



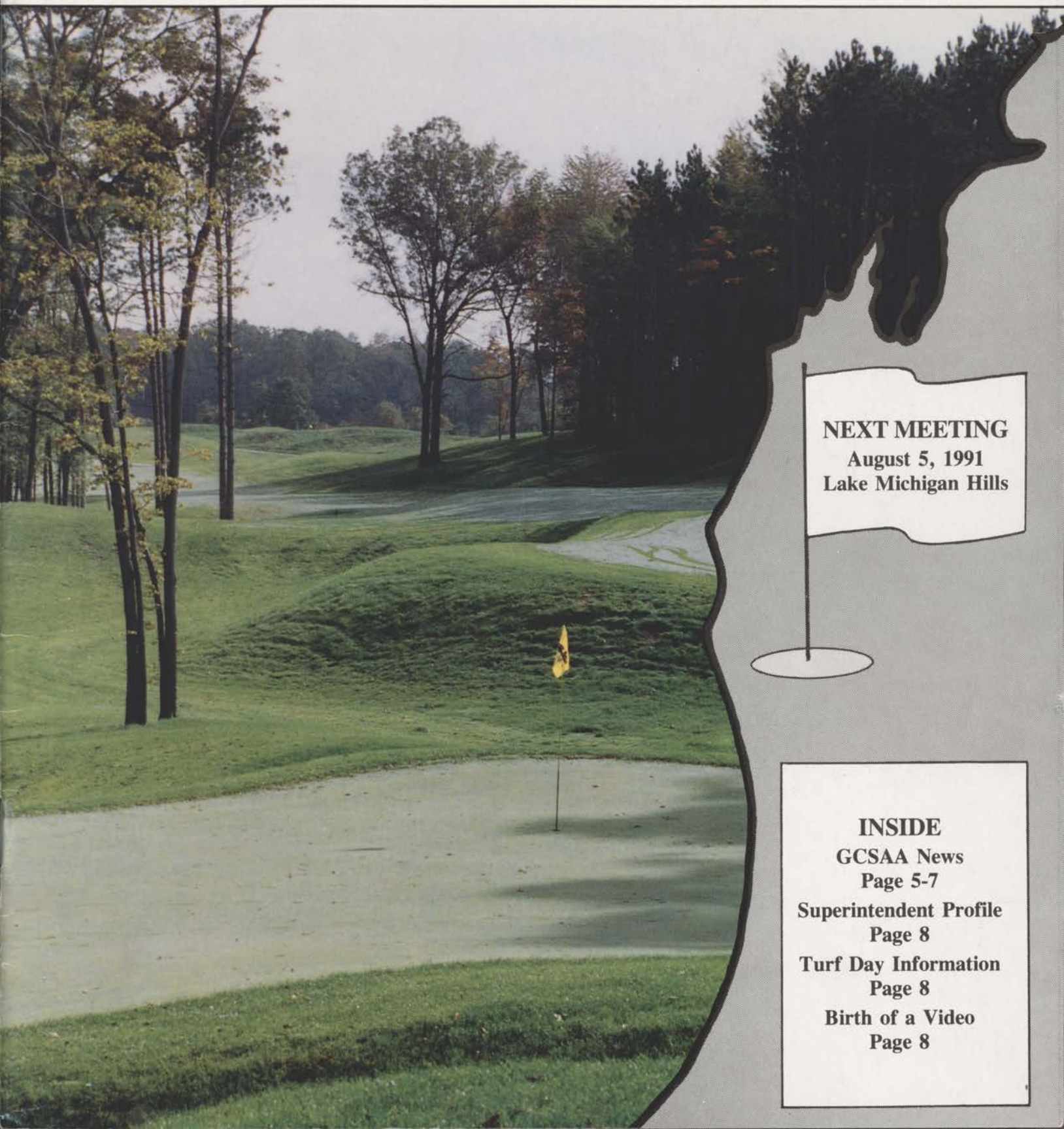
WESTERN VIEWS

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

Editor — Paul Richter

Summer 1991

Photo courtesy of Jan Janson



NEXT MEETING

August 5, 1991
Lake Michigan Hills

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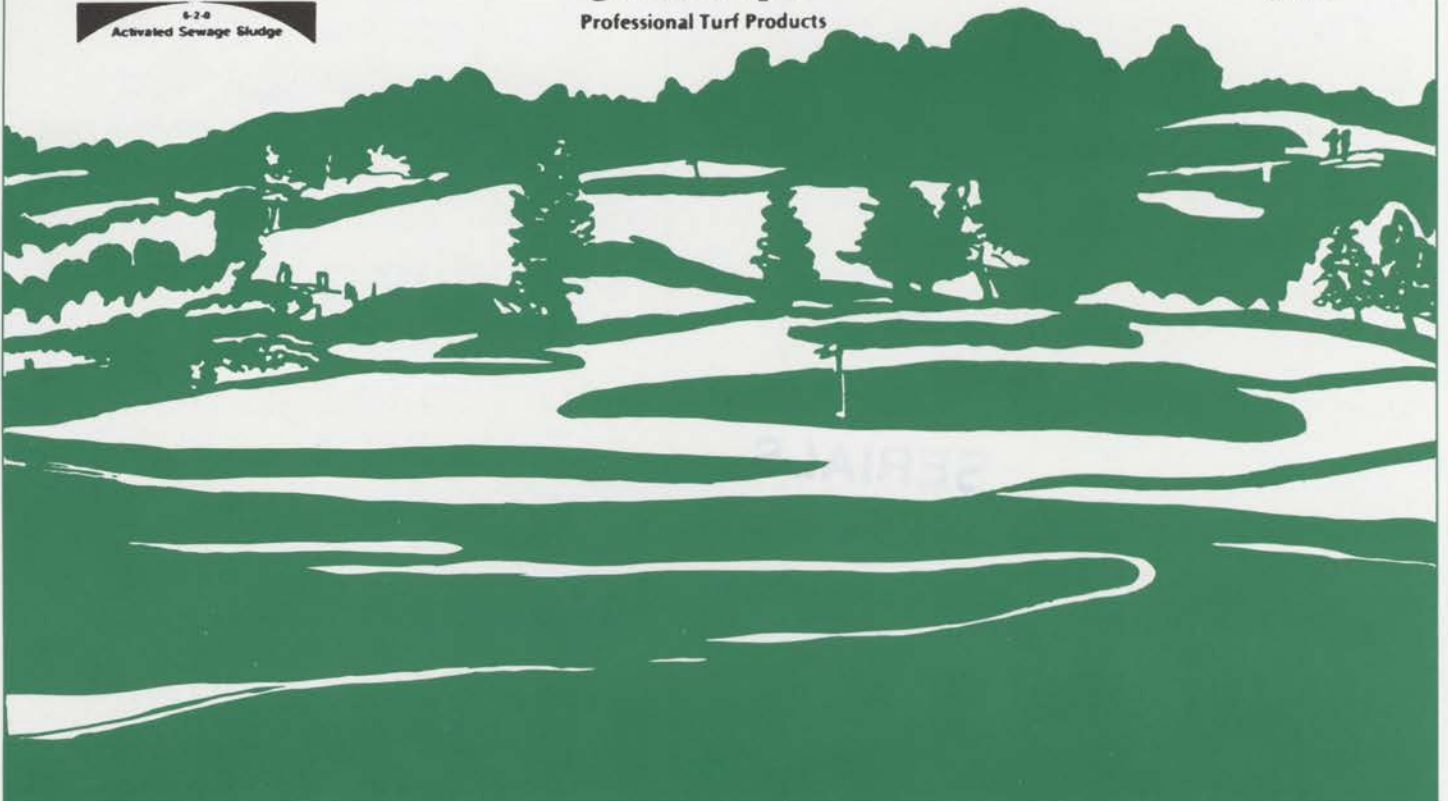
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RICHTER'S RAMBLINGS

Summer came in May this year. Forty and rainy one day and a few days later eighty-five and no humidity. Just goes to show you that abnormal is normal in Michigan.

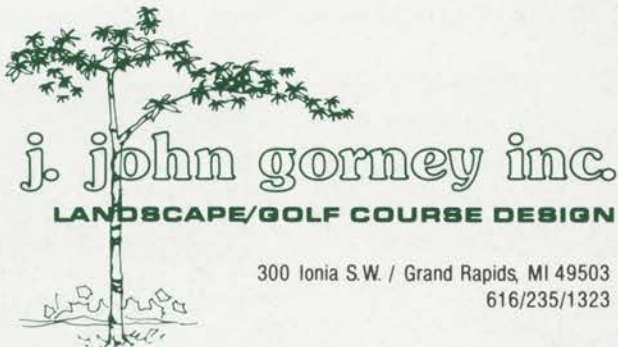
Had hoped to have this issue to you by Memorial Day, but that didn't happen. Life has been piling up on me; between the family, the golf course, and everything else, I am late again.

