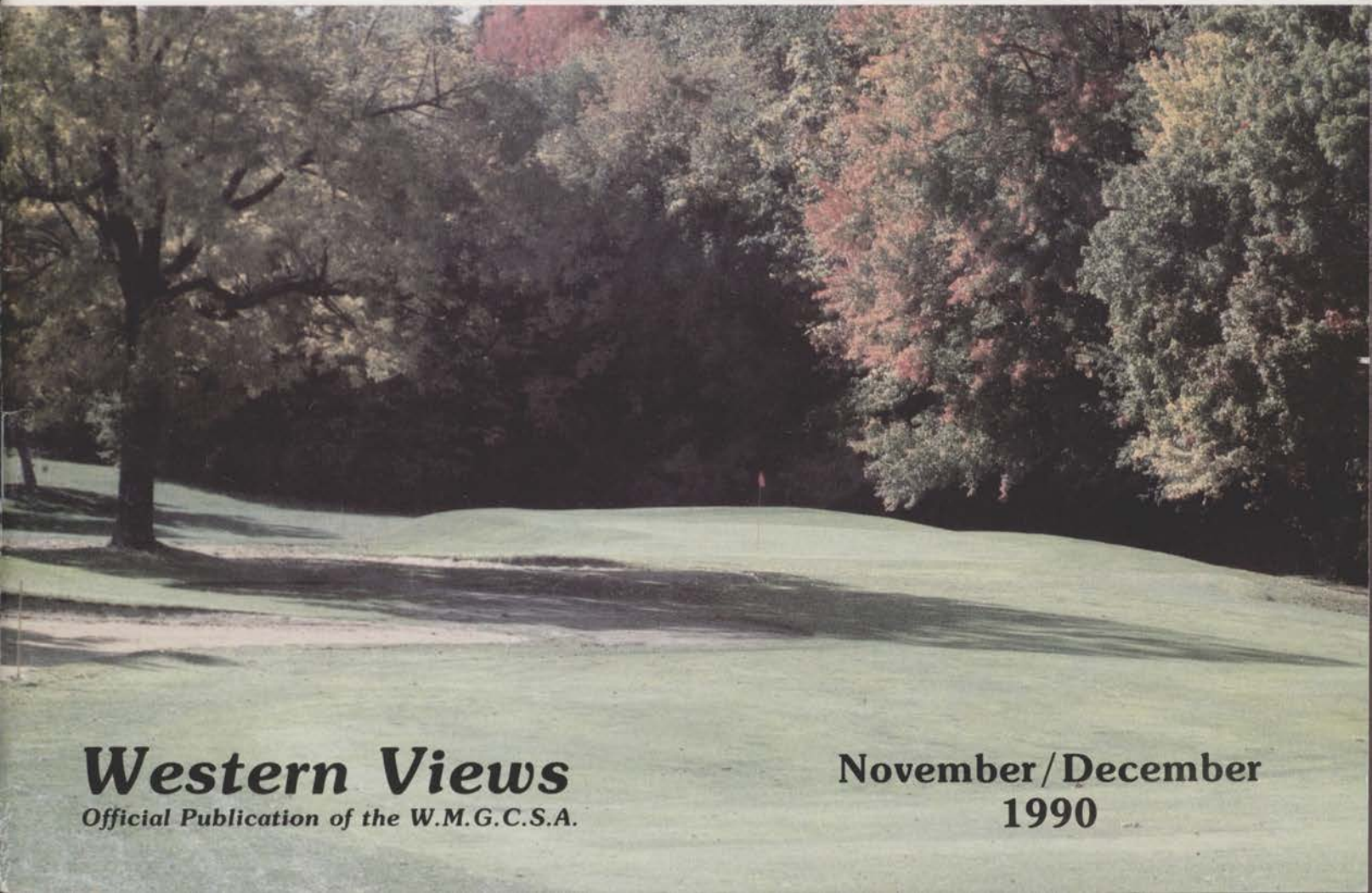


An aerial photograph of a golf course, showing several green fairways, sand traps, and a clubhouse area on the right. The text "Site of 1990 Golf Day" is at the top, "The Highlands" is on the left, and "(Formerly Grand Rapids Elks)" is at the bottom left.

Site of 1990 Golf Day

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**Western Views**  
Official Publication of the W.M.G.C.S.A.

