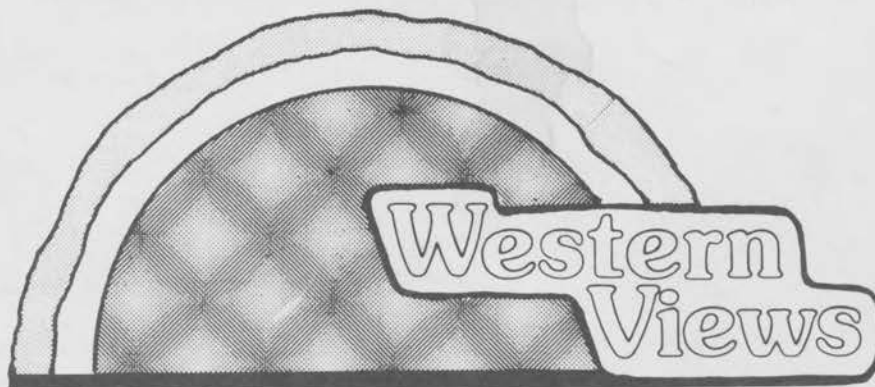




Official Publication of the
W.M.G.C.S.A.



JAN/FEB 1987

PRESIDENTS MESSAGE
Kurt A. Thuemmel C.G.C.S.

Now that the busy Holiday Season is behind us, January will, by no means, be a slow month. The month of January starts off with our monthly meeting on the 9th at Grand Rapids Elks Country Club with our host Jeff Gorney. This is our annual Bowling Meeting, along with a guest speaker, and it provides an opportunity to discuss the upcoming Michigan Turfgrass Conference and the National Golf Course Conference and Show in Phoenix.

The Michigan Turfgrass Conference will begin on January 12th (basic schools) and run through the 14th. It will follow a similar format to the 1986 conference with a few adjustments here and there.

The National Conference dates are January 26th through February 2nd, 1987, with the National Golf Tournament the week prior to the Conference. The Hospitality Room for the National will be held in the Hilton Hotel and will be available on January 29th, 30th, 31st and February 1st. On the evening of Friday, January 30th, our association will host this room. Volunteers are needed to serve as Bartenders and related duties.

On December 4th, your Board of Directors met at Blythefield C.C. to plan our Association's activities for 1987. The following Committee Chairmen were appointed:

Notification	Roger Barton
M.T.F.	Jeff Gorney
Membership	Chris Fochtman
Nomination	Keith Paterson
Education	Peter Ashe
Newsletter	Keith Paterson
Golf Day	Jeff Gorney
Golf Events	Bill Davis & Bob Johnson
GCSAA Liaison	Fred Pastour
GAM	Kurt Thuemmel
Fall Party	Roger Barton

The last three committees on the above list are new for 1987.

GCSAA Liaison: At the urging of the National Headquarters, this Committee was formed to improve communications between GCSAA Members and GCSAA Headquarters. All details have not been worked out; however, it seems to be a modified attempt at regionalization of our National Headquarters. Tom Mason, Birmingham C.C., has been selected to represent Michigan and 3 or 4 other states as the Liaison between GCSAA Headquarters and the Members from these States. Fred Pastour will keep our Association informed as new information is received.

GAM The Golf Association of Michigan is interested in hosting, in conjunction with our Association, annual seminars pertaining to Golf Course Management issues. The first Seminar was held in April, 1986, at Kent C.C. The 1987 Seminar is scheduled on March 14th at Battle Creek C.C. The function of this committee is to assist in planning and coordinating this Seminar.

(Continued on page 2)

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(Continued from Cover)

Fall Party: The Chairman of this Committee will select the facility for the Fall Party and assist the host in planning this event.

Like most Associations, feedback from the Members is important if we are to provide the services that you deserve. Get involved and volunteer to serve on a Committee to help improve our Association. You may find that it is very rewarding.

Now is the time to think about our March Meeting (Round Table Discussion) and pass onto Peter Ashe ideas for topics of interest for this informative Meeting.

See you in January!

STARR TO KEYNOTE OPENING

Bart Starr, former player and coach of the Green Bay Packers, will be keynoter at the 58th International Golf Course Conference and Show sponsored by the Golf Course Superintendents Association of America (GCSAA) January 26 - February 2, 1987.

An accomplished contributor to professional sports, Starr will speak at the Opening Session at 5:15 p.m. Thursday, January 29, in Symphony Hall, which is located at the Phoenix Civic Plaza.

A professional quarterback, Starr was named to the Pro Bowl four times and led the Packers to five world titles between 1961 and 1967. His jersey, number 15, was formally retired by the Packers in 1972. He was only the second Packer to have his number retired in the team's 55-year history.

His career highlights include: Most Valuable Player in the National Football League (NFL), 1966; the first winner of the Byron White Award, NFL Gladiators Award for outstanding contribution to community and pro football, 1969; and Chairman, Vince Lombardi Memorial Golf Classic.

Starr currently is the owner of automobile agencies in the southeastern United States.

The 1987 GCSAA Conference and Show are expected to attract an international crowd of nearly 13,000 persons from the world of golf course management and golf.

ROBERT TRENT JONES TO RECEIVE RARE TRIBUTE

Renowned golf course architect Robert Trent Jones will receive golf's prestigious Old Tom Morris Award from the Golf Course Superintendents Association of America at the 58th International Golf Course Conference and Show this winter in Phoenix.

Identified throughout the golfing world with the true heritage and tradition of the game, the award will be presented February 2 during banquet ceremonies at the Phoenix Civic Plaza Ballroom.

The Conference and Show are scheduled January 26 - February 2. The center of activities will be the Phoenix Civic Plaza.

The Old Tom Morris Award is presented to an individual who, through a continuing, selfless commitment to the game of golf, has helped to further the game with the same dedication and inspiration demonstrated by Old Tom Morris.

Jones is a charter member and past president of the American Society of Golf Course Architects (ASGCA). He has designed more than 400 course in 42 states and 23 countries, and has remodeled many others.

More than any other post-World-War-II golf architect, Jones reversed the trend toward playing equipment, becoming the determining factor in how a course should be played. Jones' philosophy was that the course, itself, should determine play and that every hole should be a difficult par, but easy bogey.

Jones was the first recipient of the ASGCA's Donald Ross Award for outstanding contributions to golf course architecture. He became an advisory member of the American Academy of Achievement and recipient of its 1972 Golden Plate Award, and a member of the Royal and Ancient Golf Club of St. Andrews. In 1981 Jones was given the William D. Richardson Award by the Golf Writers Association of America in recognition of consistent and outstanding contributions.

Arnold Palmer, Bob Hope, the Honorable Gerald R. Ford and Patty Berg are previous recipients of the Old Tom Morris Award.

An international golf audience including representatives of every major golf association will be on hand for the 1987 banquet ceremonies.

WHY DO WE HAVE 18 HOLES ON THE GOLF COURSE?

*The following article was taken from the book
The History of Golf.*

At the time the members of the Society of St. Andrews Golfers laid down the rules, the course at St. Andrews — what would now be the famous Old Course — had twelve holes. The first eleven traveled straight out to the end of a small peninsula. After playing these, the golfers returned to the clubhouse by playing the first ten greens backward, plus a solitary green by the clubhouse. Thus, a "round" of golf at St. Andrews consisted of twenty-two holes. This is, the golfers played "out" until they reached the End Hole. There they turned around and played "in" to the same holes. If two groups approached a green simultaneously, preference was given to those playing "out". The outgoing holes were marked with a small iron pin with white flags, while the incoming holes were marked with a red flag.

