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NOVEMBER/DECEMBER 1991

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Our 66th Year

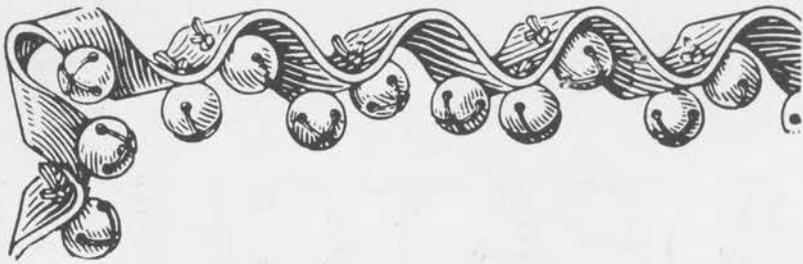
A PATCH of GREEN

*Season's Greetings
and Best Wishes
for the New Year*

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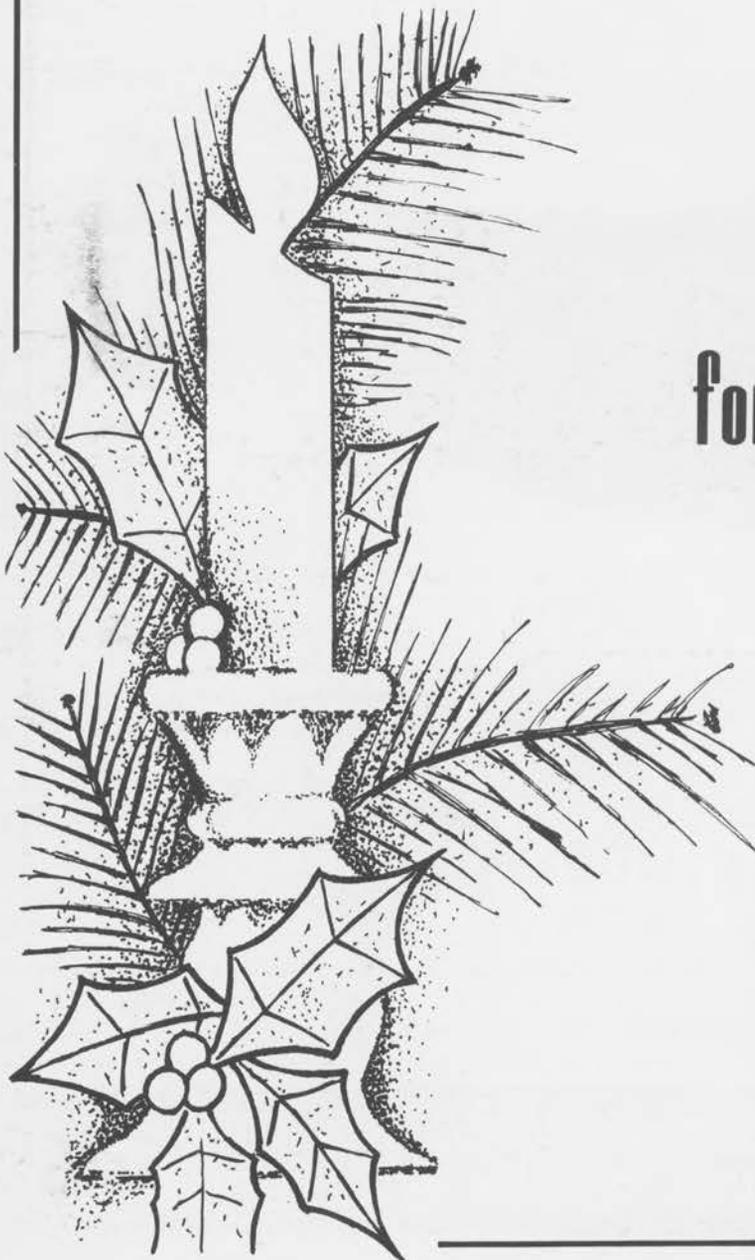
OFFICIAL PUBLICATION OF THE MICHIGAN & BORDER
CITIES GOLF COURSE SUPERINTENDENTS ASSOCIATION



Season's Greetings



and Best Wishes
for the Coming Year



from the
Editor and Publisher



PRESIDENT'S MESSAGE

The position that the superintendents now hold in the golfing community has never been higher. Even though we sometimes don't feel like it, many of us are being treated as professionals. I know that some members will say that I'm wrong, and that they are not being treated as respectfully as they should be treated. To those members I would respond as follows:

1. Are you being given the opportunity to be treated as professional?
2. Are you being open-minded enough to accept criticism, whether it be insensitive or constructive?
3. Are you communicating to your member's/-owners satisfaction? Without being asked?
4. Do you own up to your mistakes?
5. Do you offer well thought out plans?
6. Do you give of yourself to the community, outside of the golf business?

7. Do you work smart, as well as work hard?

These are only some of the questions a person should be asking themselves if they are not happy in their job situation. Your association is here to help provide some of the skills you need. Your association is here to provide you with the opportunity to share the experiences of others that may be successful in areas where you may be weak. Your association is here to help show you where the business of golf course maintenance is heading. Your association is here, so use it for the good of everyone.

As I come to the end of my terms as President of this fine Association of golf course superintendents, many thoughts go through my mind. Such as:

1. Did I accomplish what I set out to do?
Answer: No. But does anyone?
2. Is the Association better than it was two years ago?
Answer: Probably, yes. But times have dictated that it had to be better.
3. Did I do a good job?
Answer: Yes and no. All I really could do was put forth a good faith effort, and I did.

The really important questions that I should be asking myself, in addition to those previous, are:

1. Have I become a better superintendent for Birmingham Country Club for having served MBCGCSA?
Answer: Yes.
2. What has been the greatest reward from serving MBCGCSA?
Answer: The manner in which the people on our committees have gone about putting together our special events — Golf Day, Special Olympics, the Picnic and the Christmas Party.
3. What is the next greatest reward?
Answer: The total amount of money raised from Golf Day and for Special Olympics.

The past two years of serving as president have been interesting and sometimes frustrating, but overall rewarding. The experience has been invaluable. And for it I truly thank you.