November/December  
1990



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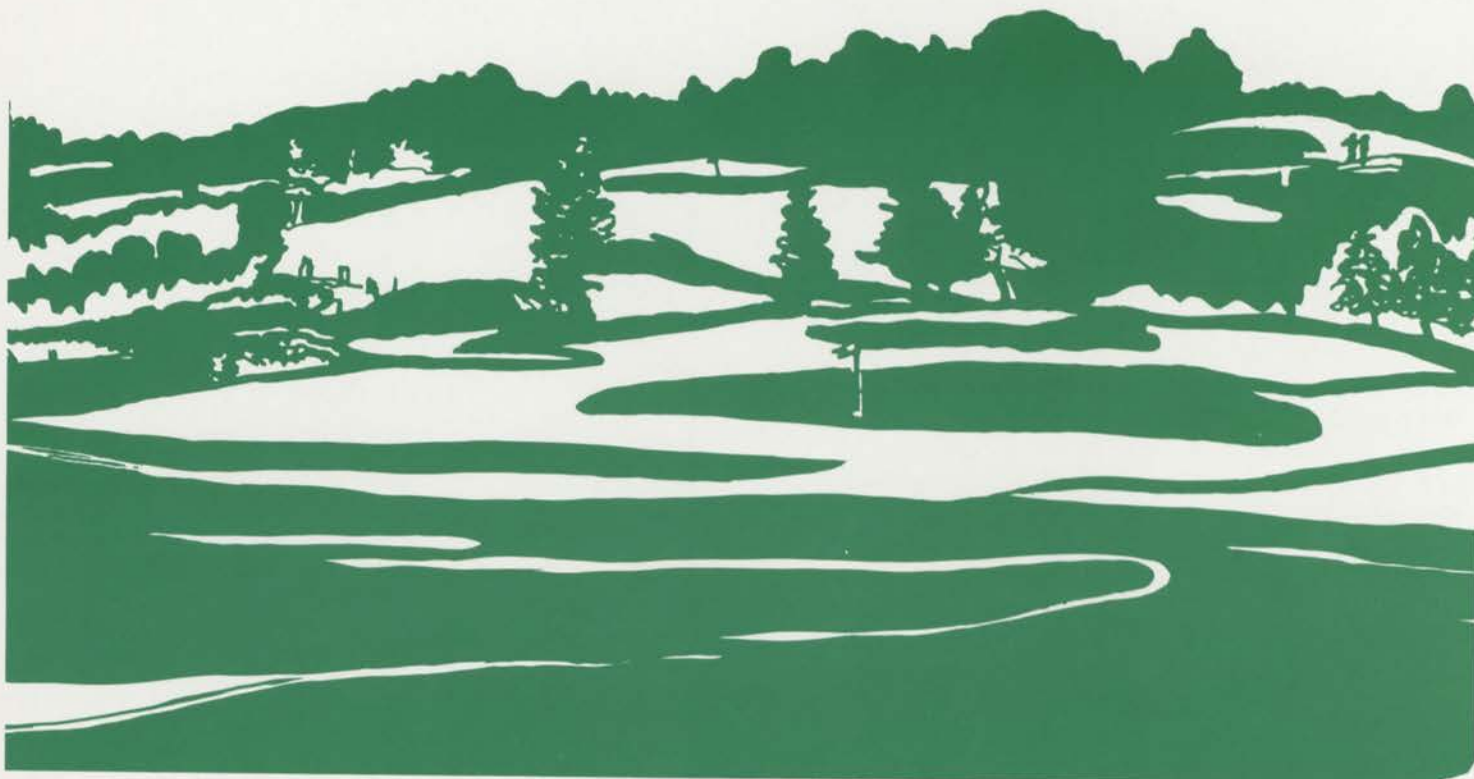
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# RICHTER RAMBLINGS

A wet and windy autumn has passed and who knows what the winter of 1990 and 1991 has in store. Even if the weather is a mystery, certainly these months allow us to reflect on the past growing season, regroup for the future, and refurbish the equipment. This slower time of year affords some time to relax and rejuvenate your relationship with the family.

Crystal Springs Golf Course is the latest challenge for Harry Schuemann, moving into the superintendent's position there. Congratulations!

A little late on the bulb article, but good reading nonetheless.

Flash!! W. Bruce Matthews, Golf Course Architect, Owner of Grand Haven Golf Club, and long time member of G.C.S.A.A. and W.M.G.C.S.A., will receive the 1991 Distinguished Service Award from the G.C.S.A.A. The award will be presented at the opening session of the 62nd International Golf Course Conference and Show in Las Vegas.

In the past year as editor of 'Western Views' I have tried to make the newsletter, eh, magazine, um, newsletter enjoyable to read. I hope that you have liked it. Next year there will be some changes to be shown at a later date.

To close out 1990 I would like to take this opportunity to wish the readers of 'Western Views' a Merry and Blessed Christmas and a Happy New Year. Amid the commercial hype of this season of giving, remember what the first six letters of Christmas (not X-mas) spell, and that the giving we do is in His name.

## DATES TO REMEMBER

### DECEMBER 22

Underground Storage Tank Registration deadline per State of Michigan. Call (517) 373-6242.

### JANUARY 10

Turfgrass Management Shortcourse begins in Grand Rapids. See Page 7 for details.

### JANUARY 20-23

Midwest Turf Conference and Show. Indianapolis, IN (317) 494-8039.

### JANUARY 21-23

61st Michigan Turfgrass Conference in Lansing, MI (517) 353-9022.

### FEBRUARY 5-12

62nd International Golf Course Conference and Show in Las Vegas, NV (913) 841-2240.