In 1764, however, the Royal and ancient resolved that the first four holes should be converted into two. Since this change automatically converted the same four holes into two on the way back, the "round" was reduced from twenty-two holes to eighteen. And since St. Andrews was soon to become the arbiter of all that was correct about golf, eighteen holes soon came to be accepted as standard throughout Scotland and England and eventually throughout the world.

Credit: On the Green 9/86

ATTENTION:

New "Right to Know"
legislation will become effective on February 25, 1987. To find out how this will affect your operation, contact Mike Mason at **517-335-8250** and he will mail you the necessary information.



GOLF COURSE DEVELOPMENT IN FLOOD PLAINS

by

James G. Walker, PE

Gove Associates Inc.

Submitted by: Jerry Matthews

Golf courses, because of their open nature, are an excellent land use of flood plains. In this sense you might say that in developed areas, flood plains contribute to the development of golf courses. However, as with other developments in flood plain areas, golf courses, too, are impacted by flooding. The purpose of this article is to provide you, the golf course superintendent or owner, with an understanding of what can and cannot be done to minimize the impact of flooding on golf courses by dike construction, elevating tees and/or greens or other construction techniques.

Unlimited filling and diking construction would of course be the answer to the reduction of flooding at a particular site. This, however, would increase flooding upstream. In order to prevent this from occurring, Act 167, which controls alterations of the floodway, was passed by the State of Michigan in 1968. Subsequent to Public Act 167, the Natural Resources Commission has established rules which prohibit the construction of encroachments in the floodway if the encroachment "may cause harmful interference" and which require "a permit to occupy, fill or grade lands in a flood plain." In order to determine what filling may or may not be permissible, then one has to make a determination as to whether a proposed filling causes harmful interference in the floodway.

Before proceeding, a few definitions are in order. A 100 year (frequency) flood means, "a flood which has a 1% chance of occurring or being exceeded in any given year" or, to put it another way, is the flood that would be expected to occur on the average, once every 100 years. Similarly, a 10 year flood is the size flood that would be expected once every 10 years on the average. The flood plain is defined as, "that area of land adjoining a river or stream which will be inundated by a 100 year flood." The floodway is defined as, "the channel of a river or stream and those portions of the flood plain adjoining the channel which are reasonably required to carry a 100 year flood." The floodway and flood plain of a typical cross sec-

tion are shown in Figure 1. Encroachment means, "any structure, deposit, or fill in, along, across, or projecting into a flood plain, channel, or floodway." Harmful interference is defined as, "causing an unnaturally high stage or unnatural direction of flow on a river or stream which causes, or may cause, damage to property, a threat to life, a threat of personal injury, or a threat to water resources.

The Water Management Division of the Michigan Department of Natural Resources has been designated as the regulating agent of the State for flood plain permits. Generally speaking, the Water management Division does not restrict development outside the floodway. Within the floodway, filling is usually permitted if the encroachment does not cause an increase of more than 0.10 feet in the 100 year flood elevation. In highly developed areas where existing buildings are immediately upstream of a proposed fill, the Water Management Division may not allow any increase in flood stage.

In practical terms, then what can a golf course superintendent or owner do to minimize flooding? In some cases, specific areas such as a tee or green, can be elevated above flood stage or, a portion of the course may be redesigned so at least nine holes would be playable under normal high water conditions.

The fill or dike should be designed to provide protection from a 10 year flood, but at the same time, not cause "harmful interference" for a 100 year old flood. Situations where filling would not cause harmful "interference" are those areas where the cross sectional area of the floodway is very large compared to the proposed encroachment. Typically this occurs upstream of dams, upstream of restrictive bridges and culverts, or upstream of large rivers.

Flood elevations, flood plain and floodway mapping is available for all developed areas subject to river flooding in Michigan as a result of Flood Insurance Studies contracted out by the Federal government. In Michigan, the Water Management Division served as the reviewing agent for these studies and has all pertinent information on file. My experience has been that personnel of the Water Management Division are very cooperative in sharing this information with the public and giving an indication of whether a proposed encroachment may or may not be permissible and what information would be required for a flood plain permit. Depending on the river hydraulics and proposed fill, the resulting encroachment may be insignificant or major. If the Water Management Division indicates the proposed encroachment is insignificant the permittee can prepare and submit a flood plain application and the required drawings (plan, profile, cross sections) for a flood plain permit. If, however, the Water Management believes a proposed encroachment may cause a "harmful interference", it will require a hydraulic report by a registered professional engineer to evaluate the effects of the encroachment. If no flood studies have been done on the area in question, the Water Manage-

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ment Division will usually require a hydraulic report. Situations where an encroachment would have an insignificant effect could be areas where downstream bridge or dam structures or larger rivers cause wide flood plains.

When a hydraulic report is required, the engineer will work with the golf course superintendent and golf course architect to come up with a design that does not cause a harmful interference. Should a hydraulic report be required, the engineer will probably use a computer model to conduct the hydraulic analysis; therefore, the encroachment can be changed and evaluated hydraulically with minimal effort. Depending on the complexity of the river hydraulics and available information, a typical hydraulic study will cost in the range of \$1,500 to \$4,000.

The permit application process takes approximately two to three months from the time a permit is applied for until, the time a permit is issued. This includes internal department review and 20 day public notice period in which appropriate agencies and adjoining property owners are given time to respond to the proposed action. If serious objections are raised from public noticing of the project, the permit process will take longer than two months. Also, if the proposed construction is planned for an existing wetland, a separate permit for construction in a wetland may be required.

GOLF CAR STATISTICS

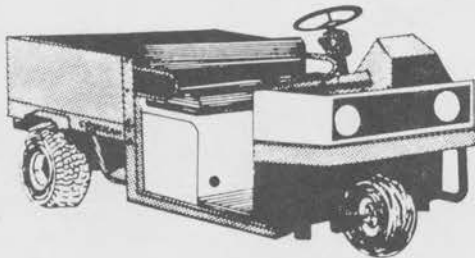
A recent PGA-NGF national survey of *Golf Course Operations* focused, in part, on golf car operations - uielding the following information:

- There are approximately 800,000 golf cars active at existing facilities across the country; each with an average retail price of \$2,500.
- Batteries are replaced on the average of six per car per 18 months. At \$40 each for 800,000 cars - we are looking at an annual \$120,000,000 battery market.
- The average number of golf cars at private clubs is 50; at daily-fee courses is 48; at municipal courses is 38; and at resorts is 70.
- 25% of private courses have continuous car paths; 10% of daily-fee courses do; 15% of municipal courses do; and 28% of resorts do.
- The average gross income from golf cars at private clubs is \$86,000; at daily-fees is \$40,000; at municipals is \$60,000; and resorts is \$100,000.
- The net income from golf car operations averages 46% of gross at private clubs; 50% at daily-fee and municipal courses; and 65% at resorts.
- 95% of all golf facilities (including executive and par-3 courses) have a golf car fleet.

Credit: Tee to Green

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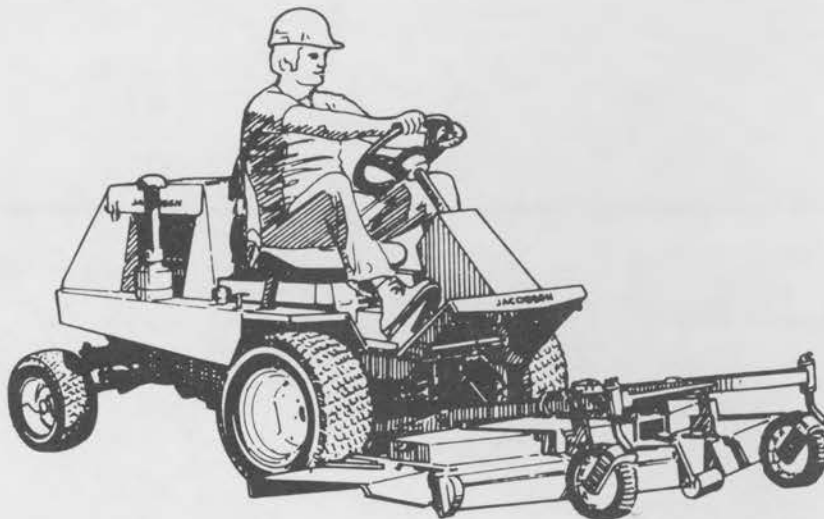
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FIVE WAYS TO FIGHT FATIGUE

by

Jane E. Brody

Condensed from the New York Times

"I'm exhausted at the end of a day at the office."