Tom Mason



"A PATCH OF GREEN"

Published Bi-Monthly by the
MICHIGAN AND BORDER CITIES GOLF
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THAT TIME OF YEAR AGAIN

by TED WOEHRLE

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This is the time of year to protect your greens against **WINTERKILL**.

"Winterkill" is a term used to describe damage of any kind caused by winter conditions. The causes of winterkill can be separated into four major groups. The groups are low temperature diseases, dessication, low temperature injury and perhaps the most devastating, ice sheet damage.

The two minor groups deal with traffic — damage caused on frozen turf and damage caused to partially thawed turf.

COLD TEMPERATURE DISEASES

The winter diseases or Snow Molds as we know them, can be quite deadly but fortunately they can be controlled on tees and greens very successfully. The only thing stopping us from controlling these diseases on fairways would be the cost.

COLD TEMPERATURE KILL

Cold temperatures can cause death to the grass plant in several ways. The most severe would have to be by dessication (the drying out of the plant caused by low moisture when the soil is frozen). Fortunately this doesn't happen too often in Michigan. We have experienced this problem on three occasions during the past twenty years. When it does happen it destroys acres of turf.

The other damage caused by low temperature kill would be the opposite condition of dessication and that would be where there is an excess of moisture. When the frozen ground is covered by water and the plant is submerged a sudden drop in temperature will freeze the water causing damage to the crown of the plant and certain death (called crown hydration). Fortunately this only happens under puddles of water and the damage is spotty, although deadly.

ICE SHEET DAMAGE

When it occurs, this is perhaps the most deadly and severe damage to turf. The last time we experienced it was in the winter of 1982. It usually occurs over unfrozen ground. You will experience a heavy rain or wet snow that freezes into a sheet of ice and then

it continues to snow so that it remains over the ice for a long period of time and insulates the ice and it fails to melt. The turf is sealed off from the air and anaerobic conditions begin to produce toxic by-products that will kill the turf. When the ice is removed you will find a smelly black layer of scum that will make the strongest stomach turn. In 1962 we experienced this condition for 120 days — 1/3 of a year. The snow and ice formed Thanksgiving week and didn't melt until late March. Needless to say the golf course didn't come through the winter in very good shape.

WINTER TRAFFIC

Turf can suffer damage when it is walked on during frosty mornings or it can be damaged when traffic continues over it when the ground is frozen and the turf is dormant. It simply wears off. Other damage occurs when the surface is beginning to thaw and it gets soft. Then the footprints cause compaction, unevenness and root damage that will show for the remainder of the season.

WHAT TO DO

Green covers can help protect the turf from three of the four conditions mentioned. They can help prevent dessication, ice sheet damage and of course eliminate traffic problems. They cannot cure poor drainage nor prevent diseases.

The covering of greens during the winter certainly is not new. Early days and, to some degree even nowadays, greens are covered with straw, manure, hay, branches and circled with snow fences to help attract and keep snow on the greens. Others have covered them with heavy topdressing, bark, leaves, calcined clay, small pebbles and anything imaginable to protect them from the drying winds. Many areas of the country haul water during these dry periods — some even gamble with their irrigation systems.

You must be aware of poor drainage and correct it. You must protect your turf against winter diseases. Be alert to the formation of ice sheets. Begin removing ice after 30 days. If dessication is a problem, find some way to cover the area.



GCSAA NEWS

GOLF COURSE SUPERINTENDENTS REPORT NOW AVAILABLE

Exclusive information about the growing golf course management profession is available to superintendents in a new marketing research report by the Center for Golf Course Management (CGCM). CGCM, a subsidiary of the Golf Course Superintendents Association of America, serves as GCSAA's marketing research division.

The 1991 **Golf Course Superintendents Report** offers an extensive look at trends in golf course maintenance. Available only to practicing golf course superintendents, the report is a synopsis of the three previously released 1991 CGCM research reports: **Pesticide and Fertilizer Usage Report**, **Golf Car and Turf Utility Vehicle Report**, and **Mower Maintenance Equipment Report**.

"The Superintendents Report is an invaluable resource, especially in simplifying the budgeting process," said John M. Schilling, GCSAA executive director. "By purchasing the report, superintendents can have comprehensive, unbiased information to reference when making difficult purchasing decisions."

The study looks at eight areas affecting daily golf course maintenance operations: labor rates, equipment inventory levels, market share (chemicals, equipment, vehicles), maintenance trends, budget information, course demographics, product ratings, and average replacement intervals (equipment, vehicles).

The **Golf Course Superintendents Report** is only available to practicing golf course superintendents who may purchase it from CGCM for \$25.

To order the report, or for more information on CGCM's 1991 marketing research reports, contact Robert Shively, director of marketing for CGCM and GCSAA, at 913-841-2240.

HIGH PROFILE SPEAKERS TO DISCUSS PESTICIDE ISSUES AT NEW ORLEANS CONFERENCE

Perspectives on and perceptions of pesticide use on golf courses will be the theme of an Environmental General Session, scheduled for Friday, February 14, 1992, at the New Orleans Convention Center. As part

of the 63rd International Golf Course Conference and Show, hosted annually by the Golf Course Superintendents Association of America, the session will feature presentations by three distinguished speakers.

Jay Feldman, national coordinator of the National Coalition Against the Misuse of Pesticides (NCAMP), will outline his group's concerns about urban pesticide use. John Stossel, ABC-TV's "20/20" correspondent, will address issues related to how the media perceive and report on the pros and cons of pesticide use, and how that influences the public's perception. Victor Kimm, the Environmental Protection Agency's deputy assistant administrator for pesticides and toxic substances, will provide a regulatory viewpoint and explain the agency's pollution prevention program and strategy regarding pesticides in groundwater. A panel question-and-answer forum will follow the presentations.

Commenting on the upcoming session, GCSAA President Stephen G. Cadenelli, CGCS, said, "There aren't many opportunities, in a single two-hour session, to hear a leader of a national anti-pesticide group, an Emmy-winning environmental news correspondent and a high-ranking regulatory official talk about their views on the complicated issue of pesticide use. This should be an extremely interesting and highly educational exchange."