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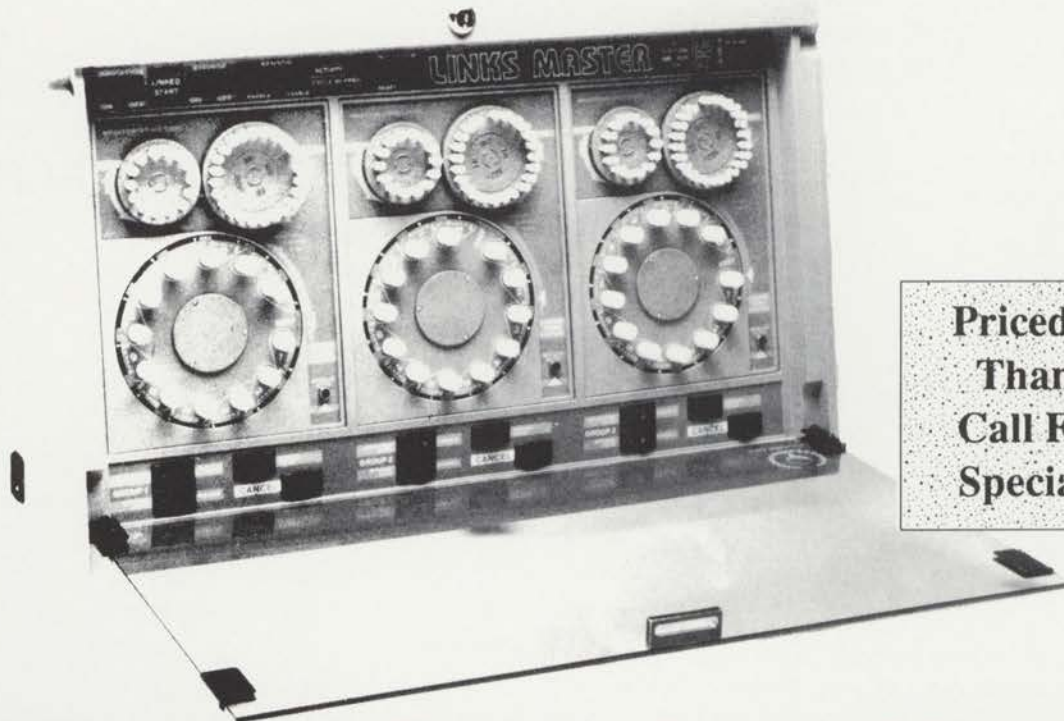
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## GSAA EDUCATIONAL PROGRAM EARNS NATIONAL ACCREDITATION

The continuing education programming offered by the Golf Course Superintendents Association of America (GCSAA) has earned official accreditation from the Accrediting Council for Continuing Education and Training (ACCET). ACCET is recognized by the U.S. Secretary of Education as the official accrediting agency for non-collegiate continuing education.

"Receiving accreditation confirms our belief that GCSAA offers topflight educational benefits to our members," said John M. Schilling, GCSAA executive director. "Few professional associations take this extra step to ensure quality education for their members."

GCSAA's senior director of education and marketing, Colleen Smalter Pederson, added that, "We chose to pursue accreditation to get public verification of the scope and quality of GCSAA's educational programs. It is important to us to have our programs measured against established standards."

The ACCET Accrediting Commission voted Aug. 18 to approve GCSAA for full accreditation status, culminating a two-year preparation, application and evaluation process. Full accreditation recognizes the association's current curriculum of more than 50 one-day and two-day seminars designed to provide information on up-to-date

golf course maintenance practices and to sharpen the management skills of golf course superintendents.

GCSAA's correspondence coursework is also included under the accreditation. The association introduced its first correspondence course covering media relations for the golf course superintendent, last year; correspondence training courses for underground storage tank management and hazard communication are planned for 1991.

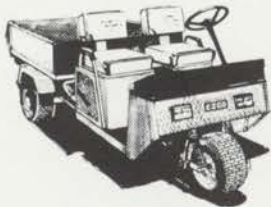
Nearly 3,500 participants attended GCSAA's 38 conference seminars and 30 regional seminars during the 1989-90 academic year. Another 81 seminars are planned for 1990-91.



62nd International Golf Course  
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## WEATHER RHYMES AND REASONS

*Those old sayings are surprisingly accurate. Here's why.*

Ancient mariners and farmers didn't have satellites and computers to help them forecast the weather. They observed the sky, winds and clouds. Eventually, patterns emerged and people made up sayings to remember them.

We now realize that behind the folklore often lies real science. Here are several time-tested rhymes and sayings, and the meteorological reasoning backing them up:

*Hen's scratchings and mares' tails make tall ships carry low sails.*

"Hens' scratchings and mares' tails" refer to high-altitude cirrus clouds. During fair weather, check the upper atmosphere for these little clusters of wispy clouds that look like groups of apostrophes. Forerunners of a low-pressure storm system, they often follow a fair-weather, high-pressure system.

If a lower, thicker veil of clouds trails in behind the mares' tails, the picture looks bleaker still: "The lower they get, the nearer the wet."

Typically, the hens' scratchings give you about 15 hours of warning before the rain arrives, but remember: "Long foretold, long last; short notice, soon past." If lower, thicker clouds seem to take forever to arrive, then the slow-moving front generally will take even longer to leave. If

the cloud level falls rapidly, your wet spell should be short and sweet.

*A backing wind says storms are nigh. A veering wind will clear the sky.*

Winds are named according to where they originate: westerlies blow from west to east, and so on. Fair-weather winds tend to blow from the west or north, while bad-weather winds usually howl from the southwest, south or east. If you notice the wind backing (shifting counterclockwise from westerly to southwesterly, for example), expect worsening weather. Likewise, if the weather has been poor and the wind veers (shifts clockwise, say, from southwesterly to westerly), you should be seeing a change for the better.

*Red sky at morning, sailor take warning; red sky at night, sailor's delight.*

Fair weather involves high-pressure air masses composed of dry, stagnant air rich in dust and haze. Low-angle light from the rising and setting sun appears red in such air; thus, a fiery display at sunset indicates high-pressure air lying hundreds of miles to the west, the direction of the prevailing fair-weather winds in the Northern Hemisphere. Conversely, a crimson dawn signals that high-pressure air has already passed eastward, increasing the odds that what follows will be wet.

