simply cannot take it home with us and

hope its gone tomorrow. We must talk and discuss it that particular day. If there's trouble amongst the staff it will never be solved unless the problems brought out and confronted. Communication will make decision making a snap. We can all rest easier if our points are made clear with this handy tool we call communication. KNOW IT, UNDERSTAND IT, AND USE IT. Many superintendents have failed, over the past, not because they weren't hard workers, but, because they couldn't communicate with their club officials. Just as it is an asset to the superintendent, its equally important for an assistant to learn how to communicate.

Every function in any successful operation evolves around communication. It must be used amongst staff, and especially within management. This device is a must for any young assistant aspiring to become a superintendent. Like a superintendent we must know the game of golf. Shooting par on the course, though, is not as important as understanding short, fast greens. Tight fairway lies are important. We must understand what makes a good lie, not just that we cut at 1/2". Clean weed free roughs and how they effect the game must be understood. Edged sandtraps, chemical mowers around trees, paths and fences and their relationship with the game must be realized.

By understanding all of these functions on golf course grooming a good assistant will know a well cut green or fairway and how to maintain it rather than simply "gee I sure putt well when the greens are like this". So its a combination of understanding the game of golf and being a professional when it comes to grooming the golf course and not the other way around. We must remember we're not here to become golf professionals, but we're here to become turf professionals.

Again, much like a superintendent, we must know and understand mechanics, we must be landscapers and personnel managers to do our job effectively.

Now that assistants have had the door opened to them by the OGSA, we have another channel to develop our professionalism. I had hoped that superintendents would strive to help develop better assistants, but apparently not. I was getting rather sick at hearing supers claiming their most important man was the mechanic. Gentlemen, if thats the case, lets not play games, get rid of your assistant. But if you change your mind, develop that man into a proper assistant, let him attend a few meetings, accept his decisions occasionally. If you have a man in your operation, and you tag him as assistant, well then make proper use of him. I don't know how the decision was reached to allow assistants into the association but I gather it came from within the superintendents. Not once has anyone asked as assistant his opinion! Anyway, gentlemen, now we're in so lets make use of the OGSA and contribute, and superintendents please allow us to.

In closing, I would like to thank you for giving me the opportunity to speak today. I hope I have enlightened the assistants here today, and the superintendents too. Let's as assistants, come out of the closet and add a new dimension to the OGSA.

POSTED MARCH 20/81

If any member has any objection to the above persons applying for Membership in the Ontario Golf Superintendents Association the Secretary must be notified in writing within 30 days.

Sean Evelyn	- Class A - John Evelyn Golf Center
Alex Lapere	- Class B - Midland Golf Club
Gerry Chillingworth	- Aero Irrigation Ltd.
James Moore	- Class A - Puslinch Lake Golf Club
Mark Hagen	- Class F - Greenhills Golf Club
Douglas Rothwell	- Class F - Islington Golf Club
Don Crymble	- Class F - Islington Golf Club

SMALL CONNECTICUT FIRM'S NEW GOLF BALL FLIES TOO FAR; BANNED BY U.S.G.A.

GOLFERS LOVE IT — "No More Par 5's?"

NORWALK, CT.—All golf balls are not created equal. At least not any more. A small Connecticut company has introduced a controversial new ball it guarantees will out-distance all legal balls, including Hogan, Top Flight, Maxfli and Titleist. The new ball is so "hot" it threatens to pull the rug on par, as we know it, and that might have the United States Golf Association worried.

For thirty-eight years the U.S.G.A. has strictly enforced the rule that a golf ball may not exceed a velocity of 250 feet-per-second off the club head. Without this and other restrictions, high-powered super balls would soon outmode most golf courses. Par fives could disappear, and even an average player could regularly blast 300-yard drives. So far major U.S. manufacturers have observed this speed limit and other U.S.G.A. rules designed to keep all balls created equal.

But now, a little-known company called H & L Labs is distributing a ball that violates nearly every rule in the book, and the result is a ball that flies down the fairway like a Ferrari on the run.

The ball has provoked heated controversy because it looks, sounds, and feels exactly like a regular ball. H & L refuses to release the ball's name to anyone but a buyer—they simply call it "The Hot One"—so about the only way another player can tell he's playing against one is to keep a radar set in his bag.

And while golf prides itself on being a gentlemen's game, it seems that more than 40,000 gentlemen—and ladies—are carrying these innocent-looking buzz bombs in their bags. Some say if the U.S.G.A. ever approved the engineering in this ball, pros might start shooting in the 50's.

What's special about the illegal ball? John McGuire, the director of H & L told me this: "We've doctored up the ball's aerodynamics so that it has less drag than conventional balls. You can tell the difference with your first drive. What's more, the special design could help keep tee and fairway shots straight down the middle . . . 'bites and sits' with more authority . . . putts with a steadier roll . . . and is virtually cut-proof." McGuire believes that more money is going to change hands with this little white bandit than all the tournament purses put together.

So far most pro shops don't dare carry it, but if you want to "test drive" the world's longest ball, H & L will send you one FREE. Just order a dozen balls and they will send you thirteen. They ask you to use the extra ball for a few holes. Tests against the best legal balls on the market prove you could add as much as 22 yards to your tee shots. If you don't, return the remaining dozen for a prompt refund. The free ball is yours to keep in any case—for fun or profit.

And if you ever cut one of these super balls in normal play, H & L will replace it free. You pay only the return postage, about 25¢.

A dozen hot balls cost \$19.95 (plus \$1.75 postage and handling). Two or more dozen cost just \$18.00 each and H & L pays all shipping costs. The address is: H & L Labs (Dept. HO 63), 18 Lois Street, Norwalk, CT 06851. You can send a check or charge it, but be sure you give them your card's account number and expiration date.