Feldman is one of the founders of NCAMP, an organization formed in 1981, and dedicated to generating public awareness of the health and environmental risks of pesticides and promoting alternative past management strategies that reduce or eliminate a reliance on pesticides.

Since 1979, Feldman has regularly provided testimony for the U.S. Congress and has served as a member of EPA advisory committees. He has written numerous articles for the **New York Times**, **Washington Post**, and other daily newspapers, as well as for various environmental journals. He has appeared on network nightly news and morning news programs, as well as on local televisions and radio news programs across the United States and worldwide.

Since Stossel joined the ABC-TV news magazine "20/20" in June 1981, he has reported on numerous controversial topics which make news headlines, as well as on a wide range of consumer affairs issues. During the 1989-90 season, one of his reports focused on environmentally safe products.

The National Environmental Development Association honored Stossel last year for balance and fairness in journalism. He also has been honored five times by the National Press Club for excellence in consumer reporting, and is the recipient of 17 Emmy Awards.

Kimm joined EPA in 1971 and spent 10 years as head of the agency's drinking water program before becoming deputy assistant administrator for pesticides and toxic substances in 1985. His professional career is divided between the management of environmental programs at EPA and consulting engineering work.

The 1992 Conference and Show will be held February 10-17.

GOLF SUPERINTENDENTS TO ELECT LEADERS IN NEW ORLEANS

William Roberts, CGCS, has been nominated for the presidency of the Golf Course Superintendents Association of America (GCSAA). The association's 1992 election of officers and directors will be held Monday, February 17, during its annual meeting at the GCSAA International Golf Course Conference and Show in New Orleans, Louisiana.

Roberts, superintendent at Lochmoor Club in Grosse Pointe Woods, Michigan is currently vice president of GCSAA.

Nominees for GCSAA vice president are directors Joseph G. Baidy, CGCS, of Acacia Country Club in Lyndhurst, Ohio, and Randy S. Nichols, CGCS, of Cherokee Town and Country Club in Dunwoody, Georgia. Nichols currently serves as Secretary/Treasurer of the association.

Three candidates for director will be elected for two-year terms. The five nominees for director are Joseph M. Hahn, CGCS, of Oak Hill Country Club in Rochester, New York; Paul S. McGinnis, CGCS,

of Union Hills Country Club in Phoenix, Arizona; C. Wayne Perkins, CGCS, of Colonial Country Club in Madison, Mississippi; Bruce R. Williams, CGCS of Bob O'Link Country Club in Highland Park, Illinois; and Randall P. Zidik, CGCS, of Rolling Hills Country Club in McMurray, Pennsylvania.

GCSAA's current president, Stephen G. Cadenelli, CGCS, of Metedeconk National Golf Club in Jackson, New Jersey, will continue to serve on the board of directors for one more year as immediate past president.

Two current board members, Gary T. Grigg, CGCS, of Genoa Lakes Golf Club in Genoa, Nevada, and Charles T. Passios, CGCS, of Hyannisport Club in Hyannisport, Massachusetts, have one year remaining on their terms.

GCSAA's International Golf Course Conference and Show runs February 10-17, at the New Orleans Convention Center.

The title "CGCS," which follows a superintendent's name, stands for Certified Golf Course Superintendent. The CGCS title recognizes the achievement of high standards of professionalism through education and experience.



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Michigan and Border Cities Golf Course Superintendents Association

ETHICS: Noah Webster defined ethics as 1) The discipline dealing with what is good and bad with moral duty and obligation 2) The primary code of conduct governing an individual or group.

Shortly after its inception, the Golf Course Superintendents Association of America adopted their 'Code of Ethics' which outlines its own rules of decency. Every respectable profession i.e., doctors, lawyers, teachers, etc., has adopted parameters by which members of their profession are judged.

As ethics chairman, I have been contacted by a number of people who have alleged improprieties by some of our members. It is the duty of the Michigan and Border Cities Golf Course Superintendents Association as our professional organization to stand by and enforce our Code, just as it is every individual members obligation to know and abide by these rules. In light of these increased concerns it seems appropriate to list our Code for your study.

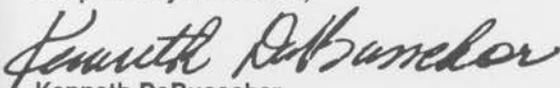
CODE OF ETHICS

The MBCGCSA subscribe to the Code of Ethics as set forth in the GCSAA's 1978 Directory. This Code is as follows:

- 1.1 Recognize and discharge all my responsibilities and duties in such a fashion as to be a credit to this Association and profession.
- 1.2 Practice and insist upon sound business and turf management principles in exercising the responsibilities of my position.
- 1.3 Utilize every practicable opportunity to expand by professional knowledge, thereby improving myself and my profession.
- 1.4 Maintain the highest standards of personal conduct to reflect credit and add to the statue of our chosen profession (golf course Superintendent).
- 1.5 Base endorsements, either written or verbal by means of any medium, strictly upon satisfactory personal experiences with the item identified.
- 1.6 Refrain from encouraging or accepting considerations of any value without the express understanding of all parties that said consideration is available to all in similar circumstances, and that no actions shall be forthcoming as a result of acceptance.
- 1.7 Recognize and observe the highest standards of integrity in my relationship with fellow golf course superintendents and others associated with this profession and industry.
- 1.8 Assist my fellow superintendents in all ways consistent with my abilities, only when called upon to do so and with the incumbent superintendent's knowledge, participation and acceptance.
- 1.9 Abstain from the debasement of, or encroachment upon, the professional reputation, practice or employment of another superintendent.
- 1.10 Lend my support to, and actively participate in, the efforts of may local Chapter and National Association to improve public understanding and recognition of the profession of golf course superintendency.
- 1.11 Abstain from any exploitation of my Association, industry or profession.
- 1.12 Present information and participate as a witness in all proceedings to which there exist evidence of a violation of this Code of Ethics.
- 1.13 Refrain from corresponding, either verbally or in writing, with a Director, member, or official of another Club, regarding its affairs, without the prior consent of the Club's Superintendent.