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*Ring around the moon, rain by noon; ring  
around the sun, rain before night is done.*

So says weather-folklorist Don Haggerty, author of *Rhymes to Predict the Weather*. Atmospheric ice crystals scatter the light of the sun and moon, creating rings or halos. High cirrus clouds, which form the most common halos, often indicate poor weather is 12 to 18 hours away. Halos may appear to grow as the cloud level lowers and the depression draws nearer. "The bigger the ring, the nearer the wet."

*When the dew is on the grass, rain will  
never come to pass.*

Clear skies at night lower temperatures enough for humidity to condense as dew. So if a heavy dew forms on a summer night, expect a fair day.

But "When grass is dry before the morning light, look for rain before night." This is especially true if temperatures rise during the night as a result of increasing cloud cover. "If night has a fever, it cries in the morning."

*Summer fog will scorch a hog.*

Elegant it's not, but the saying often rings true. Clear skies on summer nights radiate heat and drop surface temperatures until moisture in the low-lying air condenses into ground fog. Likewise, fog rarely forms over land unless the air is nearly still. Clear skies and still air characterize high-pressure areas. Come morning, the sun shining through the clear skies will burn off the fog and scorch the skin of any hog careless enough to rise above the muck.

*When the glass falls low, prepare for a  
blow; when the glass is high, let your kites  
fly.*

Lousy weather arrives in low-pressure air masses. Watching the glass, or barometer, in conjunction with the cloud progression (lowering or rising ceiling) and wind shifts (veering or backing) let you monitor the three most important variables in foretelling the weather. Other signs can also warn you of a drop in pressure: headaches, an arthritis flare-up, sleepiness.

*If with your nose you smell the day, stormy  
weather's on the way.*

Plants release oils into the atmosphere, and research indicates that the higher the humidity, the more oils the plants give off. This produces the distinctive odor many of us recognize when we say, "Smells like rain today."

While rhymes such as these helped past generations, the wisest of the old-timers didn't rely on a single couplet; they looked to see if a variety of clues matched up. Haggerty sums it nicely: "One indicator makes lucky your guess. Two indications make errors much less. So take the weather sign at its word, if you look again and see a third."

Mind you, these time-honored forecasts are by no means infallible. Then, as now, the only absolute about weather is that nothing is absolute.

CREDIT: Condensed from *Backpacker*  
Andy Dappen

---

## GUIDELINES FOR CONTROLLING MOSS IN GREENS

*Norman Hummel, Cornell University*

The quality of golf course greens by present day standards is often determined by greens' speed. Golf course superintendents are mowing greens shorter and keeping the nitrogen fertility lower than ever before to obtain faster speeds. A consequence of these practices has been a reduction in turfgrass vigor to a point whereby the greens are much more prone to weed encroachment. One of the more troublesome weeds to have become a problem is moss.

Until recently, the only known means of controlling moss was through the use of mercury products. With the support of the Metropolitan Golf Association, research was conducted to look at means of controlling this serious weed. This research identified both chemical and cultural tools that could be used in a moss eradicating program.

### **Chemical Control**

Pesticides and other materials offer hope in controlling moss on bentgrass greens. In the early spring, moss commences its growth much earlier than bentgrass, giving it an early competitive advantage. Hydrated lime applied in late March at 3 to 5 pounds per 1000 square feet will burn back the moss during this period. The lime can be spread easily if mixed with a dry sand topdressing.

An effective treatment for moss control would be the Scotts Goosegrass Control; a betasan-ronstar combination. Labelled for use on bentgrass greens, this product

provided 83% control from only a single application. While this product will cause some discoloration, it appears to be one of the more promising moss control products.

Siduron (Tupersan) and bentazon (Basagran) provided from 53% to 74% control of moss. While they were not quite as effective as the Scotts products, both siduron and bentazon were much safer since no injury occurred for either product.

You should note that with the exception of bentazon, the most effective treatments are preemergence herbicides. While it can't be determined from these trials whether the effect is pre or post emergence, it should be mentioned that the herbicidal activity of these materials on moss was chronic. It was several weeks before we noticed any significant decrease in moss populations.

### **Cultural Control**

Chemicals only offer a partial solution to the moss problem. Unless cultural steps are taken to increase turfgrass vigor, chemical control of moss will be an ongoing battle. We designed studies to look at the effects of cultivation techniques and fertility on moss eradication. The results clearly demonstrated that culture can be changed to the detriment of moss.

While silvery thread moss will tolerate dry conditions, it is favored by an abundance of free water. Core cultivation immediately followed by sand topdressing would



create a system of "vertical drains" that would facilitate a rapid water removal of the surface. We found that moss removal has hastened where this practice was followed compared to core cultivation alone. Deep spiking was also beneficial compared to core cultivation alone.

Nitrogen and iron are the most important tools in a moss eradication program. Moss control improved as the rate of nitrogen was increased. Moss was eliminated over two growing seasons from plots that were initially 40% moss by increasing nitrogen rates to about 0.8 lbs. per 1000 square feet per growing month (6 lbs. N/year). Iron applications at a rate of 6 ounces per 1000 square feet per month were beneficial during the first year, especially at the higher rates of nitrogen. Iron had no effect on moss in the second year.