"I'm so tired that I haven't made the kids a proper meal for a week."

"It doesn't matter how long I sleep - I'm more washed out when I wake up than when I went to bed."

In this age of labor-saving devices and convenient transportation, why are so many people so tired so much of their time?

The causes of modern-day fatigue are diverse, and only rarely related to excessive physical exertion. Today, physicians report, tiredness is more likely a consequence of *underexertion* than of wearing oneself down with overactivity. In fact, increased physical activity is often prescribed as a cure for sagging energy.

There are three main causes of fatigue:

Physical. this is the result of so overworking your muscles that metabolic wastes—carbon dioxide and lactic acid—accumulate in the blood and sap your strength. It is usually a pleasant tiredness, such as you might experience after a hard set of tennis or a long hike. The cure is simple and fast: rest, giving your body a chance to get rid of the wastes and restore muscle fuel.

Pathological. Here fatigue is a warning or a consequence of a physical disorder, whether a cold or a more serious illness. Usually other symptoms are present that suggest the true cause.

Even after an illness has passed, you're likely to feel "dragged out" for a week or more. Take it as a signal to go slow while your body has a chance to get back in shape. Pushing yourself to resume full activity too soon could precipitate a relapse and, almost certainly, it will prolong your period of fatigue.

Even though illness is not a frequent cause of prolonged fatigue, it's important that it not be overlooked. Therefore, anyone who feels drained of energy for weeks on end should have a thorough physical checkup.

Psychological. Unfortunately, too often a medical workup ends with a battery of negative test results, and the true cause of serious fatigue goes undetected. As Dr. John Bulette, chief of psychiatry at Allentown Hospital and Lehigh Valley Hospital Center in Pennsylvania, tells it, this is what happened to a woman who had lost nearly 50 pounds and was "almost dead - so tired she could hardly lift her head up.

Physicians were sure the woman had cancer, but they could find no sign of malignancy—or any other disease that could account for her wasting away. She was brought to the hospital where doctors noted that she was severely depressed. They questioned her about her life and discovered that her troubles had begun two years earlier, after her husband died. Once treated for depression, the woman quickly perked up, gained ten pounds, and then returned home to continue her recovery.

Emotional problems, especially depression and anxiety, are by far the most common causes of prolonged fatigue. It may represent a defense mechanism to keep you from having to face the true cause of your depression, such as hating your job. It is also your body's safety valve for repressed emotional conflicts, such as an unhappy marriage.

When these feelings are not expressed openly, they often come out as physical symptoms, with fatigue as one of the most common manifestations. Says Dr. Bulette, "Many fatigued people don't even know they're depressed. They're too busy distracting themselves or just worrying about being tired.

One such condition, sometimes called tired housewife syndrome, is often accompanied by genuine physical exhaustion. Many victims are young mothers who, day in and day out, face the tedium of caring for a home and

(Continued)



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small children. The homemaker may be inwardly resentful, envious of her husband's job and guilty about her feelings. But rather than face these feelings head-on, she becomes fatigued. Today, with nearly half the mothers of young children working outside the home, this syndrome may also stem from conflicting roles and responsibilities, and guilt over leaving the children.

Emotionally induced fatigue may be compounded by sleep disturbance that results from psychological conflict. A person may develop insomnia, or may sleep the requisite number of hours, but toss and turn all night, have unsettling dreams and awaken exhausted.

Understanding the underlying emotional problem is the crucial first step toward curing psychological fatigue, and by itself often results in considerable lessening of the tiredness. Vitamins and tranquilizers are almost never a longterm solution and should be taken only under your doctor's direction. Sleeping pills and alcohol are counterproductive. And caffeine can cause symptoms of anxiety. Counseling may be needed; but there is also a great deal that you can do on your own to deal with both severe prolonged fatigue and periodic washed-out feelings.

Eat Well-Balanced Meals. If you eat a skimpy breakfast or none at all, you're likely to experience mid-morning fatigue, the result of a drop in the blood sugar that your body and brain depend on for energy. For peak energy in the morning, eat a breakfast low in sugar and high in complex carbohydrates and protein, which will provide a steady supply of blood sugar through the morning. The same goes for the rest of the day: frequent snacking on sweets is a false pick-me-up that soon lets you down lower

than you were. Stick to regular, well-balanced meals. Because extra poundage is tiring, getting your weight down to normal can do much to revitalize you.

Exercise More. For people who are physically healthy this can increase, rather than sap, energy. Regular conditioning exercise, such as jogging, cycling, swimming or walking, helps you resist fatigue by enabling you to handle a bigger workload. Exercise also has a tranquilizing effect, which helps you to work in a more relaxed fashion and to cope with tension. Exercise at the end of a day can give you energy in the evening and help you sleep better.

Sleep More. If you're drowsy in the daytime because you don't get enough rest, try to get an extra hour of sleep each night. People differ as to the hours of sleep they need, so find the amount that suits you best and then stick to it.

Work at Your Peak. Some "morning people" tire by midafternoon; others work better in the evening. Schedule your most taxing jobs for the time of day when you're at your peak. Recognize your energy cycles as well as your capacity and plan accordingly.

Take Breaks. No matter how interesting or demanding your work, you'll be able to do it with more vigor if now and again you stop, stretch, and change the scenery. Instead of coffee and a sweet roll on your break, try relaxation, yoga, calisthenics or a brisk walk.

Credit: Readers Digest

GETTING THE MOST OUT OF CONFERENCES

Conference and trade shows, such as GCSAA's International Turfgrass Conference and Show, offer an important opportunity for you to invest a small amount of time and money for a large return. Most professionals believe that occasional opportunities to educate themselves are central to their ability to provide continuing good service to their employers. This is especially applicable to golf course superintendents whose responsibilities are expanding rapidly.

Learning opportunities come in several forms at a meeting such as GCSAA's. There is the chance to benefit from the knowledge of experts; the more concrete learning afforded by the chance to examine new equipment and products; and the benefit derived from associating with other superintendents.

Attending intensive education sessions can make conferees feel as if they're trying to drink from a fire hose--so much is coming so fast that it's difficult to absorb anything. The best way to overcome this problem is to plan ahead. Select your program of educational sessions carefully, considering the value that each topic has for your problems and situation.

Take plenty of notes--they help you keep organized--but be sure you're not so busy writing things down that you forget to listen. If conference proceedings or recordings of the sessions are available, take advantage of them.

Trade shows offer an opportunity to observe a wide variety of equipment and supplies in a relatively short period of time. It's possible to "comparison shop" among many equipment manufacturers. Whether you have a specific need to fill or are "just looking", you will benefit

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from the time you spend on the exhibit hall floor.

If you own or can borrow a camera, consider taking one along to photograph items that you are interested in. Photographs of informative posters can save you time by keeping you from copying down information. Don't be hesitant to discuss your requirements with the sales representatives on the floor—they are there to inform you. They may also have descriptive brochures you can take home with you.