Please be aware that MBCGCSA will fervently stand behind this Code and govern our members in accordance to these rules. If evidence is clear that any member has violated this Code, contact the Ethics Committee Chairman.

Respectfully submitted,



Kenneth DeBusscher,
MBCGCSA Ethics Chairman

Our best to you!



**Merry
CHRISTMAS**



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THE WILLINGNESS TO RISK FAILURE

Let me focus for a moment on the willingness to take informed risks. The willingness to risk failure is an essential component of most successful initiatives. The unwillingness to face the risks of failure — or an excessive zeal to avoid all risks — is, in the end, an acceptance of mediocrity and an abdication of leadership. To use a sports metaphor, if you do not come to bat at all, or when at bat, wait hopefully for a walk, you cannot hit a home run. At best, you can get to first base. Major leaguers can decide to play in the minor leagues, and they may have more hits and fewer failures there, but their impact on the game and on society would be very much diminished. The risk of failure is intrinsic to significant accomplishment. Even the great Babe Ruth struck out almost twice as often as he hit home runs. Successful change depends on experimentation with uncertain results. A willingness to occupy new ground always involves the risk of losing your footing along the way.

We must also be aware of raising the flag of failure too quickly. The world too often calls it failure if we do not immediately reach our goals; true failure lies, rather, in giving up on our goals. When 10,000 experiments with a storage battery failure to produce results, Thomas Edison said, “. . . I have not failed. I've just found 10,000 ways that won't work.” Few battles result in immediate and full victory. For example, instead of being frustrated and immobilized by the continued hardship experienced by many around the world, we must keep alive the idea of eventual deliverance from suffering and oppression by demonstrating our willingness to move forward along those paths actually available to us.

As we begin to prepare for the challenges that will face humanity in the 21st century, we know that we need new ideas and a renewed determination. We face challenges in health care from infancy and childhood to elder care and long-term care. We confront challenges in education, the economy, and the environment. We have an inventory of unfilled aspirations for families and communities and in connecting ourselves to the rest of humankind in a world that becomes ever more interdependent.

If we approach these challenges with a grim determination to avoid risk, we will sentence ourselves to the status quo — or worse. If we rely exclusively on old situations, we not only will resign our leadership position in economic, political, and cultural affairs, but also will fail to reach our objectives. If our collective fear of failure, our fear of taking the risks of listening to new voices, or our demand for all or nothing immobilizes us, we will achieve little change.

My own observation of the American society has become too risk averse for its own good. Moreover, as

individuals become more risk averse in their own lives, they seem to become less and less tolerant of the risks taken by those in leadership positions. We are less tolerant of our leaders' mistakes and seem increasingly to exhibit a fear of failure even in the face of the compelling national challenges before us. Indeed we often speak of failure as malfeasance and at the same time accuse our leaders of lacking courage and vision. Courage, vision, and change require not only our personal willingness to shoulder the risks of failure, but also our willingness to understand that some failed projects are an inevitable part of the great successes that we hope will characterize the efforts of our leaders.

Let me reflect, for example, on the “failure” of last year's demonstrations in Beijing. In a certain sense they failed. The daring and courage of these students, workers, and others seem, in the short run, to have produced only a more repressive situation. History, however, has shown us that these seeming failures are often just threads of a larger tapestry; until this tapestry is on the wall, the nature of the final pattern is difficult to discern. Let me be clear, I do not recommend failure. Nor am I attracted to the idea that failure builds character. But a willingness to accept the risk of failure is one of the costs of leadership and, therefore, the price of all success.

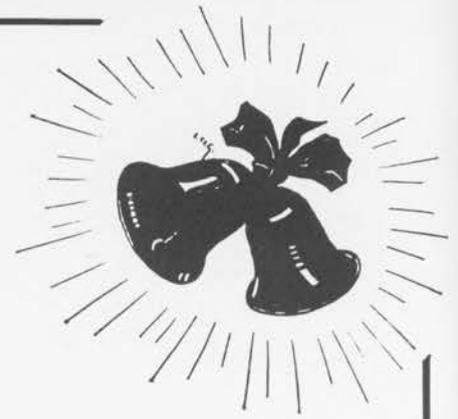
Harold T. Shapiro, President Princeton University
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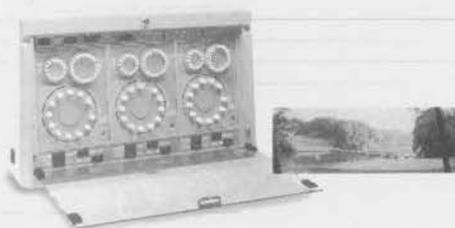
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DESIDERATA

Go placidly amid the noise and haste, and remember what peace there may be in silence. As far as possible, without surrender, be on good terms with all persons. Speak your truth quietly and clearly, and listen to others, even the dull and ignorant; they too have their story.

Avoid loud and aggressive persons; they are vexations to the spirit. If you compare yourself with others, you may become vain and bitter; for always there will be greater and lesser persons than yourself.

Enjoy your achievements as well as your plans. Keep interested in your own career, however humble; it is a real possession in the changing fortunes of time.

Exercise caution in your business affairs; for the world is full of trickery. But let this not blind you to what virtue there is; many persons strive for high ideals; and everywhere life is full of heroism.

Be yourself. Especially, do not feign affection. Neither be cynical about love; for in the face of all aridity and disenchantment it is perennial as the grass.

Take kindly the counsel of the years, gracefully surrendering the things of youth. Nurture strength of spirit to shield you in sudden misfortune. But do not distress yourself with imaginings. Many fears are born of fatigue and loneliness.

Beyond a wholesome discipline, be gentle with yourself. You are a child of the universe; no less than the trees and the stars, you have a right to be here. And whether or not it is clear to you, no doubt the universe is unfolding as it should.

Therefore, be at peace with God, whatever you conceive Him to be, and whatever your labors and aspirations, in the noisy confusion of life, keep peace with your soul.

With all its shame, drudgery and broken dreams, it is still a beautiful world. Be careful. Strive to be happy.

Found in Old Saint Paul's Church,
Baltimore - Dated 1692.