While we didn't measure greens' speeds, these high nitrogen treatments no doubt resulted in slower speeds. The bottom line though, is if you have moss, you are going to have to at least temporarily increase nitrogen rates. Effects on greens' speeds can be minimized by careful control of water, double cutting, or increasing potassium levels.

Moss control research has until now looked at fertility and herbicides independently. Studies will be conducted this year to look at combinations of herbicides and nitrogen fertility in moss eradication "programs". Perhaps this research will identify more reasonable nitrogen rates to use in conjunction with a herbicide program to eliminate the moss from greens.

In summary, enough information is known for a superintendent to develop a legal moss control program. Early spring applications of hydrated lime, followed about a month later and in the early fall with a herbicide are the first steps in controlling moss. Increasing your nitrogen levels during this period will no doubt improve the competitive advantage of desirable grasses at the expense of moss. Furthermore, control your soil moisture levels through careful irrigation and by providing good drainage throughout the soil profile.

CREDIT: Our Collaborator, Northeastern GCSA  
September 1990

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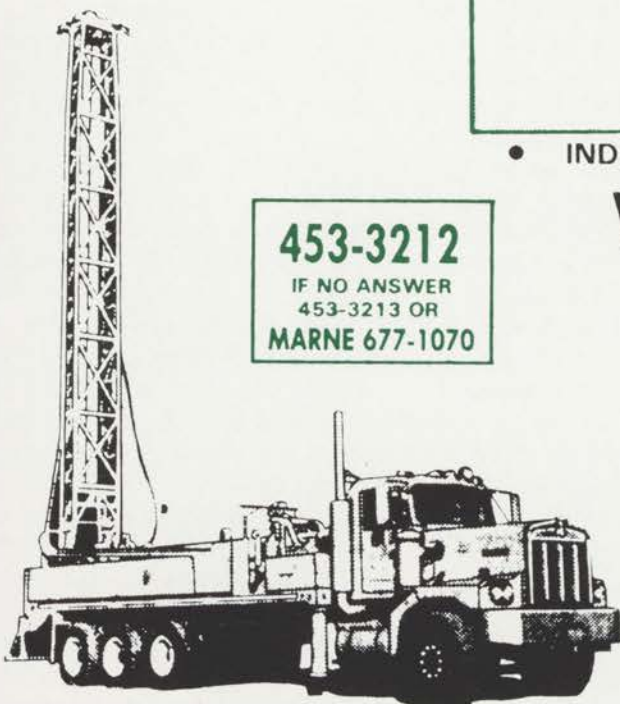
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## BUILD A WOOD-DUCK CONDO

Wood ducks are the only waterfowl species that readily use artificial nesting structures. Populations of woodies, which normally nest in hollow trees, ebbed to an all-time low at the turn of the century because much of their nesting habitat was lost to extensive American logging practices.

Man-made nesting boxes played a vital role in the ducks' comeback, and today building them is a popular and fruitful craft of wildlife-watching sportsmen and conservationists.

Wood-duck boxes are, in fact, superior to the natural nesting places of "squealers," reports Frank Bellrose, a wildlife specialist who has been studying wood ducks for over 50 years.

Bellrose, an advisor to the conservation group Wood Ducks Now, says that wood ducks nesting in tree cavities successfully raise clutches only 37 percent of the time. But, when woodies set up housekeeping in well-placed man-made nesting boxes, almost two-thirds of the brood hatches, survives and flies off to further perpetuate the species.

"This discrepancy is primarily due to predation of ducks and their eggs by raccoons, rat snakes, starlings and squirrels," Bellrose notes. "In other words, a man-made box can be made fairly predator-proof, but a natural cavity is prone to intrusion by varmints."

Southern sportsmen can make a simple and inexpensive nesting box from 10 linear feet of rough-cut cedar, cypress or other weather-resistant lumber.

"There are several key things to remember when constructing the box," Bellrose says. "First, its entrance should be a 4-inch-wide by 3-inch-high oval. This will keep raccoons weighing over 10 pounds out of the box. Secondly, a wire-mesh or hardware-cloth "ladder" must be installed along the box's inside front, from its bottom to the entrance hole. This provides the ducklings a way of escaping the nest."

Bellrose adds that since wood ducks do not collect nesting materials, a 3-inch layer of sawdust or wood shavings should be placed in the box-bottom just prior to the nesting season, which takes place in early February throughout the South.

When assembling the duck house, use only zinc-coated nails, which are rust-resistant.

Bellrose reports that duck food is an important concern when choosing a nesting-box site. "Proteins are critical during nesting season," he says. "They provide energy for egg-laying, and for the ducklings' growth and survival. Wood ducks obtain protein from insects plucked from aquatic vegetation along shores and water surfaces."

A freshwater marsh is the most productive type of environment for wood ducks, says the biologist, adding that the colorful wildfowl like living around placid pools and overhanging woody cover. Farm ponds are superb locations in which to place boxes.

Since tree-mounted duck houses are easy to scale by predators, Bellrose recommends fastening the boxes to

pre-cut lengths of metal pipe.

"The safest site for nesting woodies is a box which is mounted on a metal pipe and set over water a few yards from shore. A coat of axle grease will reduce predation, and a cone-shaped sheet-metal predator guard is well-advised. In some areas of the South, houses on pipes have been widely used, even when they are placed on dry ground near water.

Over *aqua pura*, the house-bottoms should set about 3 feet higher than the water's surface. Otherwise, the nests might become inundated should the water rise.