Meeting strangers at a conference need not be difficult. All you have to do is be willing to introduce yourself to those around you at a meeting or in an elevator, for example. Have a ready supply of small talk about the weather or sports ready to ease the first few minutes of conversation. There is a rapport that develops quickly in these kinds of encounters which can lead to valuable exchanges of information.

Look for the new attendee and pay special attention to him. If he feels lonely or isolated, chances are he won't return next year. If that happens, he loses and so do you.

Education, exhibits, exchanges with fellow conferees—they are three important aspects of attending a conference. Each is valuable, and each is part of the investment you make of your time and money when you attend a conference.

Credit: Newsletter of New England

“FLOWERS IN JANUARY”

by

Fred Opperman, CGCS
Glen Oak C.C., Glen Ellyn, IL

Flowers in January? Who thinks of flowers at this time of year with snow on the ground and freezing temperatures? If you do think of them you would think of just the house plants that flower, like the Poinsettias.

But here at Glen Oak C.C. I start thinking of what flower will be planted around the clubhouse flower beds this coming May. I do it now, for if there is a certain type of flower or color combination I want, the greenhouse has time to order the seeds I need and the lead time to plant them for me. The greenhouse, then, can schedule all my plant selections to be ready by the third week in May. It is extremely risky to plant any earlier than the third week in May due to late frosts that can and do occur. The safest planting date is really May 30th.

Here at Glen Oak we have eighteen flower beds ranging from 75 to 800 square feet, plus about 15 flower pots/planters. We rarely repeat or plant the same thing two years in a row in any of these beds, but there are exceptions, which I'll mention later. Another thing we do is keep a log on what flowers are planted in each bed for every year, and a picture log is kept up on these beds. I usually take color, size when full grown, spacing when planted (both in row and between the rows), total number of each plant in the bed, and comments on that bed. Comments being if the bed was good, bad, needed more plants, or the colors really didn't go together like you thought they would. A person may wonder why I need all

(Continued)

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that information. Well, when it comes time for me to start planning my next year's flower beds, I can go back a couple of years, find a very successful flower bed, and repeat it. I have all the information that I need for the ordering and planting of that bed. It also guarantees that I won't be making the same mistake twice with flowers that didn't work out before.

We employ a full time gardener during the season, and I usually have a woman to handle this position. She would usually start the first of May and work thru August. By late August the flower beds need only a few hours a week of care. During the growing and flowering season the gardener is kept busy weeding, watering, cultivating, pinching back, and removing dead flowers. She also handles all the edging and trimming around the clubhouse area. All mowing is done by the grounds crew.

We try to roto-till the flower beds a week or two before planting. In most of our beds we have added substantial quantities of spent mushroom soil which we have a ready supply of from a nearby mushroom farm. A granular fertilizer is added when the beds are roto-tilled at about one pound per 100 square feet of a 1-2-2 ratio.

The flowers are then fertilized with a liquid fertilizer, which is sprayed on about once a month. Insects are watched for and handled as they come up with the proper chemical used for control.

The following are some of my favorite flowers which we use around Glen Oak:

Petunia - One of the showiest and longest continual bloomer of any plant and comes in any color.

Marigolds - Great bloomer which comes in various sizes and shades of gold or yellow or mixed.

Purple Salvia - If you need a blue or purple, this is the plant, reaches about two feet and is a constant bloomer.

Snapdragons - good bloomer, comes in all sizes. My favorite is Floral Carpet, about 10-12" high, which just blooms and blooms. Snaps need attention to be the spectacular bloomers, so be prepared to pinch them back and constantly pick off all dead flowers.

Impatiens - Great plant for a shady area. Comes in various sizes and colors.

Dusty Miller - A good edging plant with different leaves to choose from. Rabbits like them too.

Celosia - You have two colors to choose from and two forms: the cockcomb or feather type.

Cleome (Spider Plant) - Here is a different plant for you if you have the space for large flowering plants. It will reach 4 to 5 feet and will have continuous blooms up to frost. This plant will re-seed itself every year. This is one of the flower beds I don't change every year due to them re-seeding and the area where they are located.

Portulaca (Moss Rose) - Is a very excellent plant in a hot dry full sun area. This plant also re-seeds itself.

Geranium - Blooms well, very good in pots, needs to have old blooms and leaves picked regularly.

I don't use bulbs in any formal beds around the clubhouse. But do use them where they can be "naturalized" in shrub beds, under trees, etc. I use only a few tulips, for to me they seem so formal. Instead we use a lot of daffodils and narcissia for our spring blooms and color.

Credit: The Bullsheet

Supervisors

Those individuals who occupy supervisory positions seemingly are required to be "all things to all people". They must strive to satisfy higher management by the productivity and profitability of their departments and by having a minimum number of grievances, accidents and other problems. They must recognize the importance of effective human relations and attempt to achieve the objective of management while satisfying the needs and wants of their subordinates. This latter accomplishment requires that they establish good relationships with subordinates as well as their superiors and fellow supervisors and most important, that they recognize the uniqueness of individual personalities as influenced by their prior experiences at work, at home, and in the larger society.

The goal of every supervisor and manager must be to supervise in such a manner that the employees will do what you want them to do because they want to do it.

Experience has demonstrated that "The Production Centered Supervisors", those who are concerned primarily with production, are less effective in terms of actual production records than the "Employee Centered Supervisors" who give their attention to the people who do the work, but who also have high performance goals and enthusiasm for achieving them. While the job or production centered supervisors feel that they do not have time for employees until they have attained satisfactory levels of production; the employee centered supervisor recognizes the individual needs of the subordinates.