How many turf and grounds maintenance related publications do you receive? About a half dozen find their way into my mail box per month; *Golf Course Management*, *Grounds Maintenance*, *Turf*, and the list goes on . . . This makes me wonder about the purpose of *Western Views*, because you certainly receive a lot of information monthly. In the future, you will see fewer articles about how to do things and more information with a local flavor.

Florida, California and Texas all have state-wide golf course superintendents publications. Is there a place for this in Michigan? I think so. There is a great deal of information within the state that needs dissemination. Do you have any thoughts on this subject?

Congratulations to E.J. Harrington and his new bride, Tiffany . . . And to Bob Hope's son Steve Hope, the MHSAA Class B Swimmer of the Year.

A reminder that the 1991 WMGCSA Golf Day is scheduled for Wednesday, September 4, at Gull Lake View Golf Club and Gull Lake Country Club with Charlie Scott and Glen Hokenmaier, our host. Put this date on your calendar! I am not chairman of this event and never will be again, so clear skies, light winds and temperatures in the high 70s are guaranteed.



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GCSAA NEWS

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Education: (913) 832-4444

Fax Numbers:

Membership, Administration, Planning:
(913) 832-4455
Education, Marketing, Conference & Show:
(913) 832-4433

DEDICATION WEEKEND PLANS FINALIZED

Come one, come all! GCSAA's new office building and education center in Lawrence, Kansas, will be dedicated the weekend of Sept. 6-7.

Plans call for the two-day event to be kicked off with a continental breakfast, which will be served at 10 a.m. Friday at Alvamar Golf Club. A golf event is slated for noon Friday at Alvamar, and a barbecue will be held at 6 p.m.

The formal dedication ceremony will begin at 10:00 a.m. Saturday at the new headquarters. Building orientation and tours will follow the ceremony at 11 a.m.

Members who wish to participate in the golf event must submit their **paid** registration by **May 31**. The registration deadline for other Dedication Weekend activities is **Aug. 9**.

The golf event will be an 18-hole scramble; four-person teams will be determined by blind draw. Prizes will be awarded for the first, second and third place teams; the longest drive; and closest to the pin. The field is limited to 144, so early registration is encouraged.

The entry fee for the golf event is \$40, and includes one ticket each to the breakfast and the barbecue. Tickets for the breakfast and barbecue may also be purchased separately. Breakfast tickets are \$5 each, and barbecue tickets are \$17 each.

If you have any questions about Dedication Weekend activities, or need a registration form, contact GCSAA's communications department at 913/832-4470.

POLICIES FOR COMPLIMENTARY TOURNAMENT ADMISSIONS ANNOUNCED

The PGA Tour is extending complimentary admission to Tour events to GCSAA superintendents who present a currently valid gold membership card.

The LPGA honors all active gold or green GCSAA membership cards for free admission privileges for the individual cardholder.

USGA policy provides GCSAA superintendents carrying current gold membership cards with complimentary *grounds* privileges at the U.S. Open and the U.S. Amateur Championship. Superintendents with currently valid gold GCSAA membership cards will also receive complimentary *grounds and clubhouse* privileges at all other USGA

events held in the United States. Spouses who accompany card-carrying GCSAA members will receive the same admission privileges.

To receive complimentary daily admission to USGA events, superintendents should present their gold membership cards at "Will Call" each day that they wish to attend.

Daily passes to the Walker Cup Match, which will be held Sept. 5-6 at Portmarnock GC in Dublin, Ireland, are available from the USGA. Tickets are \$20 per day, plus a \$4 postage and handling fee. For more information, contact Nancy Baker or Mike Butz at the USGA, Golf House, P.O. Box 708, Far Hills, NJ 07931, telephone 201/234-2300.

GOVERNMENT RELATIONS

Regulations

Pesticide Companies Fined \$2.4 Million For 1989 Contamination

EPA is ordering four pesticide companies to pay a combined total of \$2.4 million in penalties for the unlawful distribution of adulterated pesticides in 1989. In 1989, atrazine was discovered in fungicides distributed by DuPont, Lesco, Platte Chemical Co. and Terra Chemical International, prompting EPA to issue a stop-sale order and to request a product recall.

The companies complied and implemented a nationwide recall of the affected products. DuPont is currently disposing of the contaminated pesticides.

"No company will be allowed to profit from violating environmental laws," said EPA Administrator William K. Reilly. "The Bush Administration is committed to assuring that products registered by EPA for home and commercial use are not tainted by illegal contaminants."

Pesticide Regulation Costs Rising

EPA recently reported that, due partly to accelerated reregistration costs and increased farmworker safety requirements, the cost of pesticide regulations are expected to rise dramatically. Annual costs are expected to rise from \$697 million in 1989 to \$1.3 billion by 1995. Much of the increase will be attributed to the cost of the testing and fees associated with reregistration.

EPA To Oversee Farm Bill Record-Keeping

EPA will have the regulatory responsibility for the new restricted-use pesticide record-keeping portion of the farm bill. EPA will only have this responsibility over the non-agricultural applicators and will file actions and levy fines against violators. Agricultural applicators will be regulated by the U.S. Department of Agriculture. The new farm bill contains provisions that require that records to be kept for restricted-use pesticide applications for two years.

Legislation

Minnesota Legislation Could Eliminate Mercury Use

Minnesota's House of Representatives is considering a bill that would eliminate the use of fungicide products containing mercury as an active ingredient. If passed, Min-

nesota would be the fourth state to ban mercury.

Kevin Clunis, golf course superintendent at Stillwater CC, Mahtomedi, MN, testified at the legislative proceedings. Clunis told legislators of the turf damage that would occur if mercury fungicides were no longer available. Currently mercury is one of the only effective fungicides currently available that controls snow mold on golf courses.

Organic substitutes have been developed but have not proven effective in northern latitudes where snow cover exists for several months. Preliminary results from new studies, however, have shown that organic substitutes are more successful when used with green covers. The green covers prevent dissipation and degradation of the organic fungicide.

Environment

State, Federal Pesticide Officials Discuss New Regulations

The American Association of Pesticide Control Officials (AAPCO) held its annual spring meeting March 11-13 in Crystal City, VA. U.S. Environmental Protection Agency officials spoke on important upcoming pesticide regulations concerning containers, pesticide mixing and loading containment and worker protection, and also discussed the reregistration process. Implementation of the regulations will take effect over the next three years.

Container Regulations

An updated implementation schedule of EPA's FIFRA pesticide container regulations was released at the

AAPCO meeting. The soon-to-be-written regulations will address pesticide management (including mixing and loading containment) and disposal.

Phase 1 regulations, which mostly pertain to manufacturers and distributors of pesticide products, deal with acceptance; voluntary and mandatory recall plans; storage and disposal plans; and indemnification. Phase 1 regulations will be implemented in spring 1992.

Phase 2 regulations concern containers, residue removal and bulk storage and are scheduled for implementation in spring 1993.

Phase 3 involves pesticide management regulations that are concerned with storage, management of excess product, containment at mixing/loading sites, and transportation. Spring 1994 is the targeted implementation date for Phase 3.

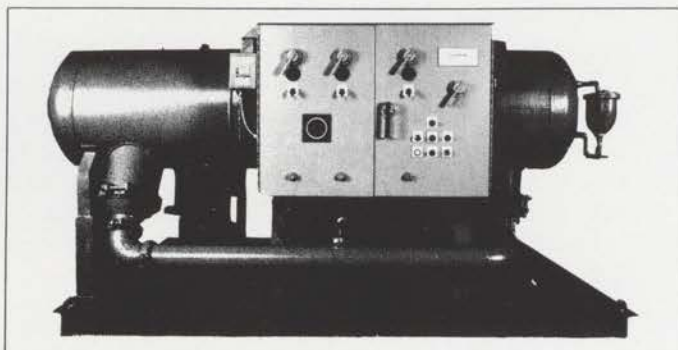
Worker Protection and Training

State pesticide control officials attending the conference suggested that the training requirements for the new worker protection regulations be compatible with those for restricted-use pesticide applications.

The worker protection rules will be released this summer, but the restricted-use application requirements are not scheduled for release until sometime next year, as part of the final applicator certification regulations.

The final version of the worker protection regulations, which are scheduled for release in late August, will contain specific rules concerning post-application re-entry and training for pesticide applicators. These worker protection regulations will affect only those golf courses that are in-

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volved in producing turf and plants for commercial uses outside of their normal golf course operations.

The revised applicator certifications regulations that are scheduled for release in 1992 will, however, affect all courses that apply restricted-use pesticides.