WILKIE UNIVERSITY COMING IN MARCH WITH EXPANDED PROGRAM

Wilkie Turf has scheduled their second annual Wilkie University Program to be held March 2-5, at the Michigan State Management Education Center in Troy (Square Lake and Crooks Road's).

The program which last year was geared toward the irrigation industry, has been expanded to include courses that will appeal to anyone in the Commercial and Consumer sector as well. Participants will be able to choose from a curriculum of thirty-eight classes. Wilkie Turf employees along with key Toro personnel and other industry professionals will be conducting the classes.

The service schools offered include: Commercial Rotary Products, Golf Course Non-Reel Products, Golf Course Reel Products and Consumer Authorized Service Dealer, Master Service Dealer and Proline Service Schools.

The Irrigation department has expanded their course offerings as well. Several of the classes that were offered last year will be taught again this year due to their success and many new classes such as Athletic Field Management, Managing for Financial Success, Contemporary Selling, Outdoor Lighting Design to name a few have been added to the curriculum.

Wilkie Turf employees have prepared a plan of study that will give each participant the tools they need to deliver customer satisfaction on a regular basis. For more information contact either Kurt Kraly, Jim Barr or Don Baxter at 1-800-822-2216.

SAFETY ON THE JOB

ACCIDENTS happen because of carelessness and also in moments of working without concentration or thought on the job. They will cease to be only when the proper watchful attention is constantly applied to your job before you start working.

To keep safe, we firmly believe:

- That every person has the responsibility for keeping out of harm's way. This he owes to himself, his family, his fellows, and his job.
- That no one lives or works entirely alone. He is involved with all persons, touched by their success, known by their failures. If he fails the people beside him, he fails himself, and more his fellows have failed along with him.
- That freedom from harm can be prevented if you set a goal to be achieved, and if you work at it day after day.
- That the prevention of injuries and pain is an obligation upon which your work directly depends.

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Good Reading, March 1972

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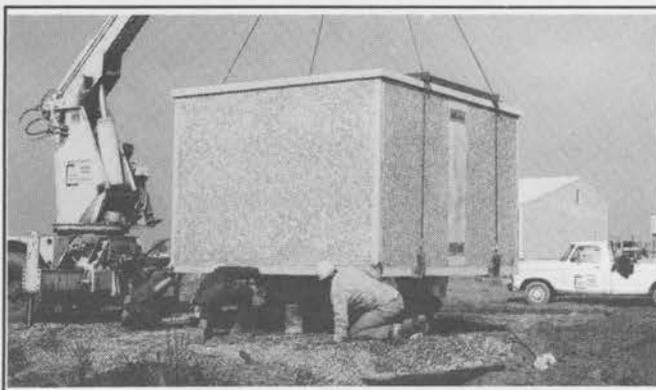
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EDITOR'S NOTE: The following presentation is the best I have seen on the subject of "Hazard Communication" — T.W.

Hazard Communication Program

by Donald W. Cook
Heartbeat, September 1991

Dear HAGCSA Members:

Late last winter, a disgruntled employee in the club's kitchen made a report to OSHA that there was an inadequate first aid cabinet in the clubhouse. The representative from OSHA came out to our club to inspect the first aid kit in question, and as long as he was there, took a look at our Material Safety Data Sheets, our medical records, and our Written Hazard Communication Program. The man from OSHA also paid me a visit at the Grounds Department to see our MSDS file and to inspect our facility.

I felt that we were prepared for such an event. I had my MSDS file in order, eye wash stations, shower, fire extinguishers, chemical applicator suits, respirators, rubber gloves and boots, safety glasses, splash-proof goggles, a well-supplied first aid cabinet, various health and safety posters hung on the bulletin board, and other safety equipment on hand for our employees' use. After our visit from OSHA and \$1,600 in fines against our club, I'm a whole lot smarter. Sure, I had six eye wash stations located throughout the maintenance building, but they did not meet OSHA standards. We had plenty of respirators and spare cartridges, and my crew knew how to use them. But, I did not have a written respirator program. The crew was not checked by a physician to see if they were fit enough to use a respirator. Safety is an important issue with me. We had a safety program written and available to the employees, but I did not have the crew sign off that they received any training.

As you can see, good intentions do not count for much and, of course, ignorance of the law is no excuse. There are over 51,000 laws covering these issues. How can we hope to be in compliance? The whole issue can be overwhelming.

On the following pages, will find Milburn Country Club's Hazard Communication Program. I've also enclosed our Hazardous Material Training Program, our Written Operating Procedure for Respirator Use and a Medical Questionnaire we developed to help determine the physical fitness of an employee to wear a respirator.

Some key points I wanted to point out with the Written Hazard Communication Program are: The Hazard Communication Program has to encompass the whole club to be effective (clubhouse, pool, tennis, carts, etc.). Employee training is extremely important and you must have written proof of that training. The employees must have access to a list of all hazardous chemicals and they must have access to all MSDSs.

Feel free to use Milburn's program as models for your own. Tailor the program to fit your facility. It is so easy to keep putting these kinds of things off, but get it done! Make your assistants do it. They can be heroes.

Sources of help in these matters include — Professional Turf Specialties (free); Regulatory Consultants, Inc.; Environmental Management Resources or Zep Manufacturing. Of course, I'd be happy to pass on any information I have.

I had a lot of help in compiling this information. Thanks go to Dave Weger and Dennis Coplen for their help in rounding up all those MSDSs and to Tim Anderson for writing our Employee Safety Program.

To finish the story, it turned out that the club did not even need to have a first aid kit because we are located so close to a hospital. Statistics show that over 75% of OSHA visits are prompted by disgruntled employees or neighbors of your facility. In my case, it wasn't even one of my employees.

Sincerely,
Donald W. Cook
Milburn Golf and Country Club

GROUNDS DEPARTMENT HAZARDOUS MATERIAL TRAINING PROGRAM

1. Reason for the "Employee Right-To-Know":

Approximately 1 in 4 workers are exposed to one or more hazardous chemicals in the workplace.

Since 1970, the number of compliance regulations from the federal and state levels has increased from about 2,000 to over 51,000 in the year 1990.