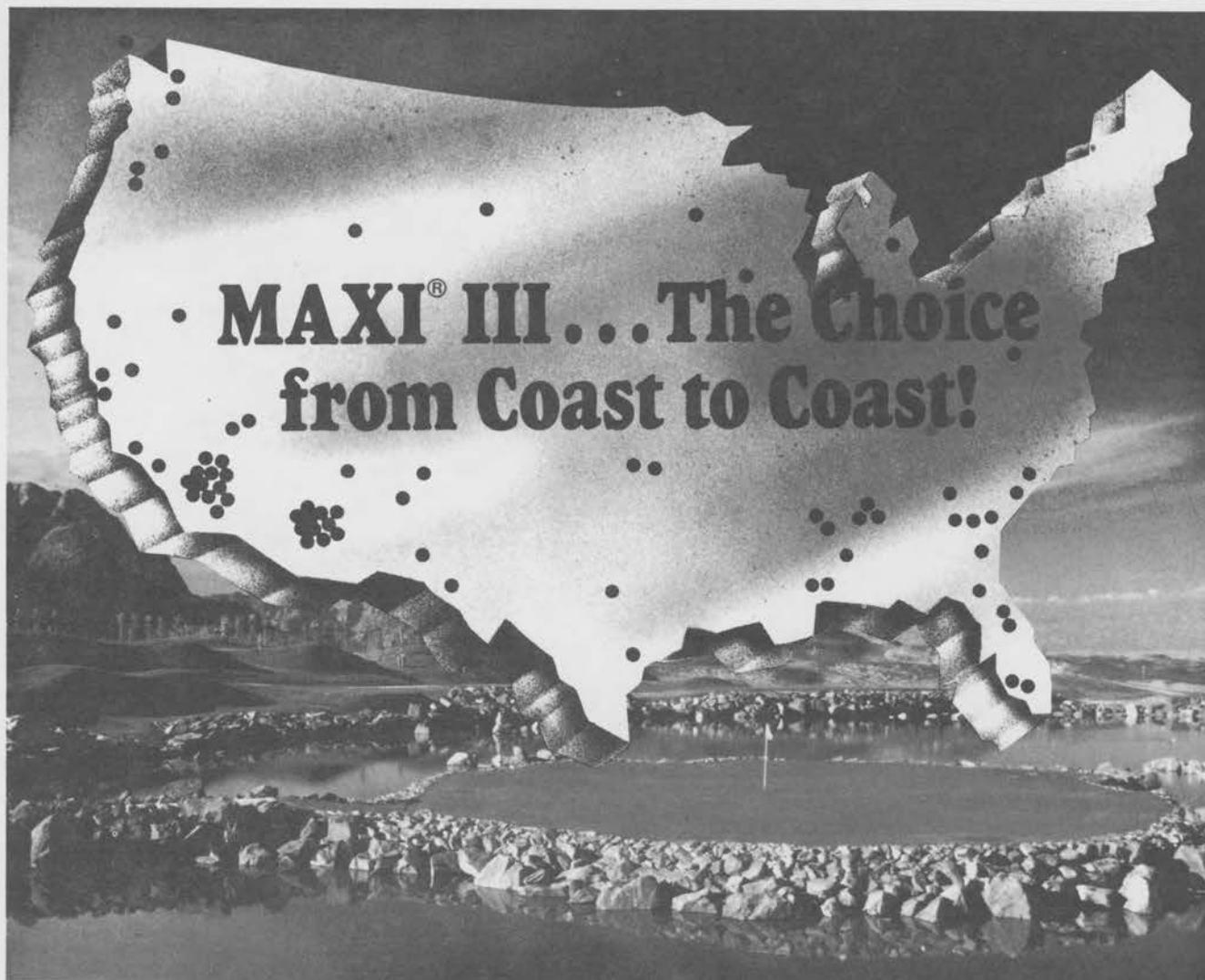
The talents and enthusiasm of the members of an organization are of little value unless they are carefully directed toward the objectives established for the organization. Providing the type of leadership that will result in the most effective utilization of personnel is a primary responsibility of managers and supervisors. However, because of their position in an organization, first line supervisors have one of the most important leadership roles. They have many responsibilities, but of primary importance is the part they play in developing efficient employees, in motivating and controlling their performance, and in facilitating their adjustments. The manner in which supervisors perform these functions may vary from one individual to another, but the effective supervisor is one who is aware of the important factors in the leadership role and is flexible in relationships with individuals and with the work group. The ability of the supervisor to provide for group participation in decision making was cited as one of the leadership skills that could be developed and would contribute to personal as well as organizational success.

Supervisors who are able to relate to subordinates, particularly those with backgrounds different from their own, can go a long way toward making them effective leaders. It should be recognized, however, that the effectiveness of supervisory personnel is a function, not only of their own personal characteristics, but their status, which is determined primarily as a result of management's attitudes toward supervisory personnel.

EXAMPLES OF POOR LEADERSHIP

1. Laziness
2. Buck passing
13. Reprimanding public

(Continued on page 12)



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(Continued from page 10)

- | | |
|-------------------------------------|---|
| 3. Failure to assume responsibility | 14. Unsafe work habits |
| 4. Not practicing what he preaches | 15. Favoritism |
| 5. Inconsistency | 16. Lack of cost consciousness |
| 6. Failure to take advise | 17. Not supportive of management policies, practices & procedures |
| 7. Failure to admit error | 18. Lack of initiative |
| 8. Avoid decision making | 19. Uncooperative |
| 9. Failure to maintain | 20. Failure to plan |
| 10. Failure to communicate | 21. No follow up |
| 11. Poor instruction | 22. Failure to train |
| 12. Dictatorial attitude | 23. Failure to delegate |
| | 24. Racial prejudices |
| | 25. Poor record keeping |

EFFECTS OF POOR LEADERSHIP

- | | |
|------------------------------------|--|
| 1. Low production | 7. Poor communications |
| 2. Poor morale | 8. Loss of respect for management |
| 3. High Costs | 9. Loss of confidence-self and company |
| 4. High labor turnover | |
| 5. Poor safety record | |
| 6. Poor cooperation from employees | |

QUALITIES OF GOOD LEADERSHIP

- | | |
|---------------------------------|---|
| 1. Job knowledge | 7. Cooperation |
| 2. Planning | 8. Decision making ability |
| 3. Initiative | 9. Delegation of authority & responsibility |
| 4. Efficiency | 10. Safety consciousness |
| 5. Fairness | |
| 6. Acceptance of responsibility | |

POINTS TO CONSIDER BEFORE GIVING ORDERS

1. Prepare yourself - plan work
2. Prepare worker for orders
3. Plan for maximum acceptance
4. Give explanation for orders
5. Consider safety aspects
6. Determine materials or equipment needed
7. Make sure employee is capable of carrying out orders
8. Plan details, clear, brief and to the point
9. Look for possible difficulties
10. Establish time span
11. Avoid conflict
12. Repeat orders until understood

WAYS TO GIVE ORDERS AND HOW TO USE THEM

1. Command - direct order
 - Emergencies
 - Where time is a factor
 - When you meet resistance
 - When other orders have failed
 - Warning or impending danger
2. Request orders
 - Where there is no emergency - not critical
 - Most of the time whenever possible
3. Suggested or implied orders
 - Where person ordered thinks it is his idea
 - Where the receiver is capable and receptive
4. Call for volunteers
 - Dangerous or unpleasant situations
 - Work outside normal job
 - Overtime work

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TYPES OF ORDERS

1. Verbal
2. Written
 - Standing orders
 - Several employees
 - Reduce misunderstanding
 - Detailed explanations
 - Where reference is desired
3. Signals
 - Visual / Sound

EVIDENCE OF DISSATISFACTION WITHIN THE WORK FORCE

1. Low morale
2. Work slow down
3. Poor work quality
4. Loss of production
5. Poor communications
6. Absenteeism
7. Tardiness
8. Complaints
9. No cooperation
10. High accident rate
11. High labor turnover

REPRIMAND - POINTS TO BE CONSIDERED

1. Get all the facts
2. Get the employee's point of view
3. Pick the right time and right place
 - in private
 - avoid interruptions
4. Plan what to say
5. Know past record
6. Offer suggestions for correction
7. Use self control
8. Give reasons for action
9. Talk straight - be clear
10. Be fair - be consistent with company policy, procedures and practices

Credit: Cactus and Line GCSA

PUMPING TIPS

Preventive maintenance plays an important role in keeping pump equipment operating efficiently and reducing equipment failure. The majority of this service should be performed by a qualified technician. However, many components of the pump station require only nominal skills and instruction to maintain. I have listed some of the components that can be serviced by inhouse staff.

Pumps

The pump packing should never be tightened to prevent leakage, otherwise the pump shaft will wear and can break. Pump packing, after it has been "run-in", should have a small leakage around the pump shaft. The leakage cools the pump shaft and packing gland and should be enough to prevent the pump shaft and gland from getting hot. Allow approximately 60 drops per minute.

Over time, repeated tightening will compress packing. Additional rings may be installed as required to compensate, but no more than two additional rings should be added. After two rings have been added and there is no more adjustment available, it is time to repack the box. Have a qualified technician do this.