GCSAA will urge the agency to consider coordinating these two separate training requirements when writing the final regulations.

GCSAA will urge the agency to consider coordinating these two separate training requirements when writing the final regulations.

GCSAA recently sent comments on the proposed levels of supervision for restricted-use pesticide application to EPA. The Office of Government Relations had surveyed affiliated-chapter government relations liaisons for their comments on the proposed rules. The majority of respondents said they believed that only certified applicators should be able to apply restricted-use pesticides. GCSAA comments, along with comments from other interested parties will be considered when the final regulations are drafted.

Reregistration

The reregistration process is still lagging behind previous projections, said Allan Abramson, acting director of the special review and reregistration division of EPA's Office of Pesticide Programs. Because of delays in processing the registration of A and B list pesticides (mostly those used on food products), the C and D list pesticides — which include most of the turf and ornamental products — will not be up for reregistration until 1992 and 1993.

Some manufacturers may decide to save the testing costs and reregistration fees for some minor-use products (i.e., products that are not primary revenue producers) by choosing not to reregister them. The EPA's processing delays may also delay the need for golf course superintendents to search for alternatives for suspended products.

However, the federal EPA is not the only pesticide regulator; the states are also involved.

State Registration

Some states are raising their pesticide registration fees — in some cases by 300 percent to 500 percent. These big fee hikes are causing pesticide manufacturers, especially smaller companies, to reconsider which products they choose to register in which states. The end result may be that superintendents in some states may soon find their choice of chemicals restricted.

This meeting brought together the federal and state regulators and the manufacturers of pesticide products. One of the last points to be made came from several state pesticide regulators: The new federal regulations will put much heavier burdens on the states; however, the states may not have the resources they need to manage or enforce them.

EPA Investigates Alleged Pesticide Data Manipulation

A Texas laboratory is the subject of an EPA/Justice Department criminal investigation for allegedly falsifying studies on pesticide residues. The EPA said that studies

on 17 pesticides — including several golf course chemicals — produced by 11 manufacturers were "alleged to have been improperly manipulated" by Craven Laboratories, Austin, Texas. The golf course chemicals listed by the EPA were: maneb, sethoxydim, Diquat, mancozeb, fenoxaprop-ethyl, glyphosate and PCNB.

Craven has produced residue chemistry studies for pesticides since 1975, and the EPA is reviewing regulatory options for registrations based on Craven data. Options include requiring replacement data and "other alternatives," according to the EPA. The agency has sent letters to 262 pesticide registrants asking them to identify all Craven data filed with EPA to support registrations and tolerances, and to estimate when they could file studies to replace Craven data.

The Craven investigation will take time. And if the EPA decides to require replacement data, it will take substantial time and money for the chemical manufacturers to have new studies conducted. If this happens, it could affect the availability and price of some pesticide products that golf course superintendents use.

Linda Fisher, an assistant EPA administrator, said that although current information does not indicate a threat to the environment or to public health, the allegations are "very serious."

The EPA will review registration data on a chemical-by-chemical and use-by-use basis as it explores regulatory options. One EPA spokesman told The Wall Street Journal that the agency does not currently expect new data to require the removal of any of the products from the market.

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1991 MSU TURFGRASS FIELD DAY

The 1991 Michigan State University Turfgrass Field Day, Trade Show, and Equipment Auction will be held on Thursday, August 22, 1991 at the Hancock Turfgrass Research Center on the Michigan State University campus. The Field Day begins with registration at 8:30 a.m. and the field tour at 9:15 a.m. At 11:00 a.m. the trade show opens, and lunch is served at noon. Following the Trade Show an auction of new and used equipment is held at 2:00 p.m. This year we are instituting a new pricing policy. Advance registration for the tour will be \$10.00 and includes lunch. Registering at the field day will cost \$15.00. If you are not on our regular mailing list please contact Dr. Bruce Branham, Michigan State University, Dept. of Crop and Soil Sciences, East Lansing, MI 48824 for a copy of the field day brochure.

SUPERINTENDENT PROFILES

Chris Fochtman, C.G.C.S. - Egypt Valley Country Club

Like many of the Golf Course Superintendents in the area, Chris attended Michigan State University's Turfgrass Management Program and graduated in 1972. After working at Riverwood Golf Club in Mount Pleasant and Alpine Golf Club in Grand Rapids as superintendent, Chris has been the superintendent at Egypt Valley Country Club (formerly Green Ridge) for the past twelve years.

The greatest challenge that Chris has faced as a golf course superintendent is the construction of the Egypt Valley Country Club, which he has been involved in for the past three years.

Besides spending time with his wife, Christy, and three children and attending the NCAA basketball regionals every year, Chris likes to eat. When Chris eats out, his favorite place to dine is Sweetland or Cheddars. Seafood with a dessert of strawberry cheesecake is Chris' favorite meal, but he can't eat seafood any more, because he liked it too much and developed an allergic reaction to it. Despite this fondness for food, Chris manages to stay quite trim.

When asked if he had a philosophy in life the response was laughter.

Gary Spahr - Ramshorn Country Club

Gary Spahr is the host for our June meeting and golf at Ramshorn Country Club in Fremont, where he has been the superintendent for the past two years. Before moving to Ramshorn, Gary worked for Pete Ashe, CGCS at Hillsdale Country Club and as the superintendent at Evergreen Golf Club in Hudson and at Lincoln Golf Club in Grand Rapids.

The greatest challenge for Gary is to continue to develop Ramshorn into a better golf course.

The greatest challenge for the rest of the superintendents that attend the June meeting, might be to beat Gary on his home course where he carries a four handicap.

BIRTH OF A VIDEO

by
Jerry Mach
Lake Bluff Golf Club

I suppose it started 3 years ago when over 50% of my crew did not return. This meant that on many occasions I could not send a new man with an experienced man, and this alone can take a year off of your life. Instead of (in the Spring) just one machine in a sand trap, creek or pond, the multiplier of calamities was increased by 6!

As in all Springs, finishing up last year's "Project", cleanup of your course and the inference of golfers' summertime expectations in the second week of April, I fell behind and could not provide individual training until well into May. It was at this point that I realized a Video, with even just the basic jobs, could have helped alot.

Some men can do, and yet can not teach or didn't care to explain the finer points of greens cutting or trap raking, for example, and I realized a video could help.

Another thing we have all noticed is that until a man conquers the fear of the machine or the fear of doing a bad job, it is very hard to explain those "Finer Points." This is where the video could have great merit. Play it before he starts the job and then play it again a week or two later where the atmosphere is free of the pressure of the actual job. Made sense to me, but the following year I had only one new man to break in and I procrastinated that I just could not make the time and did not have the expertise with a camcorder to achieve my goal. Fortunately, a professional videoman liked my idea and volunteered to come to the golf course at 5:30 a.m. to set up and shoot the different jobs as they were being done.

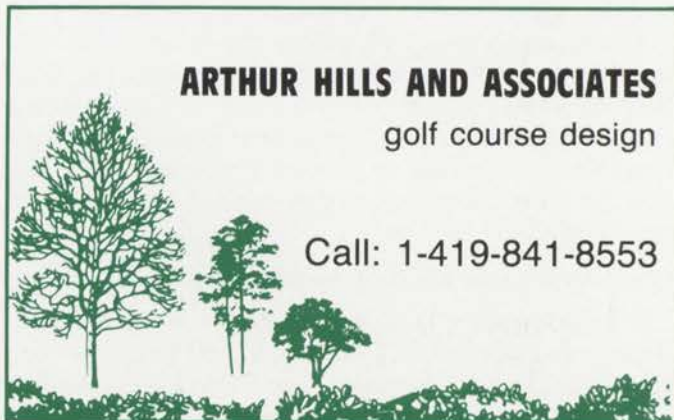
Three days of shooting, seven days in editing, ten days of dubbing in English and three days to dub in Spanish, produced two 30 minute tapes. They cover cup changing, greens cutting, trap raking and golf cart maintenance, in what I consider a generic approach.

Two private clubs and two public course Supers have rated them "8" or excellent on content (all have ordered the Spanish version) and I am pricing them at \$39.95 each (plus \$4.00 shipping and handling) or \$80.00 for both (free shipping and handling).

Since my wife, daughter and son have all contributed to this endeavor, I have named our group MACH IV Production, P.O. Box 543, Wauconda, Illinois 60084.

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NECESSITIES IN THE 90s

by

James M. Latham, Director
Great Lakes Region, USGA Green Section

Looking back on the 1990 golf growing season, there was no major, all-encompassing event or condition that makes it memorable. There was no central focus like *The Drought of '88* which affected the entire Great Lakes Region. It was not, however, one of those vintage years when things were generally pleasant. But when the quality of bunker sand shares equal interest with the quality of the grass during some Turf Advisory Service visits, golfers must not be very unhappy. There were intense local problems - severe winter-kill of *Poa annua* from Fargo to Stevens Point with an epi-center (again) in the Twin Cities; prolonged rains and high temperatures which caused turf losses (quality or quantity) in northern Illinois; heavy white grub invasions from Indiana to Iowa, and a few floods (like the 23 inches of rain falling in the Quad city area during the month of June).