What's in all this for the average Joe Southerner? Besides making a vital contribution to waterfowl conservation, he can enjoy watching and observing squealers from one season to the next, since the hens and their progeny are likely to return to the area to nest each year.

Four-thumbed friends of woodies can purchase complete homes for the birds through Ducks Unlimited. Designed by Bellrose, the boxes, which cost \$17 each, are made of durable plastic and last indefinitely. For more information, write: River Cities Chapter, Ducks Unlimited, Dept. SO, P.O. Box 309, Fulton, IL 61252, or call (815) 589-4230. Proceeds from the sale of the houses help further waterfowl conservation across North America.

*CREDIT: Southern Outdoors  
Chris Altman*

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## ALL THINGS CONSIDERED

### What's Your Batting Average? An Opinion on Unreasonable Expectations

BY Stanley J. Zontek

Director, Mid-Atlantic Region, USGA Green Section

Golfers are well known for making comparisons. They seem to take pride in telling anyone who will listen how a course down the road does something this way or that. They compare budgets, acreage maintained, soils, grass types, green speed, the amount of labor, and many other facts. Sometimes the comparisons are accurate, sometimes not.

Let's take this comparison one step further. It's not really valid, but is interesting nonetheless.

Baseball: A .250 batting average is just that—an average. A ball player hits safely one at-bat in four. A "star" bats .300, and an immortal like Ted Williams bats .400. If you are keeping score, and you should be, that's four out of ten.

Basketball: Superstars shoot just over 50% from the field. They shoot a ball into a hoop at a distance of zero (a dunk) to 18-22 feet or more.

Golf: A par round of golf is normally about 72. Golfers who consistently shoot less than par are found on the PGA Tour, making lots of money. Golfers who shoot consistently over par are found everywhere, and includes those people making the comparisons. The average handicap in the country is just over 18. The average golfer, therefore, shoots about 25% over par.

At what percentage do golf course superintendents produce quality turfgrass? As a basis for comparison, golf courses contain about 30 acres of fairways, 2.5 acres of greens, and 2.5 acres of tees. This equates to about 100,000 square feet of greens and tees and 1,320,000 square feet of fairways. Thus, if a superintendent "Bats" .400, which would put him in great company in baseball, it means your superstar would lose the equivalent of 10.8 greens and tees out of 18. On fairways, he would lose about 18 acres of turf.

While this .400 batting average might get you into the Baseball Hall of Fame, you would probably lose your job as a golf course superintendent.

All of this may sound ludicrous, but the fact remains that golfers have set such high standards for their golf courses

that maintaining these standards is difficult, expensive, and sometimes impossible to achieve. To keep alive every blade of grass on every green, tee, and fairway regardless of the conditions, and not being willing to accept anything less, is wishful thinking and a mistake.

Everything cannot be perfect on every golf course every day. Even if it were possible, what would it cost?

So, look at your golf course. My message to course officials reading this opinion is not to be so concerned if the golf course superintendent bats only .998. After all, this equates to losing about 200 square feet of turf, a 10 feet by 20 feet area of greens or tees and 2,640 square feet of fairways or .06 of an acre.

Anyone who bats this percentage or better deserves a pat on the back, not a kick in the pants. After all, what other industry which deals so closely with Mother Nature can boast a 99% average or better? Not many.

Therefore, the next time you read about a professional athlete making \$2,000,000 a year to achieve only a 30% batting average, be proud...because golf course superintendents are batting 99% or, better.

Reprinted from the September/October 1990  
USGA Green Section Record

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# THINGS THAT AGGRAVATE SUPERINTENDENTS

by Terry R. Smith  
Greenfield Country Club

With the season almost to an end, I sat back and looked at some of the things that aggravated me over the past season, and they did not seem nearly as bad as they did when they happened. In fact, I realized they were sometimes funny. What follows are some of those aggravating things that look so different to me now.

## Aerification

After two days of arguing with the golf pro on what days the course can be closed so you can aerify, you come up with two days that do not interfere with any tournaments, outings, ladies' days, or any personal reasons the pro may have.

So now you post the dates that you have chosen and wait for the --- to hit the fan. Some of the things that you might hear go like this. One of your board members, green committee members, pool committee members, ladies' association board members, or the second cousin of any member will come up to you and say that you cannot aerify that week! "That's the week that my wife's third cousin twice removed on her Aunt Mildred's side is coming to play and I cannot have him playing on aerified greens!" And then there's the member that says, "Close the front side! If I wanted to belong to a nine hole club I would join one". That's after he had played the back side three times last Sunday because he scores better on the back.

## Carts

Carts are probably the biggest pain in the butt that a superintendent has, besides the person driving it. I guess that making the decision on when to let the carts out is the worst. But the damage that carts cause rank right up there.

You just got a three inch rain and closed the course to carts. Your members are sitting in the bar discussing your job future, when the club manager comes up with a story about the club he once worked at (which there is quite a list). He told them about when they had a four-inch rain and the superintendent let the carts out with no problem at all. But what he did not tell them was the golf course was built on a sand dune and the total rain fall for that area was ten inches a year.

Then we come to what golfers do when they get behind the wheel of a golf cart. We have a ninety-degree rule on our golf course. One day I notice a cart driving down the middle of the fairway. I stopped them and asked them why they weren't using the ninety-degree rule. Their answer was that one of them sliced the ball, the other one hooked the ball, so they figures they would drive down the middle of the fairway, then turn ninety-degrees to the right or left rough.