Most packing boxes have copper drains to carry the leakage back to the pump vault. These drains invariably

(Continued on page 23)



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GOALS AND POSITIVE LIVING

by
Jacques Weisel

*WARNING: The Surgeon General Has Determined that
Apathy is Dangerous to Your Health*

Most people have an aim in life, but no ammunition. You're at a picnic and you spot a young man with an archery set shooting arrows into tree trunks. Every time he hits a tree he goes over and paints a perfect bullseye around the arrow. Passerby who only see the results or his work think he is a great archer. You smile, knowing better of course. Or do you?... After all isn't this basically the way you run your life? You end up somewhere, and then decide that's where you wanted to be all along. As a mature individual you've forgotten the most basic concept to living, which is to Plan Ahead. You'll go over the day-by-day activities for a 2-week vacation (perhaps 50 times in your lifetime) as if you were involved in a forcible overthrow of a hostile government. Yet, your only *once-in-a-lifetime* journey is played through without too much rhyme or reason. Usually with no plan beyond today and what it may bring. The Koran says "If you don't know where you're going, any road will get you there." "I've watched people do the same thing in Chinese restaurants. They don't know how to use chopsticks, and try for the beef, shrimp or pork in the dish. All they end up with are some grains of rice, which they proceed to eat. Occasionally, in order not to starve to death, they go back to the fork. And yet, a little training ahead of time with the chopsticks (short-range goal) would eliminate the problem before it occurs, and no one would have to be satisfied with the "crumbs" dished out, since we would be in full control.

It is a well-known psychological fact that man is a goal-striving mechanism. This means that whether he has goals or not, he will reach them. My question is simply this; would you rather reach goals which are yours or someone else's? As a child we were given short-range goals to live by. "Eat your food", "go to bed", "don't step in the gutter", "go to college", "get married"... all short-range and long-range plans that someone else wanted us to execute. It's no wonder that we got out of that habit as soon as we could... and usually end up by throwing out the baby with the dirty water. Goals are not important to Positive Living. They are *crucial*. It is not a coincidence that the word goal begins with "go". Daily goals give you the best reason to get up and do. Weekly goals make the months fly, and monthly goals renew your enthusiasm for life twelve times per year. Annual goals can guarantee a lifetime of successful happenings, as you maintain full control of your personal destiny.

The captain of a cruise ship needs to see his destination thousands of miles away to know he will reach it at a certain date and time, so can you plan your life according to your own timetable. Your goals must be realistic and reachable, so that you can reap the rewards of positive reinforcement at timed intervals, and thus have the confidence to know that you're on target for the big plan. One last condition. You must feel you deserve to reach your personal and financial targets, and only a

healthy self-esteem can do that. As children, we are all either the victims or beneficiaries of attitudes instilled in us by others.

We are either cursed or blessed by our early conditioning...and we also know that the Bible says "As a man thinketh in his heart, so he is.." This means that if we don't like some of our "programmed" thinking, we can change it by putting stronger and healthier thought into our minds.

Goals have changed a lot in recent years. Witness the following example. We used to marry on a long-range basis "till death do us part", which means a *commitment*. Now it's become "till divorce do us part", a short-range affair wherein the "commitment" has turned into "convenience". A recent *Redbook* survey of marriage counselors showed that the 3 most common causes for divorce are: (1) a breakdown in communications; (2) the loss of shared Goals and Interests; (3) sex and incompatibility.

There are literally hundreds of self-help books out on numbers 1 and 3, and very little on the subject of proper goal-setting. Profit-oriented companies have discovered the secret. They call it "management by objective". They make money and reach corporate goals by carefully pre-planning the direction in which they want the company to go. Unfortunately the same cannot be said of our governments, both national and local. The reason is simple. Since elections take place every few years, politicians cannot plan beyond their short-term positions, so that as a nation there is never a continuity of ideas designed to benefit the People. Japan, on the other hand, has 30-year plans for industrial growth and it is understood that whoever is in power will continue the program of his predecessors, because it is in the National Interest to do so, and not for the benefit of the local politicians.

One last good thought on goals by Henry David Thoreau: "The man who goes alone can start today. But he who goes alone can start today. But he who travels with another must wait till the other is ready." 'Nuff said...

Jacques Weisel is a national authority on positive living and selling. He is co-author of the book, "The Magnificent Motivators", producer of sales and motivational tapes and past president of the New York Chapter of the National Speakers Association. For a free information kit, contact him at: P.O. Box 224, Coram, NY 11727, (516) 698-7760.

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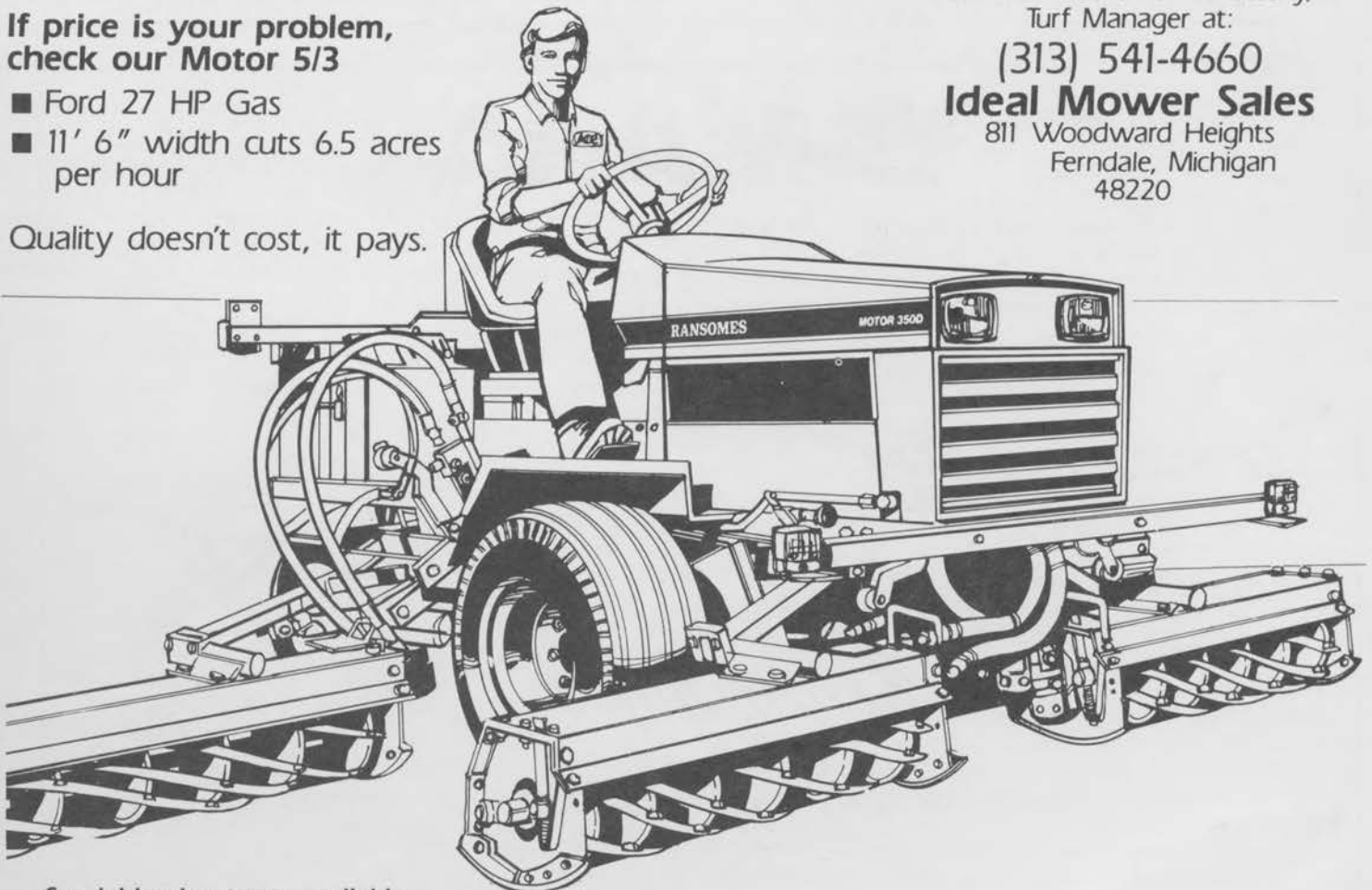
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OUR EXPERIENCE WITH NEMATODES ON SAND TOPDRESSED GREENS

by
Joel Purpur, Supt.
Bartlett Hills Golf Club, Bartlett, Il.