The bone-chilling cold early last December (1989) did much less damage here than was expected. There were major losses of warm season grasses from Missouri to Texas. That cold spell, incidentally, killed some golf turf all the way to Houston. How would you like to see about 70 acres of dead grass on your course?

The Wisconsin Golf Turf Symposium turned 25 this

year, just a kid as compared with some conferences, but one which sets some sort of mileposts in the field. Each is devoted to a single topic, which is usually a mirror of the interests of the day or at least the near future. Looking at some of the topics covered, some rather pointed questions can be asked. For example, Symposium Number One (1966) dealt with winter injury. Number Two covered the physical nature of soils - with much emphasis on green building and Number Three took on *Poa annua*, as did the 11th and 18th. Even though speakers at these Symposia are acknowledged leaders in their fields and attendees are certainly capable of learning, these subjects remain major problems. It indicates the complexities of dealing with the environment of this high quality, special purpose turf and the costs involved in creating a favorable environment for the root systems of defoliated bentgrass. **Why were there so many greens built in 1990, which are either doomed to failure or will at least be a severe threat to the tenure of future golf course superintendents?**

Perhaps it parallels some of our bureaucracies. The construction division (of either a municipality or industry) is pressed by management to design and build something

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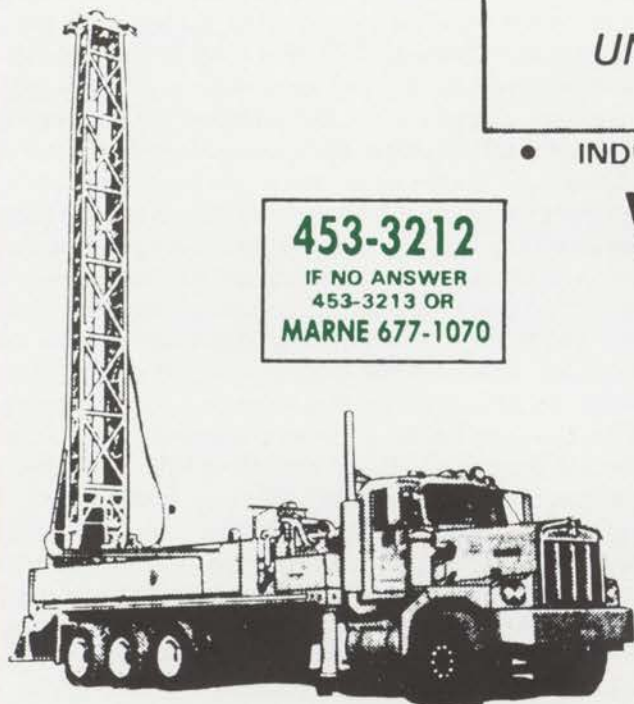
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for the lowest possible cost. When plans and specs are presented, the numbers look good - to everyone but the operating division who see their costs mushrooming just to keep the new stuff running and who must go back to management every year for funds to repair or replace the installation. They are the people who must justify their budgets, while the designers are off on some other money saving tangent involving untested ideas devised by their own rationalizations or egos.

Sound familiar? But boy, does that new structure or machine get media attention and cover photos. All the while the operations people are already wondering how they can prepare a budget just to keep the monster running and, of course, without pointing out the lack of foresight of those in management who approved the project in the first place. "Keep construction costs down! We'll handle operations and maintenance when the time comes." Sure! I drive a lot of miles on Interstate 43 (Green Bay/Milwaukee/Beloit). It is probably the roughest stretch of new highway ever built. The slabs of concrete had not cracked before they were running Super-Zambonis over some sections to "groove the pavement for safety." Hell, they were trying to smooth it. Who OK'd that work and who inspected it? Probably shock absorber salesmen.

The point here is, who OK's plans and specs for golf courses? Why do owners who, after being told of construction deficiencies go ahead and accept the job? They reject a rehab budget on the grounds that it's a new course and shouldn't need it or that play cannot be discouraged because cash flow is needed (usually in the clubhouse or pro shop).

It is more difficult to deal with the *Poa annua* thing. But winterkill of *Poa annua* is real, even though "out of sight - out of mind" (no seedheads) never fit a subject better. Ask the Minnesotans who have seen it two (2!) years in a row. The kicker in '89 and '90 was the extremely poor spring weather which severely retarded seed germination of both bentgrass and poa. Anything green was acceptable, even though it meant starting the same vicious cycle again. The fact that bentgrass loss was negligible for nonexistent should deliver a strong message.

Prevention? The thin fabric covers were of little or no help in the Twin Cities. If there is snowmelt followed by a deep freeze, they offer no thermal protection and may even enhance the day/night temperature spread. The very thick mats have done well, perhaps because they prevent mid-to-late winter thawing. These observations by superintendents in the area certainly make sense to me. Maybe that's the reason old timers topdressed heavily in late fall or put brush on the greens to hold snow cover. The basic idea may have been to protect against desiccation, but it provided insulation as well. (Or maybe there was less *Poa annua* to worry about in those days when the normal close mowing was a quarter-inch.) The insulation theory is valid, since the primary winterkill of Perennial Ryegrass fairways in Milwaukee (1986) was in areas receiving full sun, not the narrow, shaded fairways where mid/late snowmelt was minimal.

The problem today lies in the difficulty of making bentgrass more competitive during the growing season. This isn't difficult in fairways where the bent stolons have about a half-inch of growing room. But vertical space is hard to come by on a green where the cutting edge of a bed-knife is only one-eighth inch above a firm surface. Mike Bavier at Inverness in Chicago commented on the vertical threshold in bentgrass spread between fairways and greens a few years ago. Just what that threshold is is still not known. It may be purely academic, because we are unlikely to see high-cut, slow greens again.

We need a feasible program to not only weaken or eliminate *Poa annua* but to make the bentgrass more competitive.

To weaken poa without improving the bent just makes the turf chronically weak, usually in the most important areas on greens where the holes are cut or the walk-on/walk-off traffic is concentrated. I am concerned by the implication that growth retardants selectively affect *only* poa and that they will open the door to automatic bent encroachment into the poa-infested surfaces of closely mown putting greens. That idea is no more valid than a groomer being substituted for a verticut. We just wish it were true. It seems to me that interseeding into weakened poa must be a part of the procedure, with appropriate aftercare. Or perhaps just seeding at every topdressing?

This takes us, again, back to the basics of what makes plants grow - but we have to make that read *defoliated plants*. Among the requirements are well developed root systems, an adequate amount of sunlight (for the remaining leaves or parts thereof), adequate fertility and moisture, adequate soil oxygen and protection against pests. It's getting harder to survive on a diet of magic potions, but even harder to perform some of the necessary cultural programs without interfering with an increased number of golfers every day. Working smarter and talking more convincingly have never been more important than they are today and that they may call for assessing the programs of fellow superintendents who are dealing with similar problems, questioning "experts" and just "visiting around." The nineties will not be a good time to paint oneself into a corner by failing to look at the whole picture.

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THE GREEN GHOST

by
Greg Gegogine, CGCS

The idea of "work" can be viewed in many ways, depending on how we feel at any given moment. In our darker moments, work may seem like a tightly strung snare set by malcontented adults for the purpose of trapping others. In times of introspection, work may exist only as an unexplainable social phenomenon with roots that started growing as soon as the apple was bitten in the Garden of Eden.

In its most basic form, work is a method for utilization of body and mind to provide earthly needs and desired excesses. However, when we do "work" in its most clinical sense, we almost never go anywhere. The trick is to always work creatively. Ultimately, we either approach our lives and chosen obligations creatively, or else we don't and everyone around us suffers... clearly an undesirable existence.

It's not difficult to work creatively. Being golf course superintendents, most of us must work creatively to get the most out of our budgeted dollars. In fact, the very nature of our job (manipulation of land features for the purpose of sport), requires creativity because turf management includes elements of art as well as science.

So, assuming we are all flowing wells of creative juices, how can we increase the gallons per minute? This ques-

tion is largely rhetorical, although there are many ways to nurture creativity. Consider the lives of many successful creative giants; most of them built their success upon living through failures and misfortunes. Beethoven, in his later years, became deaf but was still able to hear symphonies and score them. Van Gogh lived a life that most of us would consider a terror, yet was able to paint beautiful images that will last forever. The mother of creativity is often a cruel mother, but if we gain strength from adversity and learn from our mistakes, we can *work* and *create* a better situation.