We also have the thirty-foot rule around the greens. When seeing a person take two steps from his cart onto the green, I asked why he wasn't using the rule. He argued

that he was a good thirty feet. Well, I guess that explains the sixty-foot putt he made last week that he was bragging about in the bar. Or it explains why his wife thinks a one foot putt is really a four inch tap in.

## Help Shortages

It is finally getting close to fall and that first snow, every superintendent is looking for. But there is a lot of work still left, with fall aerification, over seeding, new construction and many other projects to be done before that first snow gets here. Well, you have lost your summer help to school and nobody is beating down your door looking for a job. So the first thing you do is put out the word that you're looking for help, but that gets you nowhere. The next step is to put an ad in the local paper. It reads "Help wanted for grounds crew, four dollars per hour, apply in person Monday." The next day, you check your ad to see if it's correct. It is fine, but what you find is that every fast food place in town has an ad too, but their ad reads "fifty-fifty per hour, good benefits, and chance for advancement."

Well, Monday morning gets here and three people show up, at least I think they are people. The first one was a man about five foot five and ninety pounds with no front teeth, fifty going on ninety and had his last drink ten minutes ago. His name was Ernest. Next it was Amy. She was five two and about one hundred and ten pounds. She wore a black spandex skirt with a red tube top and three inch long red fingernails. She said she would do anything as long as the hours were not too long and work wasn't too hard. I was waiting on the next one when I heard a faint voice at my door. I looked up to see my mechanic standing in the doorway, his face as white as a sheet and his head shaking back and forth as if to say, "No." He looked as though he had just seen his ex-mother-in-law. He stepped to the side and there she was—the biggest, ugliest woman I ever saw. She was six foot and had to weigh three hundred and fifty pounds. Her hair didn't look like it had been washed in the last six months, or the rest of her either. She walked into my office with flies buzzing around her head and looked me right in the eye and then she leaned over and put her hands on my desk and said she was here for the job and when did she start. Well, I was in shock and I wasn't about to tell her "no." So I told her to report to the club manager the next morning and I took the next day off.

## It's Over

I have just looked back on a small portion of the things that can aggravate a superintendent in a season, and in some seasons it can be a never-ending story. By looking back on these aggravations with a sense of humor, it tells me that I can exaggerate a story just as well as a club member can about the work I do.



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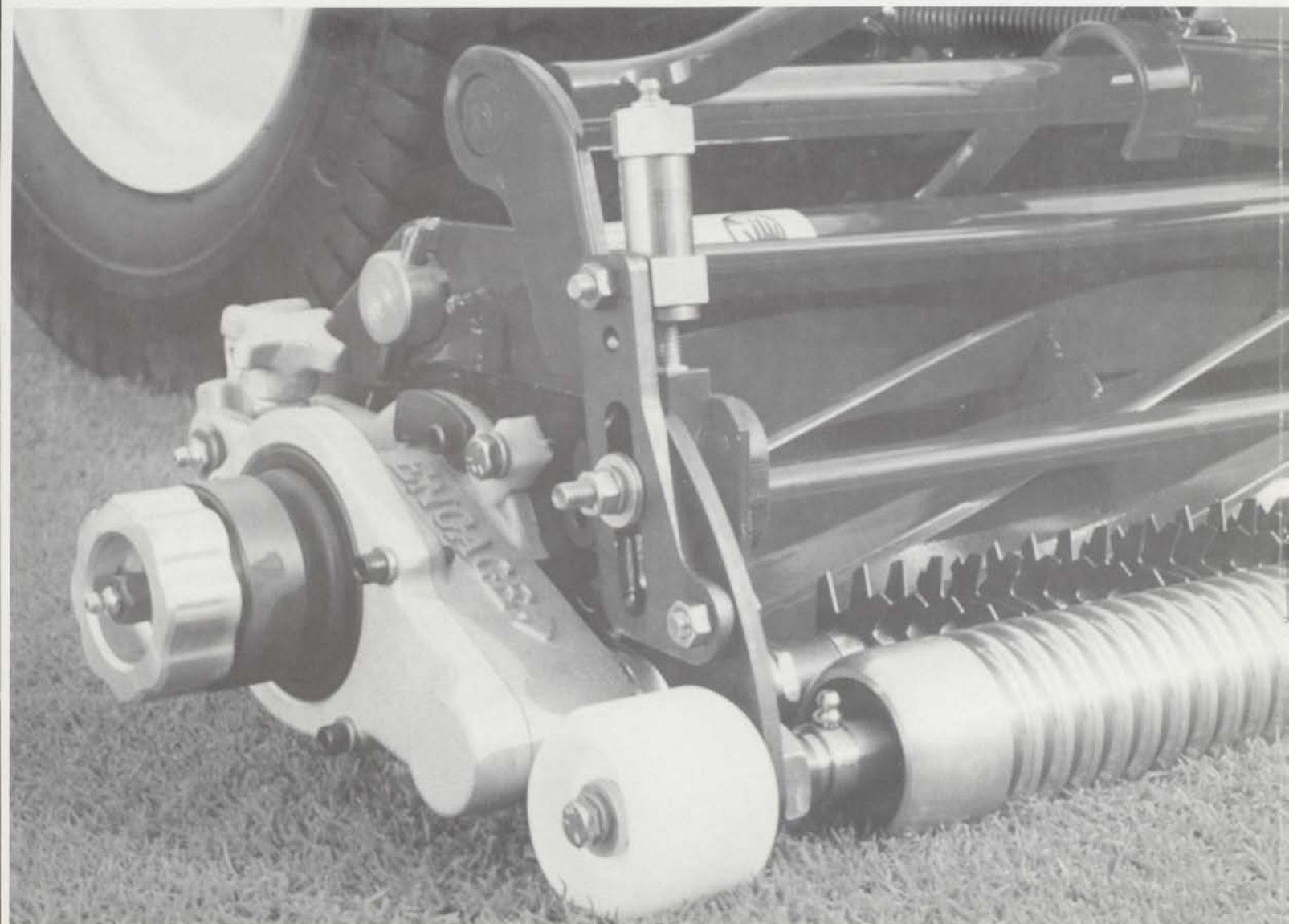
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## LEACHING OF LAWN PESTICIDES LITTLE THREAT TO GROUNDWATER