With more and more superintendents switching to sandier soil mixes and topdressings, a variety of uncustomary problems are occurring with greater frequency, with Nematode damage on sandy or sand topdressed greens becoming more common.

During the summer of 1985 at Bartlett Hills Golf Course, we experienced Nematode damage. Symptoms started in mid July when the green looked weak, chlorotic, and didn't respond well to fertilizer applications @ $\frac{1}{2}$ #/m. Small yellow to yellow orange spots $\frac{1}{2}$ " in diameter were observed throughout several greens. A closer look at the affected grass plants showed a yellowing starting at the tips of the grass blades progressing inward towards the crown, affecting older leaves first. Larger areas a couple feet in diameter looked more like wilt, but the soil and the turf had plenty of moisture. Other areas resemble patch disease symptoms. Various fungicides were applied and seemed to suppress the "disease", but only for a few days in some cases.

Damage severity also seemed to vary as to the turf species. *Poa annua* was most affected, while the coarser bents seemed least affected. Samples were taken to the University of Illinois Plant Clinic where *Fusarium* spores were found in some of the infected areas, as well as An-

thrachnose on dead leaves.

The problems persisted so a microscope was purchased to try and find more clues. After viewing a few samples at 105 power, one sample had several Nematodes around the plant ligule. Additional samples were taken at areas which seemed to be in the same stage of decline and Nematodes were again found.

Soil samples to a 6" depth were sent to U of I for a Nematode count and to find out if the Nematodes were parasitic or just fungi feeders working on *Fusarium* spores.

Theoretically, Nematode damage made sense as far as yellowing turf not responding well to fertilizer or fungicides. Spots that looked like patch diseases could have been disease moving in on weak turf or diseases brought on from plant fluids in the soil by turf injured from feeding. Damage to the turfgrass circulatory system by enzyme secretions during feeding cause galls, lesions, lateral roots, and kills meristematic tissue would possibly account for some areas looking like wilt. *Poa annua* being most seriously affected may simply be the weakest variety showing damage first.

Results from the plant clinic indicated parasitic Nematodes were present. Stunt (*Tylenchorhynchus*) and Ring (*Criconemoides*) Nematodes had the highest counts.

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Recommendations stated: "The number of Nematodes present are believed inadequate to affect production of the crop to be grown.

C.D.G.A.'s Dr. Randy Kane has seen an increase in incidents of Nematodes on greens, mainly on old greens with a clay base on a sand topdressing program. Dr. Kane pointed out that since Nematodes prefer sandy soil, sending a sample with 1" of sand and 5" of soil may dilute the sample if the concentration of Nematodes is only in the sand layer.

Not having a great deal of experience with Nematodes, a number of questions came to mind: Were the Nematodes brought in with the topdressing since lateral movement of the critters seldom exceeds a few inches per year? Were they spread by golf shoes, spikers, aerifier tines, or did the population build up in the soil naturally? Is it the sandier soil we're using in our greens or did the mercuries and other heavy metals used for disease control keep Nematodes in check? Milorganite has been known to suppress Nematodes. Is it because activated sewage sludge contains metals which may suppress Nematodes, or does activated sewage sludge enhance development of natural predators?

Nematodes should be treated in the adult stage with soil temperatures above 60 degrees F. As the season moved toward fall, soil temperatures dropped and rains became frequent, which helped the greens recover to a healthy looking appearance. Knowing Nematodes were likely to reoccur the following season, the greens were watched very closely for symptoms.

Mid May of 1986, the soil temperatures warmed and Nematodes were again found on the yellowing grass plants. At this time all greens were treated with Nematicur 15% granular at 2# material per 1000 square feet. Nine holes were closed and treated at a time because Nematicur is a highly toxic restricted use chemical which must be watered in using a minimum of 1/2" water immediately after application.

Nematicur claims systemic control for up to seven months, so only one treatment was made. We experienced no discoloration or burn on the turf after heavily watering in the chemical and the health of the greens improved with no reoccurring symptoms.

I've learned a great deal about Nematodes but have come up with more questions than answers. Experts also

(Continued on page 19)

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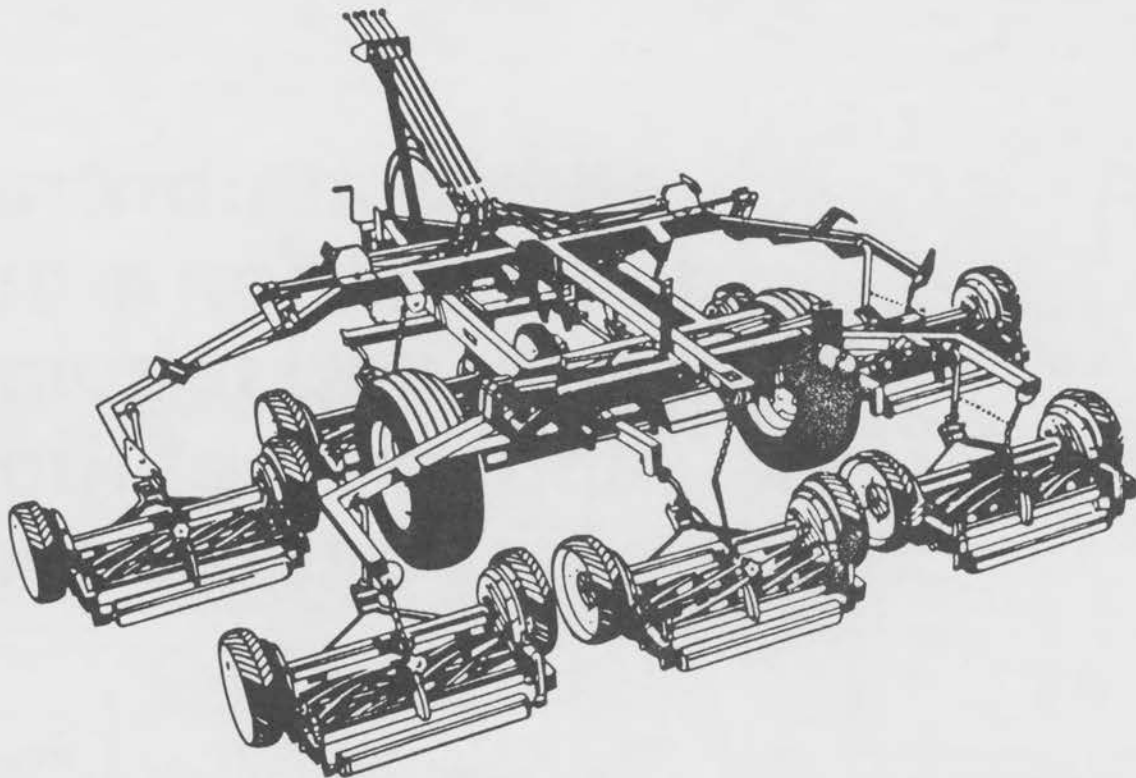
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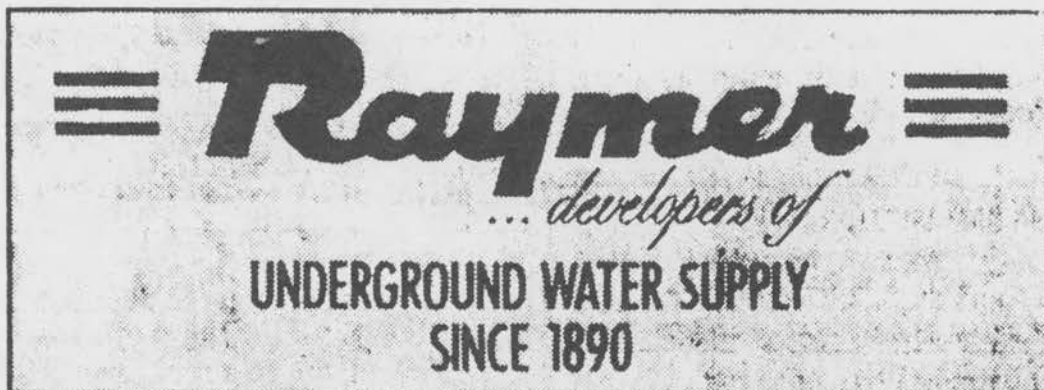
When, oh when, will we have an anti-toothpick demonstration?