Our lives as superintendents will most likely not be as twisted as those of the Van Goghs and Beethovens. We must, however, work creatively within the physical environment that we have chosen... whether it be a nine-hole municipal course or an exotic resort. There should be no excuse for a lack of enthusiastic work on the part of one's location. Remember the old story about a famous writer who rented a house in the country with tranquil views in every direction, only to struggle with "writer's block" the entire time he stayed there.

Our own mental environment is perhaps the most important component in the creative process. We don't have to live "on the edge" to be creative as in the case of a

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stereotypical genius. In most cases, a relaxed and confident mind will allow smooth movement of a surprisingly large number of ideas. Something that works for me is to uncover dusty memories of my youth and to observe my two-year-old son in his clumsy desire to achieve mental greatness. Kids naturally convert the whole learning process into a seemingly desperate game. They play.

I remember playing games . . . dodge ball, the tree climbing, the lincoln logs, the etch-a-sketch, etc. When turned loose outside with the other kids, we invented games that were only ever played once in the history of human offspring. A special treat at that time in our lives was to be loose in the evening when it was dark. That's when we played green ghost.

Green ghost was a great game. You may have called it something else . . . hide and seek, tag, you're it, boogey man, etc. The origin of its name remains a mystery. Green ghost required no physical properties; just the nooks and crannies of the local terrain, a spot you could call home base, enough kids to make it a pell-mell, and all the creativity we could muster up. The rules were simple. One of us was given the coveted responsibility of the green ghost. While the others closed their eyes and counted to 100 or so at the home base, the ghost would sneak away and hide. Once the others finished their count, they would

strike out on their own in search of the green ghost. The first one to spot him would scream at the top of their lungs (while running at top speed), "Green ghost! Green ghost!" This would serve as a cue for all the others to make a made dash back to home base before the ghost had a chance to tag them. Anyone who got tagged before reaching home would then be the next green ghost.

Green ghost offered countless strategies. A ghost who hid real well could take cat-like control of the unwary searchers and pounce at the right moment. A ghost with a lot of time on his hands could hide someplace really unique and prolong the game for hours. A ghost who hid just around the corner from home base could make for an immediate strike-force attack that guaranteed to make our little juvenile hearts skip a beat.

Green ghost had just enough rules to permit genuine creativity with no roadblocks. We didn't know then that that was why we liked it; we just did. At that time, liking it was enough. Then.

Now, we find ourselves in various stages of maturity. We are all involved in the game of golf. We all have memories that may be beneficial in renewing our creative enthusiasm. "The secret of creative work is to always be at play. May you all have happy childhoods, no matter how old you are when you finally begin."

MAKING TURF CONDITIONING WORK FOR YOU

by

Dan Miller

North Star Turf, Inc.

The greens conditioner has helped superintendents worldwide develop faster, healthier putting surfaces. But those who haven't tried it may wonder what it does and what benefits it provides.

The Turf Groomer, the original greens conditioner, was developed and patented by superintendent Larry Lloyd to improve the playing surface of greens. Jacobsen Division of Textron later purchased exclusive rights to the patented device.

Regular use virtually eliminates grain, helps control thatch, smooths out irregularities on greens—ball marks, old hole placements, etc.—and makes grass plants stand up for more consistent putting. The greens conditioner also allows a higher height of cut. In some cases, superintendents have gone from below 1/8" without the conditioner to 3/16" with it and maintained the same ball speed.

The higher cut gives the plant more leaf surface allowing it to perform photosynthesis more easily and develop a deeper, stronger root system. In addition, the plant is more heat and disease resistant and stands up to traffic better.

The greens conditioner also allows the reduction or elimination of other potentially harmful methods used to increase greens speed. Besides lowering cutting heights, superintendents top dress, vertical mow, roll, and reduce water and nitrogen application to make greens faster. Some of these methods stress the grass, raising the potential for disease and plant death.

Many of the benefits once limited to greens are now

possible on fairways with the introduction of the fairway conditioner. In addition to grain and thatch control, and deeper roots, fairway conditioning (used in conjunction with lightweight mowing) promotes a lush, dense growth of grass that gives the golfer a better lie.

In the South, the fairway conditioner controls Bermudagrass runners, making grass plants stand up for a more consistent surface. On bentgrass, the fairway conditioner controls grain and promotes dense growth.

Since lightweight mowers can collect clippings, poa annua and other undesirable fairway grasses can be better controlled because many of their seedheads are removed before they can spread. The fairway conditioner continues that cleaning process, removing seedheads, worm castings, small leaves, twigs and other debris from below the cutting line for cleaner turf.

PROPER CONDITIONER USE

Before using it regularly on greens, try the conditioner in an inconspicuous area. Set the blades at bedknife level (referred to as the zero setting) and make a few passes. Note the results and gradually lower the conditioner's blades until you reach a height of cut satisfactory to you.

After careful testing, you'll be ready to use the greens conditioner on a regular basis. Use it three times a week if you plan to use an aggressive (lower) setting - more often if you use a less aggressive (higher) setting. It is recommended that you don't go more than 1/16" below your height of cut. In most cases, the height setting should be between zero and 1/16".

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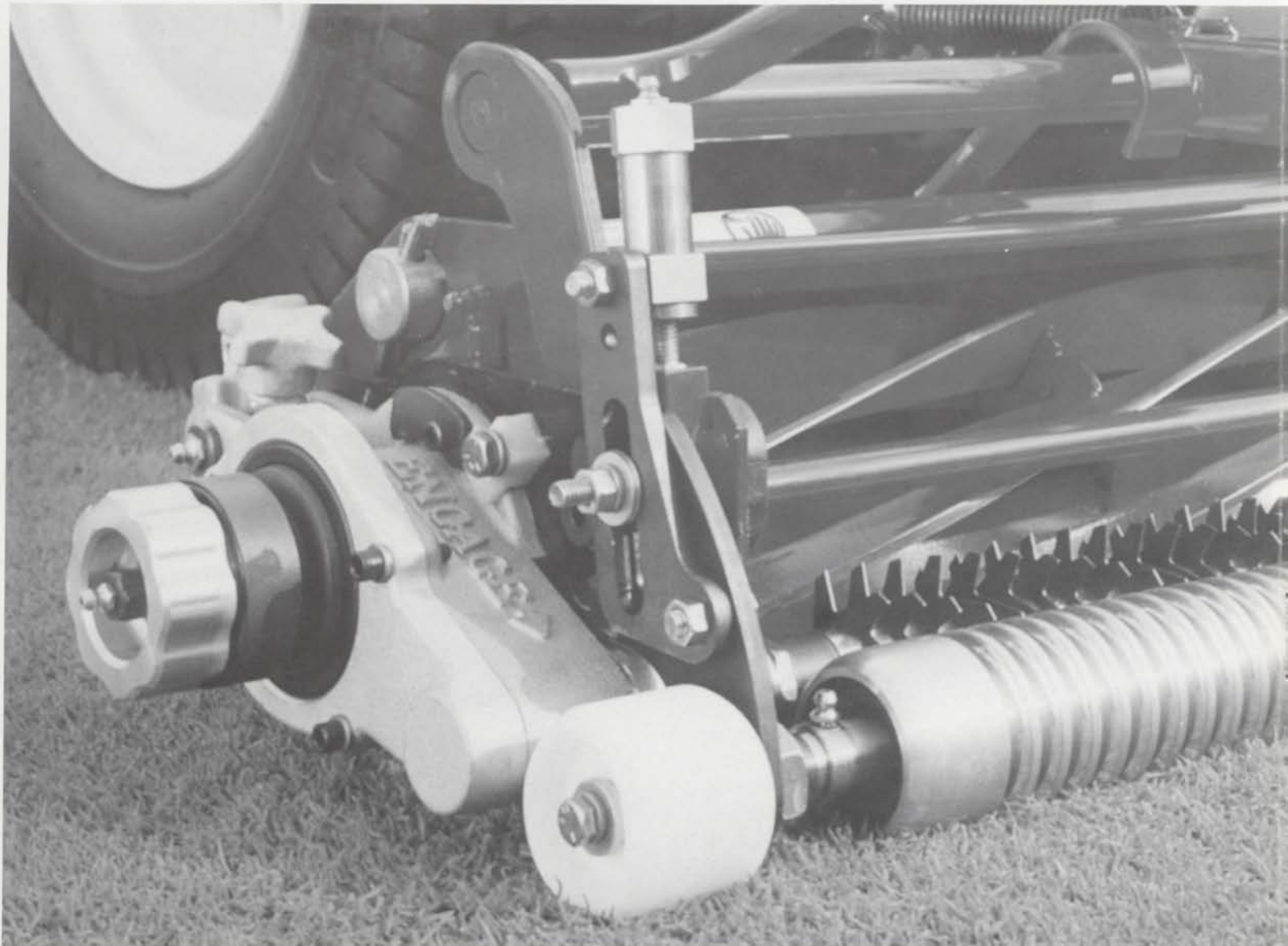
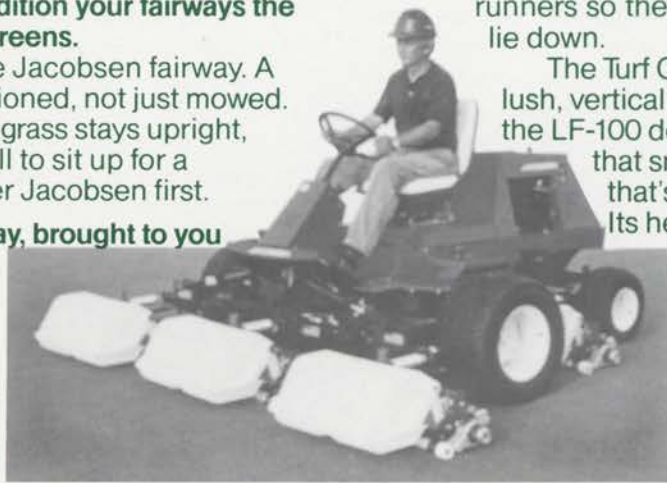
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For fairway conditioning, start with the conditioner set at about 50 percent of your cutting height. If your cutting height is a 1/2", then set the conditioner a 1/4" below the bedknife and work down from there. Because the grass on a fairway is less dense than on a green, you need a lower setting to get results.