About 500,000 chemical products exist today.

Hundreds of new chemicals are introduced each year.

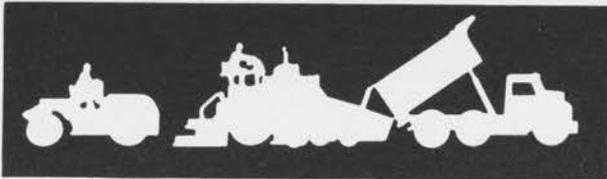
2. Non-Manufacturers' Requirements:

Inventory all hazardous materials found in their workplace.

Complete a Hazardous Substance Survey Form for hazardous materials found in the workplace.

Post the survey where all employee notices are usually posted.

CONTINUED NEXT PAGE



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Post an "Employee Right-To-Know" notice in the workplace.

Hold annual training sessions for employees who are exposed to hazardous materials.

Prepare an Environmental Hazard Survey Form if requested by the Department of Labor and Industry.

Make sure that containers and pipeline ports containing a hazardous mixture are labeled correctly.

Collect a file of Material Safety Data Sheets (MSDS) of hazardous substances that are present in the workplace.

Make these MSDSs available to employees without intervention of a supervisor.

Provide MSDSs to local emergency response organizations if requested.

Maintain employee health and exposure records and allow access to that record.

Get a hazardous materials warning sign for the outside of the maintenance shop, so as to warn any emergency response people of the shop's dangerous contents.

3. Employee Rights:

Employees have a right to know their rights under the "Employee Right-To-Know Act." A posted notice of this act should be made available in the workplace.

Employees have a right to know the identity of the substances with which they work. Employers must inventory, list, and label hazardous materials in the workplace.

Employees exposed to hazardous substances have a right to be trained.

Employees have a right to know the specific information about the hazardous substances with which they work.

Employees have a right to refuse to work with a particular hazardous substance, without being subject to penalty, if an employer fails to provide an MSDS for the product.

4. Training for Use and Handling of Hazardous Materials:

Oral and Dermal LD₅₀ (lethal dose 50) =

Miligrams per kilogram of body weight which must be internalized to cause death in half of a large-scale test population.

DANGER — WARNING — CAUTION. These are called signal words. They are found on the label of all chemical products. As you go from Caution to Warning to Danger, the LD₅₀ number decreases. This means that the lower the LD₅₀ number, the more toxic the product is to the applicator.

There are three means for hazardous materials to enter the body:

- Oral (mouth)
- Dermal (skin)
- Respiratory (lungs)

Means by which a hazardous material may result in oral poisoning:

- Not washing hands thoroughly.
- Mistaking the pesticide for food or drink.
- Accidental contamination of food products.
- Accidentally splashing the material into your mouth while handling or mixing the product.

Means by which a hazardous material can result in dermal poisoning:

- Not washing thoroughly after handling a hazardous material.
- Splashing or spraying hazardous materials on an unprotected portion of your body.
- Wearing clothing that is contaminated by a hazardous product.
- Wearing inadequate clothing while exposed to hazardous materials.
- Being exposed to the chemical drift of a hazardous substance.

Means by which a hazardous material can result in inhalation poisoning:

- Prolonged exposure to vapors and mist in poorly ventilated areas.
- Accidentally breathing vapors or mist of toxic products.
- Breathing fumes, vapors, or dust of a toxic product during application.
- Re-entering a treated area too soon after the application of a toxic substance.
- Not having a good seal on your respirator or using old cartridges in your respirator.

Two major types of exposure to hazardous materials:

- **Acute exposure:** A single, large-scale exposure with immediate symptoms of poisoning. Often

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caused by direct contact, broken equipment or severely contaminated clothing.

- **Chronic Exposure:** Repeated exposure to a hazardous material over a prolonged period of time. Usually due to faulty equipment, early re-entry, inadequate clean-up of clothes and body or contaminated working conditions.

- **What you should wear when dealing with hazardous materials:**

Use your common sense and the signal word on the label as an indicator of what protective clothing you should wear. Also, refer to the product's MSDS for information on protective clothing. As a general rule, you can refer to the Protective Clothing Equipment Guide located in the MSDS file. By cross-referencing the signal word on the product's formulation (dry or liquid) and the application environment, you can determine what protective clothing is acceptable.

Full protective gear would include goggles, a hat, coveralls, gloves, respirator and rubber boots.

- **Gloves:** Use neoprene with liquids. No lining is preferred because the lining may absorb the material.
- **Hat:** A wide-brim hat that is easy to clean or is disposable. The hat shouldn't have a leather sweatband. When working with liquids, you should use a water-proof hat.
- **Shoes:** Rubber boots with pantlegs on the outside.
- **Goggles:** These should be used especially when mixing chemicals, or any time there is a threat of a toxic substance coming in contact with your eyes.
- **Coveralls:** They should be made of a tightly woven material, clean, dry, free of tears, and cover as much of the body as possible. They should fit snug at the collar, and button or zip all the way up. Clothes used with hazardous materials should be triple washed or discarded.
- **Respirator:** Use an approved respirator if the label says "don't breath the mist or vapors of this product," you are in an enclosed area, or you will be exposed to the product for prolonged periods of time. A respirator must have a tight seal to work effectively. Replace the cartridges according to the manufacturer's instructions. Wash and dry the respirator after each use.

- **Personal Clean-Up:**

If you spill a hazardous material on yourself, wash the product off and refer to the product's



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MSDS for any further treatment.

If you are working with a pesticide product, shower thoroughly when you are finished.

● **Re-Entry Interval:**

When using a hazardous material, refer to the instructions on the label for the re-entry period. Warn all workers and other people to avoid the area until the re-entry period has passed. If no re-entry period is listed on the label, wait for the product to dry if it is a liquid, or for the dust to settle if it is a granular.

● **Proper Hazardous Material Storage:**

Store all hazardous materials in a cool, dry, well-ventilated, well-lighted area, with a concrete floor and a locked door.

Always store hazardous materials in their original containers.

If a container breaks, transfer the remaining contents into a comparable clean, dry container and label it properly.