Credit: Florida Green

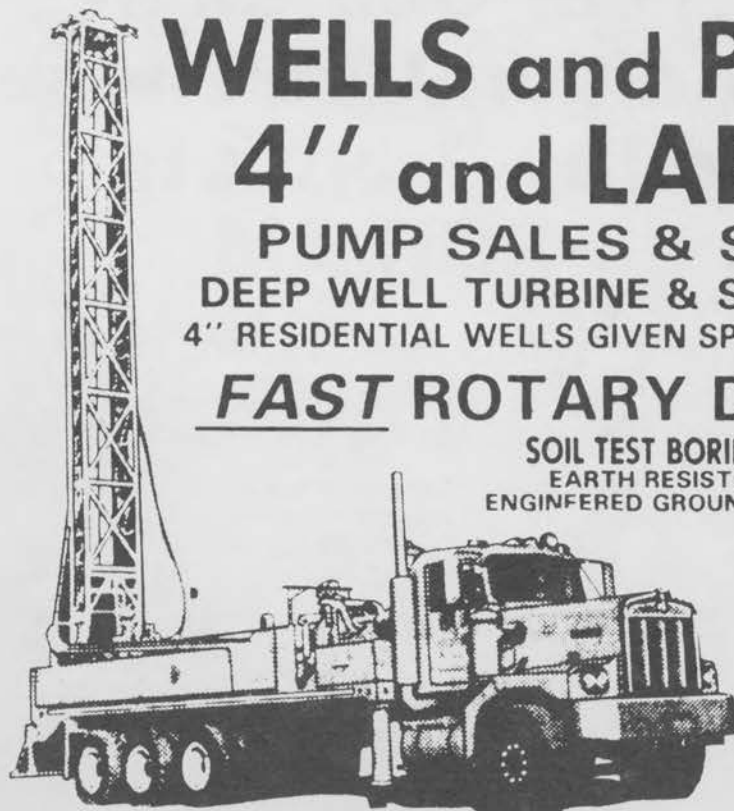
(Continued from page 17)

question the threshold levels required for damage on golf greens. We know this may be a reoccurring problem at Bartlett Hills Golf Course and are much too familiar with the damage symptoms. I feel our course is safe for the rest of the year, but next year may be a whole new ball game.

Credit: The Bull Sheet



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(Continued from page 13)

get plugged and have to be cleaned periodically, otherwise the water drains on the floor, creating a real mess.

Motors

The vertical motors used with the turbine pumps have two lubricated bearings - thrust and guide bearings. The thrust bearing is more critical because it is the one carrying the weight of the pump shaft. On most motors the thrust bearing is on the top and is oil lubricated. Light turbine oil is used and it should be changed twice per year. The color of the oil should be monitored. If the oil blackens, this is a sign of the oil overheating and that the bearing is going out. Guide bearings are generally grease lubricated and on the lower part of the motor. These bearings should be lubricated at least twice per year. Be sure to remove the grease relief plug before pumping grease into the zerk fitting. If the plug is not removed, grease can be forced into the motor and short out. Before replacing the plug, run the motor until warm and allow the grease to expand.

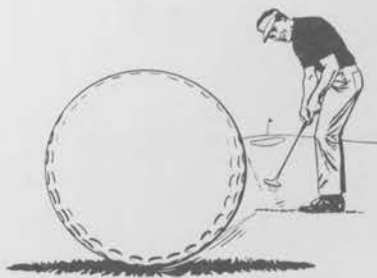
Clean the screens covering air passages. If the screens are covered with debris, cooling air flow will be restricted, causing the motor to run hotter and shorten its life.

Control Valve

Control valve strainer requires cleaning periodically. Most often the screen is screwed into the side of the valve and requires draining the upstream piping. The control valve can be simply locked shut and the upstream piping drained. Muriatic acid does an excellent job of cleaning the screen.

Have your service technician review the preventative maintenance procedures with your staff. Routine inspection and simple maintenance by inhouse staff will build a better understanding of the equipment and reduce risk of equipment problems and down time.

*Credit: Cactus and Pine
GCSA*



HOW TO BUTCHER A TREE

Before you begin to butcher a tree, you need the following equipment: a pair of tree climbing spikes. The spikes on these are about 3' long and really help you climb. If you have not used them much, you can really impress your customers how dangerous tree butchering is with blood coming down your legs from gaffing yourself with the spikes. Spikes are also ideal for scarring a tree. This shows your customer how high you had to climb up into the tree.

Next, you need a machete so you can cut off the suckers. These are the little branches that grow off the main branches of the tree. The machete works well in cutting these off and also does a good job of scarring the tree so the customer can see how many suckers you have cut off. It also works well in cutting up your leg while you are climbing; again to show the customer how dangerous the job is.

The next thing you need is a combination pruner and pole saw at least 25' long. This makes it easy to use. The pruner on one side works well in pruning, while the saw on the other side is scarring the tree at the same time and vice versa when you are using the saw. If the combination pruner and pole saw is 25' long or longer you may break a few second-story windows, and if you're lucky, the owners may pay you to repair them.

Now, a word about the real art of butchering. Always make a cut from the top only. This will cause the branch to rip off bark on the bottom of the branch and down the tree as it falls. You can paint this wound with a water base paint. The tree will look good, but it will not prevent disease or stop insects in any way. If you are lucky the tree will die and you'll get a removal job.

Credit: Three Rivers Green

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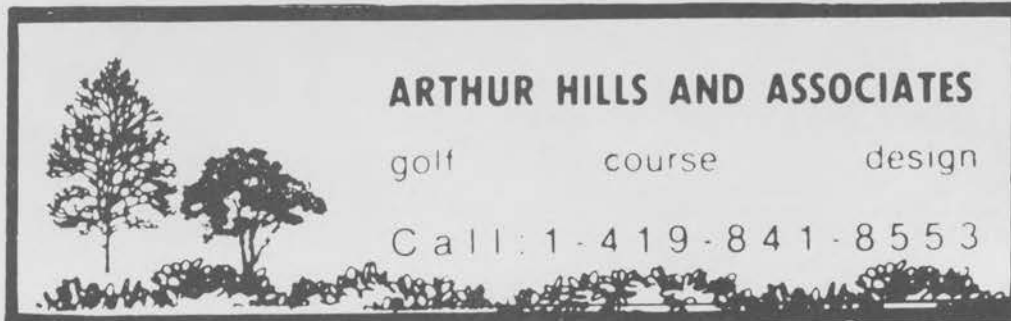
The logo for LESCO, featuring the word "LESCO" in a bold, stylized, sans-serif font. The letters are thick and closely spaced, with a slight shadow effect.

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