Keep in mind the conditioner will send more material through the reel and bedknife when you first start using it. But, as the turf becomes conditioned, the need to sharpen reels and bedknives will decrease.

FINDING THE RIGHT CONDITIONER

Important features to get when buying a conditioner include:

- *Roller/knife design:* the roller should stand grass blades up and support them. The knives should then rotate through the roller slots to cut them, the basic premise of conditioning. A roller and blade design that doesn't do this is of little value.
- *Durability:* fairway and greens conditioning units see some demanding use. Look for a conditioner with solid, well-constructed parts—a substantial front roller, strong cutting blades, and a sturdy metal frame to join the attachment to the mowing unit.
- *Strong, protected belt drive system:* the drive system should have a strong belt, protected by a sealed housing.
- *Protected bearings:* roller and blade shaft bearings should be protected by reliable seals with grease fittings for lubrication.
- *Compact rollerbase (distance from the center of the con-*

ditioner's front roller to the center of the cutting unit's rear roller): the closer the conditioner is to the cutting reel, the better it will follow the contour of your turf and give a consistent cut.

• *Easy cutting height adjustment:* a way to easily raise or lower the conditioner is important. You should be able to lift the blades completely out of the way so grooming can be skipped when so desired. A method to "fine tune" cutting height, preferably without tools, is also desirable.

Greens and fairway conditioners deliver healthier turf and a better playing surface. They've become important tools for superintendents.

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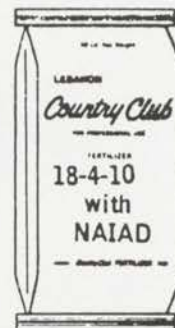
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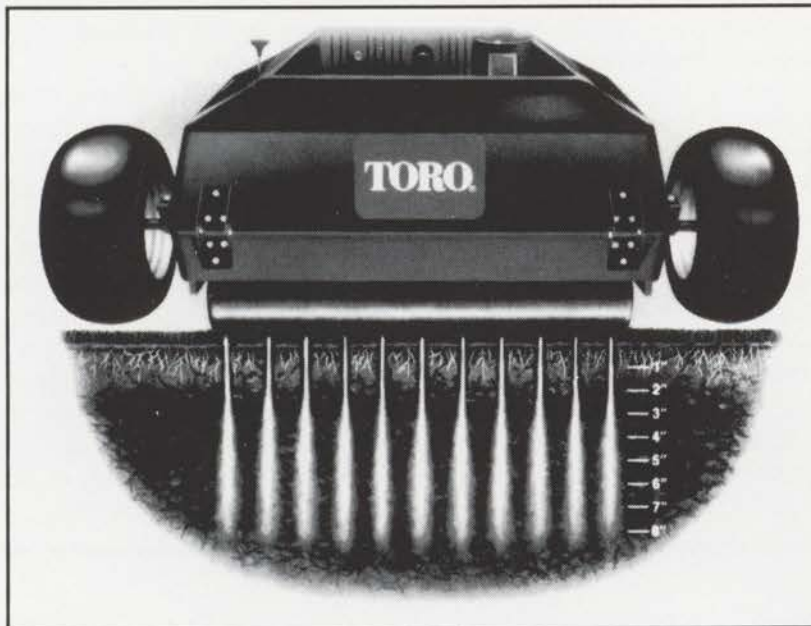
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If April showers are still leaving you with brown fairways, a new technology by Glenscott Motor Controls of Rock Island, Illinois, may be of interest to you.

Three-phase line extensions, necessary to operate irrigation pump motors, can sometimes be expensive and cost-prohibitive. If this is your dilemma, Glenscott and Consumers Power Company can help.

The Glenphase Motor Controller electronically converts single phase 230 volt power into balanced, three phase at 460 volts to operate irrigation pump motors up to 100 hp. In addition, the Glenphase includes motor speed control, motor overcurrent protection and soft start features.

Consumers Power Company, Michigan's largest utility, is also offering incentives to its electric customers who install an electronic phase converter. These range from \$200 to \$900 for installations from 10 to 100 hp.

The Glenphase converter allows the customer the convenience of three phase power while providing other exciting advantages. With the use of the motor speed control feature, the electric pump motor can automatically vary its volume, while maintaining a preset line pressure. In other words, as additional zones to be irrigated are turned on, the Glenphase senses the pressure drop and increases the motor speed to maintain the preset pressure. As zones are turned off, the Glenscott slows the motor down and detects the pressure rise.

Another advantage of the speed control feature is energy savings. With the auto speed control, the customer only uses enough electricity to pump the desired amount

at the preset pressure. It's far more efficient than redirecting excess water or creating unnecessary head pressure. Courses can also be designed without a jockey pump with this feature.

In addition, the Glenphase allows the customer to contribute to an improved environment with the utilization of a clean, quiet, electrically powered pumping unit.

"Large motors can create several problems on electric distribution lines," commented Dick Thompson, Senior Sales Consultant for Consumers Power Company. "This electronic phase converter solves many of those problems. It eliminates in-rush current, yet allows the customer full torque. In mid 1990, we began promoting this technology and by year end, had over 40 installations on our system."

One such installation is at Wallinwood, an exclusive golf course and condominium development, located outside of Grand Rapids in the Village of Jenison. "We needed three phase power for course irrigation, but it was a considerable distance from our site," commented Dirk Nyenhuis, President of Wallinwood, Inc. Lori Burrell, Senior Sales Consultant for Consumers Power Company, suggested utilizing an electronic phase converter as an alternative and arranged for an on-site evaluation by the manufacturer's representative, Frank Defever. "The phase converter not only gave us the three phase power we needed, but did so at an acceptable cost," said Nyenhuis. "The fact that it is compatible with timer-regulated irrigation is a plus."



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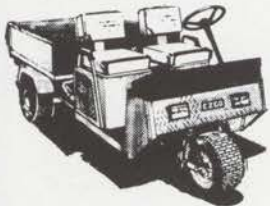
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Photo by Stan Gregg

Frank Defever, Sales Engineer for Glenscott Motor Controls, added that Franklin Electric recognizes the Glenphase as the only phase converter to be used on their submersible pump motor. "For golf course applications, the Glenphase is ideal."

Wallinwood Golf Course, designed by Jerry Matthews of Lansing, is slated to open 9 holes in July 1991, expanding to 18 holes in July, 1992.

For a free site evaluation to determine if you have any application for the Glenphase, contact Frank Defever, at (517) 463-8660, or Dick Thompson at Consumers Power Company, (616) 538-7000.

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GRAVEL STORAGE BINS MADE EASY

BY

*Tony Rzadzki, Asst. Supt.
Cantigny Golf Club*

Every golf course has this problem. Where can I store my sand, soil, gravel, peat moss, limestone screenings, etc. etc. etc.

Every golf course deals with this problem in a different way. Some of us have timber bins, some have cinder block wall bins. Some of us just pile our wares in a readily accessible location. This is fine, but it's always hard to get that last bucketful of material when you have nothing to push it against.

We decided to build our bins out of 2' x 8' x 2' cement blocks. This is not an original idea, but it is a simple, everlasting, and fairly economical way to build material storage bins.