GASOHOL: WEIGHING THE BENEFITS AND RISKS

Gasohol may help solve our energy problems, especially now that it has become more widely available, but fuel alcohols also have their risks, according to Clair Young, Ohio State University extension leader for safety.

Fuel alcohols, whether they are used straight or blended with gasoline, are Class 1 flammable liquids, Young says, and all fire codes and regulations pertaining to gasoline also apply to alcohols.

According to Young, a primary problem with gasohol is its high volatility. The addition of 10 percent alcohol to gasoline increases the mixture's volatility by as much as 35%. Most gasohol is a 90 percent-10 percent blend of gasoline and alcohol.

This results in increased vaporization in the fuel tank, which causes tank pressures to rise. This is especially critical in tractors where the fuel tank is located above the warm engine. Pressure may build to a point where fuel spews out when the tank cap is removed. Young recommends waiting to refuel until the engine cools and using a vented fuel tank cap.

Another problem is alcohol's ability to absorb water. Even a dilute mixture such as gasohol can attack and destroy gaskets and fuel line fixtures, particularly those made of aluminum. Frequent inspections of gaskets, seals and hoses can catch dangerous faults, Young said.

— From Fore-Front.

PROTECTING YOUR CREW FROM PESTICIDES

Pesticides are one of the worst health hazards involved in golf course maintenance. It is a superintendent's responsibility to make sure that the proper equipment is provided and worn by his crew. The following information is taken from GCSAA's "Pesticide Usage Reference Manual" available from Association headquarters in Lawrence, Kan.

Many superintendents are alert to the dangers present when applying pest control chemicals but overlook these equally hazardous situations:

1. Handling of containers in moving from transport vehicle to storage area or in rearranging containers in the storage area.
2. Measuring, loading or mixing operations.
3. Disposal of empty containers.
4. Cleaning of equipment after use.
5. Laundering of contaminated clothing.
6. Personal cleanliness.

Cotton, leather or canvas gloves or boots will absorb large quantities of toxic materials and provide a constant exposure to the skin. If organophosphorus or carbonate insecticides are involved, wear natural rubber gloves unless the container label specifically states otherwise.

Rubberized boots are generally preferred for protection against chemicals because they wear well and can be cleaned with soap and water. Disposable plastic boots and gloves should not be used because they may not be strong enough to stand the rough conditions of continuous golf course usage.

Workers need additional protection when opening containers, mixing chemicals and filling application equipment because these operations involve direct skin or lung exposures to the chemicals. Therefore, goggles or face shields, head coverings and respirators should be worn. A rainsuit or coveralls can provide maximum protection, especially when very toxic chemicals are being handled. Headbands or goggles and face shields should be replaced periodically since they are absorbent and are in direct contact with the skin and hair.

Maximum protection is needed when chemicals are being applied, and the type of protection is dependent upon the types of chemicals being used. In spraying operations, operators are often exposed to considerable hazard, because their clothing can become very wet. Waterproof rainsuits are recommended for the greatest degree of protection. If dusts or granular materials are being used, full-length coveralls are satisfactory. Both wet and dry applications require the use of respirators, gloves, boots, and head and neck covering for maximum protection.

A moderately high risk factor is involved in the cleaning of equipment after use. Workers often are eager to shed protective clothing as soon as they return to the maintenance building, especially on hot days when most pesticides are applied. Every effort must be made to prevent this since the bare skin or clothing can lead to serious consequences.

Protective clothing suggested during clean-up includes: rubberized boots, rubber gloves, goggles or face shield, and waterproof suit or large rubberized apron. All clothing should be thoroughly washed with soap and water after each usage. This includes gloves, boots, coveralls, waterproof suits, etc.

The final safeguard is that of personal cleanliness — each person who has handled toxic chemicals must be instructed to wash or shower thoroughly as soon as possible after finishing his work. Failure to do so can produce tragic results, especially if the worker is unduly sensitive to a given chemical.

If all this seems unreasonable, bear in mind that you, as a golf course superintendent, are completely responsible for the health and safety of your crew.

— From Fore-Front.

THIS IS THE WEEK THAT WAS — SUPERINTENDENTS DIARY

FRIDAY - In at dawn again and fell over the barn dog before I could get a light on. Friday is the day we do EVERYTHING. Assistant late again, sometimes I wonder about him. He wouldn't even hold still when I had to cut the bubble gum out of his hair - got mad because I missed band. This is the day I was going to spray because I missed last Friday that should have gone on the Friday before that. Maybe Monday. Maybe by then the cutworms will have turned to moths and have flown away. Looped around the course in the pre-dawn light and saw four joggers, a mushroom picker, two ball hoppers in the pond, three members walking dogs, an old Italian lady cutting dandelions and a partridge in a pear tree. Threw a rock at the last mentioned. I love the course early in the morning - so quiet, so peaceful and tranquil. I think I'll call the local police and have all these people arrested. Picked up the remains of a big beer party by the fifteenth, then went to work.

SATURDAY - Everybody in the world loves weekends but superintendents. More turf disasters have happened on Saturday and Sunday than all the Mondays, Tuesdays, Wednesdays, Thursdays and Fridays put together. Right off the bat four pins and a dozen markers missing and the usual moronic messages written in the sand traps . . . why can't they write inspirational thoughts or the weather report? A neat group partied last night. All imported beer, an empty Southern Comfort bottle and two Cutty Sark - members kids. Went to look at a very large pupa dangling from the tree by the ninth and after gazing in wonder for two seconds realized it was a tampon. Left it there, maybe it will hatch.

SUNDAY - Greens mower operator failed to show till I had mowed five greens, I would have fired him but then I would have had to finish. Things looking pretty good today. Can't wait till Monday to see what the hell will happen next.

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