● **Mixing and Loading Chemicals:**

Applicators are most exposed when mixing chemicals because they are in their concentrated form and the risk of accidental spills is greater.

● **Safety Guidelines:**

Don't work alone when using hazardous substances.

Work in an area with adequate ventilation and light.

Wear proper protective clothing based on common sense, the label instructions, and the signal word.

Always read the label directions carefully and fully before using a hazardous substance.

When pouring liquids, keep the material below eye level.

When mixing chemicals, stand so that the wind doesn't blow the chemicals back toward your body.

Never use hazardous materials under conditions where drift will contaminate non-target area or unprotected persons.

Don't smoke, drink, eat or use chewing tobacco while using a hazardous material.

CONTINUED NEXT PAGE

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Disposal:

- Avoid creating any excess hazardous materials.
- Pesticides: Empty the container and allow it to drain for 30 seconds. Fill the container ¼ full of water and rinse the container. Empty the rinsate into the spray tank mixture. Repeat this process three times. Plastic, metal and glass containers should be destroyed so that they cannot be reused. Paper containers should be sent to a landfill operating under a state pesticide disposal permit.
- Discarded petroleum products should be placed in containers marked for discarded hazardous waste so that it can be removed at a later date. No products should be poured down a sink or into a floor drain.

5. Spill Clean-Up Procedure:

- Avoid contact with the spill.
- If possible, contain the spill without coming in contact with it.
- Notify the Superintendent, Assistant Superintendent or Spray Technician as soon as possible. However, don't leave the spill unattended unless there is someone to warn people of the danger.
- If anyone was exposed during the spill, wash the material off of the person and refer to the product's MSDS for first aid. If necessary, seek medical attention. If medical attention is needed take the MSDS or a label off the container with you to the hospital so the medical personnel will know what they are dealing with.
- Before coming in contact with the material, put on the proper protective gear and refer to the product's MSDS for the appropriate spill clean-up procedure. In most cases, clean-up will include containing the spill by utilizing the Hazorb Pillows located by the Superintendent's office. The pillows should be placed so as to completely enclose the spill. If possible, eliminate the source of the spill by placing the damaged part of the container up or by placing the lid on the container. You may also use some of the "Lesco Soak-Up" located on top of the chemical applicators cabinet to absorb some of the spill. Once the spill is contained, shovel the material into a suitable container. If the product is reusable (example: a dry, granular product), return it to its original container or a suitable substitute to be used at a later date in a manner consistent with its label. If the product is no longer usable, put it into a leak-proof container for disposal at a later time, in accordance with EPA and state regulations. Once the bulk of the spill is cleaned up, additional rinsing of the effected area may be

necessary. Refer to the product's MSDS for appropriate clean-up procedure. Unless the product's MSDS states not to mix the substance with water (for example, an acid product), normal procedure would be to cover the area with detergent and add a small amount of water and brush the slurry for about 5 minutes. Apply more of the Lesco Soak-Up, shovel the material and put it into a container for proper disposal. Remember, try not to spread the spill to a larger area while cleaning it up, and don't allow any unprotected people into the area until the spill is completely cleaned up.

If the spill results in a fire, notify your Supervisor IMMEDIATELY! Get yourself and your co-workers to a safe area away from the fire and exposure to chemical vapors. Remember, when hazardous materials burn, they may emit toxic fumes. If possible, put on protective clothing, including a respirator and extinguish the fire using a CO₂ or dry-foam extinguisher. If you can't control the fire, notify the Fire Department and inform them of the hazardous material located inside the building.

ABOVE ALL, REMEMBER TO KEEP CALM

6. Chemical Poisoning and First Aid:

● **Poisoning Recognition:**

Symptom: Any bit of evidence that you are sick.
Example: Headaches, dizziness, sweating, nausea, impaired vision, rash.

Sign: Evidence of an abnormality or a disorder as observed by a physician. Example: Vomiting, salivation, fever, convulsions.

Contact a doctor immediately if you or a co-worker have a symptom or signs of poisoning as a result of exposure to a pesticide or a hazardous material. If possible, take the product's MSDS or a container label with you when you go to the hospital.

● **First Aid for Chemical Poisoning:**

Use common sense and stay calm.

Make sure that the victim is still breathing. If not, apply artificial respiration.

Make sure that the victim is no longer exposed to the poisonous material.

Don't allow yourself to be exposed to a poisonous chemical while helping another person.

Refer to the product's label and MSDS for specific first aid procedures. Listed below are some standard first aid procedures.

● **First Aid for Dermal (Skin) Poisoning:**

- Remove contaminated clothing.
- Clean the skin and hair with detergent and water.
- Dry the victim and keep him warm.

● **First Aid for Chemical Burn on the Skin:**

- Remove contaminated clothing.
- Flush the area with large quantities of running water.
- Cover the burned area with clean, loose fitting cloth.
- DO NOT apply any ointments to the burn.

● **First Aid for Eye Contact with a Toxic Material:**

- Wash the eye quickly.
- Don't let wash water drain from the affected eye into your non-affected eye.
- Flush the eye with clear water for about 15 minutes.
- Don't put any chemicals or eye drops in the eye. It may make it worse.

● **First Aid for Inhaled Poison Fumes:**

- Get the victim to fresh air.
- Loosen any tight-fitting clothing.
- Increase air movement in the affected area.

● **First Aid for Ingested Poisons:**

- Rinse mouth with lots of water.
- Drink large amounts of water or milk (1 quart or more).
- Induce vomiting only if directed to do so by the product's label or its MSDS.

7. Location of Hazardous Materials and Safety Equipment Within the Shop Area:

- No one under the age of 16 should be allowed to come in direct contact with any hazardous material in this workplace, under any conditions!

Location of Hazardous Materials in the Workplace.

- **Tool Room:** Assorted aerosol containers including solvents, sealers, and lubricants. Many of these products are flammable. The signal word on these products ranges from Caution to Warning to Danger.