The 2' x 8' x 2' performed blocks actually are 'over pours' made of leftover cement from trucks that do not complete dumping their loads at a construction site. For these rather inexpensive and almost immovable blocks we paid \$35 each, delivered and installed in place.

Our four stall storage area is 72' long and 16' deep. It took 38 blocks to complete the project: \$1,330 may be a lot of money, but these are immovable blocks that will never deteriorate.

I have seen beautiful material storage bins made of heavy timbers and superbly constructed. But lumber is

lumber; it does rot. Wolmanized, creosote timbers, and cedar logs do have a much longer life span, but none of these timbers can stand up to some loco cowboy ramming the -!\$7* out of your gravel pile with a front end loader. Timbers do crack and break. Concrete is concrete.

To beef up our storage facility a bit more I felt that the floor needed to be as strong as the walls. So we made the floor of poured concrete. If you build bins like these you can use any type of paving material for a floor, or none at all to cut down on costs. We felt that we would like to make our bins as permanent as possible and not lose our floor to the ravages of the front end loader, so we invested the extra money.

The foundation I dug to 12 inches. For the bottom layer I used 4" shot rock. I needed approximately 20 tons at a cost of \$8.80/ton to cover my 1152 square foot base. Above the base layer of shot rock I put in 4" of gravel to get me within 4" of grade. We paid \$12.60 for 16 yards of #2 gravel. The total cost of the gravel we used was \$377.60.

Before pouring the concrete I had the 2' x 8' x 2' placed. The blocks sit on the gravel 4" lower than grade so that the poured concrete could form around the blocks and hold them in place. Now the crazy caballero can't

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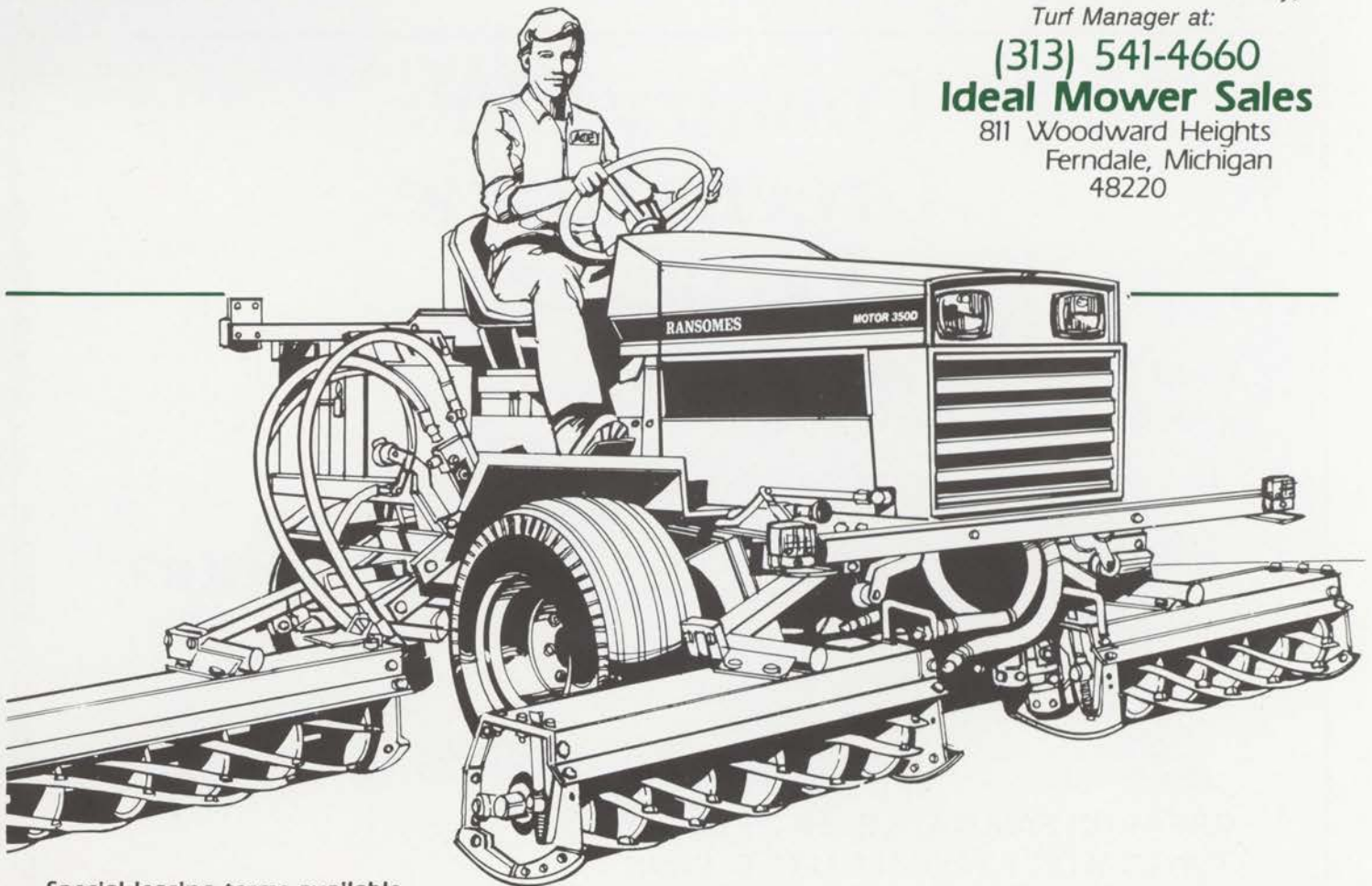
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nudge them, either. We used approximately 12 yards of concrete for our floor. This cost us \$600. I also threw in some metal reinforced screening that we had laying around for a little extra insurance.

For my simple, unoriginal, everlasting, and 'fairly economical' gravel storage bins we paid a grand total of \$2,307.60. Labor costs were nothing because Cantigny pays me anyway, whether I build gravel bins or supervise

the crew. Again, this may be a grand amount of money just for storage bins, but they should never move out of place.

We are very pleased with results that we have had with our storage bins. They serve our needs well and we are very happy that we spent the extra money to make them as permanent as possible.

TORO JOINS FORCES WITH MOTOROLA

The Toro Irrigation Division announces an agreement between The Toro Company and Motorola, Inc. for distribution of the second generation OSMAC system.

The alliance of The Toro Company's extensive irrigation experience with the technical applications expertise of Motorola will provide the golf industry with a remarkably unique new control system, with applications and service support to match. The second generation of OSMAC (On Site Management and Control) has evolved substantially beyond the first version, incorporating features and functions that are needed by a large segment of the golf market. The system is extremely versatile in that it can function as either a low cost upgrade to an existing control system, or as a complete control system for entirely new golf installations.

The OSMAC is an easy-to-use, affordable, central based irrigation control system. The Central communicates to the satellites with a paging radio system, completely eliminating the cost and inconvenience of communications

wire installation. As a retro-fit controller, the OSMAC is quick and easy to install, often causing no disruption of play. And whether retro-fit or new installation, the OSMAC offers golf course superintendents a versatile controller with the dramatic advantages of radio communications and remote operation flexibility. System features include a basic receiver unit which is expandable from 8 to 48 stations, each individually addressed — up to 255 field units per Central; stations individually accessible from the Central and/or from a hand-held remote; multi-valve syringe; alarm paging capability from key sensors monitoring flow, power, and pumps; and two addresses for individual and group commands and start time linking. The OSMAC control system utilizes reliable, solid state design and state of the art pager technology — its hand-held radio unit doubles as a two-way radio to communicate with the base unit or another portable.