CONTINUED NEXT PAGE

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- **Bathroom** : Assorted cleaning supplies. The signal word on these products include Caution, Warning, and Danger. You should only be in this area if you are trained in the use of these chemicals or are under the charge of a supervisor.
- **Irrigation Locker** : Assorted primers, solvents and glue products used on PVC pipe. These products are very flammable and have a signal word of Danger.
- **Fertilizer Storage Bins** : A wide variety of products containing fertilizers, insecticides, herbicides, and fungicides. Signal words on these products vary from Caution to Warning to Danger. Some of these products are extremely hazardous and they have the potential to be both flammable and explosive. You should only be in this area if you are trained in the use of these chemicals and are under the charge of a supervisor.
- **Mechanic Shop Area** : An assortment of aerosol solvents, cleaners, sealers, lubricants and other petroleum-based products. Many of these products are extremely flammable. Their signal words include Caution, Warning and Danger.
- **Fuel Storage Area** : Various petroleum-based products. Most of these products are flammable.

Location of First Aid and Safety Equipment in the Workplace.

- **First Aid Cabinet** : Directly outside the door to the superintendent's office. Also on the north wall of the front shop area where it is marked with a red cross.
- **Eye Wash Stations** :
 - Inside the bathroom.
 - Outside the superintendent's office.
 - Next to the tool room door.
 - On the exterior north wall of the chemical room.
 - Next to the telephone located in the rear of the shop, by the mechanics shop.
 - By the rear garage door in the mechanics shop.
- **Safety Showers and Eye Wash Stations** :
 - Outside the chemical room.
 - West end of the shop.
- **Fire Extinguishers** :
 - Outside the bathroom door.
 - Outside the chemical room door.
 - By the garage door, next to the fertilizer bins.

- On the acetylene torch in the mechanics work shop.
- By the garage door leading from the front shop to the back shop area.
- **Phones and Emergency Numbers:**
 - By walk-in door adjacent to the Superintendents office; by the garage door that divides the front shop and rear shop area; by the grinder, adjacent to the mechanics office.
- **MSDS File:**
 - Located on the counter that runs along the south wall of the front shop area.
- **Wash Sink:**
 - In the front shop area on the outside wall of the bathroom.
- **Shower:**
 - Located inside the bathroom.
- **Chemical Applicator's Suit:**
 - Inside the bathroom located on the top of the employee lockers.
- **Chemical Applicator's Cabinet:**
 - Outside the door to the superintendents office. This contains respirators, masks, rubber gloves, respirator cartridges and goggles. Some of these items can also be found in the first aid cabinet located on the north wall of the shop area.
- **Rubber Boots;**
 - In the bathroom; under the chemical applicator's cabinet; under the counter along the south wall in the front shop area.
- **Hazorb Pillows:**
 - Outside the door to the superintendents office.
- **Lesco Soak-Up:**
 - On top of the chemical applicator's cabinet.
- **Main Power Switch:**
 - Located on the south wall of the front shop, immediately outside of the tool room.
- **Emergency Fuel Shut-Off:**
 - Located on the east exterior wall of the shop, adjacent to the front garage door.

Definition of Key Terms:

- **Hazardous Substance:** Any chemical which is a physical hazard or a health hazard.

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*Best
Wishes
for a
Joyous
Holiday
Season*



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- **Physical Hazard:** Combustible liquid, compressed gas explosive, flammable, organic peroxide oxidizer pyrophoric, unstable or water reactive. A physical hazard can cause a fire or an explosion.
- **Health Hazard:** A chemical that when exposed to employees through the skin, inhalation or ingestion, may produce acute or chronic effects.
- **Acute Effects:** Adverse effects evident immediately or shortly after exposure.
- **Chronic Effects:** Adverse effects that develop slowly over a long period of time or upon repeated, prolonged exposure.
- **Routes of Entry:**
 - Dermal (Skin)
 - Inhalation (lungs)
 - Oral (mouth)
- **Sign:** Outward evidence of abnormality or disorder. Example: Vomiting.
- **Symptom:** Any bit of evidence that you are sick. Example: nausea or headaches.
- **Complete Protective Gear:** Applicator's suit, rubber gloves, rubber boots, respirator, goggles, wide-brimmed hat.
- **Signal Word:** Caution, Warning, Danger. Based on the product's LD50 number. As the LD50 number decreases, then the product is more toxic. Products with the signal word "Danger" are the most toxic. Products with the signal word "Caution" are the least toxic.
- **MSDS:** Material Safety Data Sheet. These are information sheets on hazardous substances which are put together by the manufacturer of the product. Employers must make these sheets available to employees. The data sheets cover the manufacturers name, company address and emergency phone number; the product's common and chemical name; various physical and chemical characteristics of the substance; fire and explosion hazard data; health hazard information; toxicity information (LD50 numbers); reactivity information; spill, leak, and disposal procedures; protective gear information; storage and handling instructions.
- **Right-To-Know Act:** This is an OSHA regulation that requires both manufacturing and non-manufacturing companies that use any material determined to be hazardous to provide their employees with specific training in recognizing hazardous materials in the workplace, properly using hazardous materials, knowing the health risk and effects of hazardous materials, avoiding unnecessary exposure to hazardous materials, and where to get information on these materials.

Hazard Communication Program Training Certification

I have received Hazard Communication Training as described in the Hazard Communication Program. The training was conducted on: _____

Employee Signature: _____

Social Security Number: _____

Work Area: _____

I hereby certify that the above-named employee has been provided with Hazard Communication Training on:

Instructor's Signature: _____

Title: _____



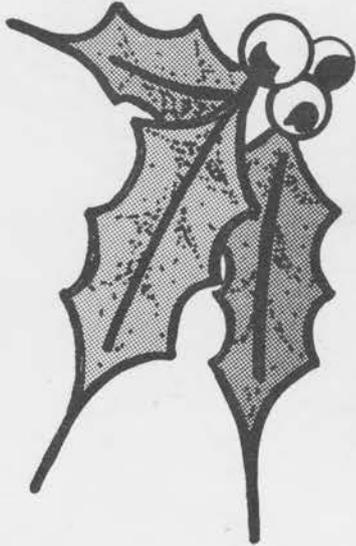
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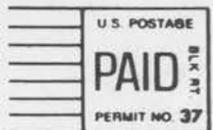
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