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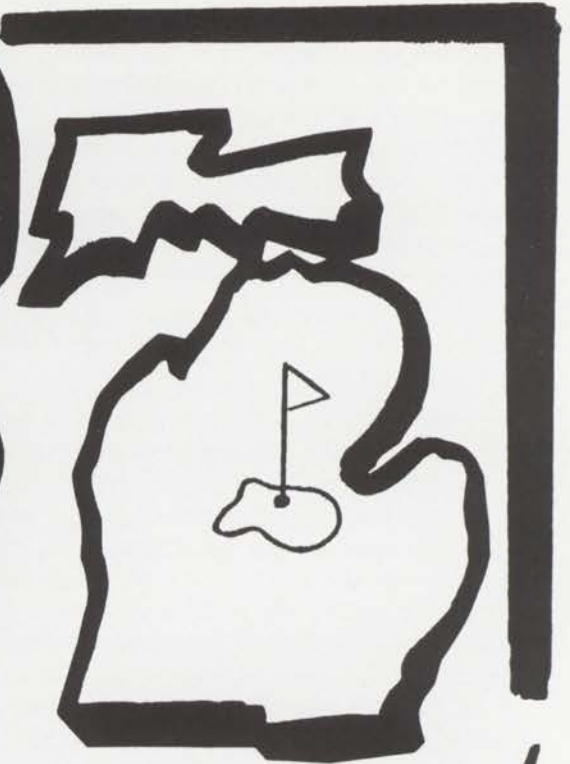
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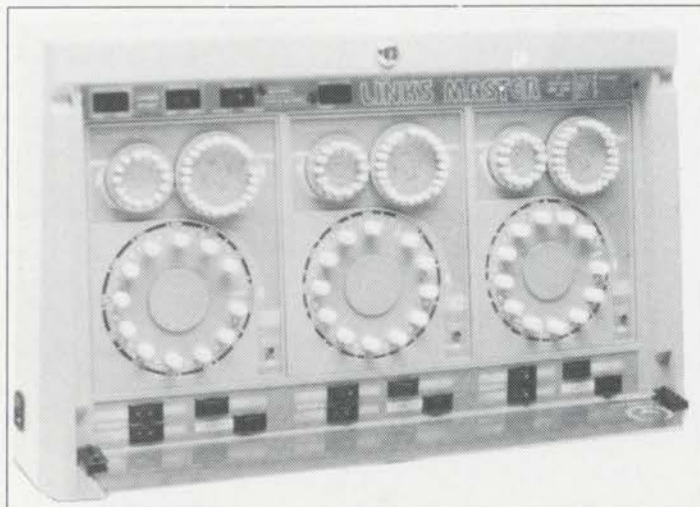
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UNDERSTANDING YOUR MEMBERS

This is a topic that is very important for both you and your club. Often I hear fellow superintendents talk about the frustration they have at their clubs. Some say they hate golfers; others feel that there is no appreciation for all the things superintendents have to do, most of which the member never sees. Still others could care less about the members and go about their business as if they were on some different planet. These are just a few complaints and I am sure the list goes on.

Before I go on, you as a superintendent must decide what you feel about this profession. If it is just a job for you, then it is time to get out! If it is more than just a job and something you enjoy doing, but still have a lot of frustrations and wish to overcome some, then maybe I can help.

What do we as superintendents think about on a daily basis at work? We think about our employees, equipment, irrigation, disease, insects, drought, rainfall, drainage and all things associated with normal golf course maintenance. Have you ever tried to see the golf course through the eyes of members? I think you will find they see things quite differently.

Most members at your club are there to relax, socialize and enjoy a game of golf. I believe that if you try to see the golf course through their eyes and the things that bother them, then there will be less stress in your job. When golfers come to play at your club, the most important thing to them is how are they going to play today. The things that you do or do not do is going to have an impact.

When the golfer gets out of his car, he goes to the clubhouse, gets his clubs and heads to the putting green. First impressions are critical, for they set the stage for a good or bad attitude. Make an extra effort to keep these areas in fine shape every day.

The golfer skips the pro-shop in this article and goes to the first tee. (That topic is an article in itself.) Does the tee look good? The most neglected thing about tees that irritate members is PLACEMENT! The markers should be a minimum of five paces apart, ON LEVEL GROUND, and at least two club lengths of similar area behind the markers. Never keep the markers in the same general area day after day. By moving the markers from front to back, or to different tees, the playability of the course changes. When the golfer gets to the 230 yard par three and has to swing a driver every time, it becomes less challenging. He will enjoy the hole better if he can hit from 185 yards now and then. Same is true with any hole. Remember, make the course yardage change as much as possible.

After the golfer hits his tee shot he will most likely end up in one of the following places; fairway, rough or hazard.

Fairway: The lie of the ball is critical because it determines what kind of shot will be played. The height and frequency of cut are the two most important factors when determining the type of lie one may get. I believe that between 1/2" - 3/4" is the best height for the majority of your members. It is very hard for the ladies to hit wood shots off of 3/8" fairways. On the other hand, the better players

will get fliers on longer cut fairways and will complain that they are hitting out of the rough instead of fairway. Try to keep the fairway looking good! No one likes looking at dead clumps of grass. If you are not sure what your members want, then ask a good cross section of them this year. Members will always appreciate a chance to get their opinions known.

Rough: If the player hits his ball in this area, then there are several concerns; can he find the ball, and if so can he swing at it without using a scythe. Roughs cut at 1 1/2", one or two times a week, depending on growing conditions, should satisfy those needs. The P.G.A. is played only one time a year, and chances are that it will not be played at your golf course, so let's keep the hay bailers on the farms!

Hazards: An often NEGLECTED area. Hazards must be properly marked and checked all season long! A lot of problems with rules arise from poor markings.

After the golfer has found and played the next shot, we will assume the ball has gotten somewhere near the putting surface. We will discuss those areas next.

Bunkers: Always a hot topic in the men's grill. Try to keep the bunkers neat and raked as much as possible. Well kept bunkers really compliment your greens. Make sure the player has a reasonable chance to get the ball out no matter where the ball is. Look around the edges of the bunkers; can a shot be played from everywhere or do you need an excavator to get at it. The sand should be firm, with the top inch loose. Never have sand so soft it produces, "Fried Egg Lies". This will infuriate more members than you can imagine, especially if they do not get out on the first try.

Rough Surrounding Greens: This area should be maintained more intensely than other rough. Golfers of all abilities should have a reasonable chance to get the ball near the pin without having Ken Venturi show them how to do it. A separate smaller mowing unit with more maneuverability will do the job quite well.

Collars: Sometimes I see greens that are nice, but the collars are terrible! Collars are just as important as greens, so treat them the same. I find it hard to believe that turf cut at 1/2" is harder to keep alive than the one next to it that is cut at 5/32". A very important area of the collar is where it joins the green. Check this area on all greens and make sure that if a ball comes to rest against the collar, that you can still take a stroke with the putter. The golfer should not be forced to use a lofted club to hit a ball that is still on the putting surface. Adjust collar mowers if necessary. Remember, well kept bunkers and collars will compliment the most important square footage you are responsible for: YOUR GREENS.

Greens: The single most discussed topic at any club is the putting surface. The speed of these surfaces are always high on the list when members compare clubs. Trying to keep the majority of your members happy with green speed is certainly a difficult task.

I feel that a height of cut between 5/32" and 3/16", plus an even flow of 3-4 lbs. of nitrogen per year will keep most

members off your back. In this height of cut range, the high handicap player will finish a round with less than 40 putts. The vocal minority, "the low handicap player", will grumble a little, but as long as the greens are somewhat speedy you can keep them happy also. We all have ways to speed up our greens for any given tournament. Decide what tournaments you need to do it to and which ones you do not. For all you superintendents who cut their greens at 1/8", give yourself, the turf and the majority of your membership a break - RAISE THOSE MOWERS UP - you will sleep better. Pin placement is another thing that

can make or break a golfer's day. Read the U.S.G.A. suggestions regarding pin placements and follow them. Make sure you have someone on your crew who knows something about the game of golf. He will usually do a fine job of placing the pins. Use pins and flags that always look new and paint the cups as often as possible.

In closing I would like to say that it is always the little things that the members notice, so the next time you tee it up at your course, think like a golfer; you might be surprised how many of those little things you see, too.

ADDENDA TO DICTIONARY

Aphid - (a-fid) one fid

Boysenberry - (boys-n-berry) the male counterpart of the girlsenberry

Cockscorn - (cocks-corn) a comb used by hairy roosters

Dogwood - (dog-wood) a shrub distinguished by its bark

Exfoliate - (ex-fo-le-ate) strip tease

Foxglove (fox-glove) mittens sold in fours rather than pairs

Gladiola - (glad-he-ola) a happy male ola

Humor - (hu-more) a shift of wit

Judas tree - (jou-das tree) a gift for the person who turned you in to the IRS

Nematodes - (ne-ma-toads) toads from the planet Nema

Odor - (oh-der) opposite of humor

Peony - (pee-on-knee) I should have been more careful

Quackgrass - (quack-grass) something ducks smoke

Russian olive - (rush-in olive) something that goes in a Vodka martini

Toadstools - (toad-stools) an organic fertilizer provided by toads

Witch's broom - (which-es broom) my mother-in-law's car

Xerox - (zear-ox) it saves design time

Zoysia - (zoy-za) grass not recommended for smoking

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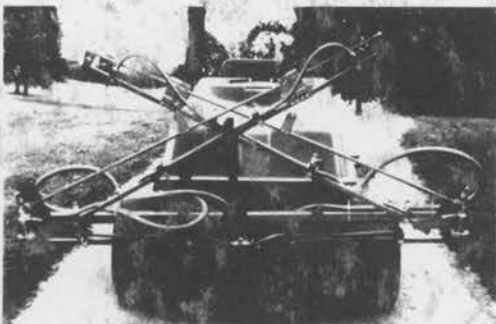
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