Reports about the condition of our groundwater reach us everyday through the newspaper, radio and TV news. It's good to finally hear about something that is not threatening our groundwater. Scientists at Ohio State University have found that there is little or no downward movement of pesticides applied to lawns and golf courses.

Dr. Harry D. Niemczyk and Adam A. Krause say their findings could help allay concern that lawn care chemicals are leaching into soil and contaminating groundwater. They are based at the University's Ohio Agricultural Research and Development Center at Wooster.

"Whether on *Geraldo* or on *60 Minutes*, people have been saying that pesticides applied to turfgrasses are getting into the groundwater," says Niemczyk, a professor entomology. "Our data say that's just not true."

Niemczyk says there was little or no leaching of pesticides in the studies they conducted in the field.

To determine the downward movement, or vertical mobility, of the pesticides, Niemczyk and Krause applied six herbicides and nine insecticides to turfgrasses in separate, one-year experiments.

Niemczyk says they found that almost all the pesticide residues remained in thatch, a layer of organic matter at

the soil surface, if thatch was present in the turfgrass.

If thatch was not present in the turfgrass, most residues stayed in the top 2.5 centimeters of the soil, he says.

The herbicides tested were benefin, trifluralin, pendimethalin, bensulide, oxadiazon, and chlorthal-dimethyl. Insecticides tested were isofenphos, diazinon, trichlorfon, ethoprop, chlorpyrifos, iszaophos, fonofos, carbaryl and bendiocarb.

"We wanted to find out what happens when pesticides are applied to turfgrasses," Niemczyk says. "Very few studies have been conducted on how these materials behave once they are applied."

Now, he says, "I would hope that people will have confidence that what they're doing to lawns is not contributing to groundwater contamination."

The studies will be conducted again next year, he says.

Niemczyk and Krause presented the results at the annual meetings of the American Society of Agronomy, Crop Science Society of America and the Soil Science Society of America.

*CREDIT: Ohio Agricultural Research and Development Center*

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# WEALTH, HEALTH AND PULLCARTS

by Jerry Tarde

The great thing about Old Money is that it doesn't give a damn.

Old Money wears khaki pants above the ankles and woolen sweaters with holes in the elbows. Old Money doesn't wear logos unless it got them for nothing. And the only golf shirts Old Money owns are frayed at the collar. In Britain you can tell Old Money by the number of soup stains on a polyester tie worn around a golf shirt at dinner. To the untrained eye, it's hard to tell Old Money from No Money.

Old Money Golf Clubs usually have creaky stairs, beat-up cars in the parking lot and no air conditioning in the locker room. Old Money Clubs don't serve dinner, and if they did, you wouldn't want to eat there. But the real sign of an Old Money Club is if you're allowed to walk when you play golf—and pull your own cart.

Walking and pulling a cart is the ultimate expression of wealth, health and happiness in golf. Or so it ought to be.

The trouble is that many golfers today don't know the joys of playing a course on foot. Besides keeping you from falling over into a heap of cholesterol, walking is good for your game. It helps your club selection, slows down your tempo and gets you acquainted with that bald-headed guy in your regular foursome whose name you can't remember.

All those nouveau riche players who have come into the game over the last 10 years think that golf is meant to be played while resting on your butt. And all those nouveau riche courses built by real-estate moguls have stretched 18 holes from a five-mile walk into a nine-mile mandatory drive.

"Caddies?" you ask. They've gone the way of real-wood woods. Our kids don't realize you can make more money carrying a bag in the great outdoors than shoveling french fries in McDonald's.

What brings this to mind is the appalling introduction of a one-seater riding cart that carries only one bag instead of the standard two. That's four carts per foursome, twice the tire tracks and presumably twice the revenue. Just what golf needed, right?

The fall of American golf can be traced to the rise of the golf cart. No wonder we can't beat the Europeans anymore. You can't find a riding cart over there, and you can't play golf here unless you're in one. I'm convinced there's a linear relationship between clogged arteries and lost Ryder Cup Matches. America is the only country in the world where there's a stigma attached to walking with a pullcart.

Fortunately, walking seems to be enjoying a modest comeback, and you don't have to belong to an Old Money Club to exercise your options.

Resorts are slowly starting to lift the mandatory riding rules. Even hallowed Pebble Beach and its sister courses, Spyglass Hill and Spanish Bay, have announced that you now may walk and carry your bag or pull a cart at any time

there. The cost of a round is the same whether you ride or walk (\$175 at Pebble and \$115 at the others), but you have the choice.

The PGA Tour's Tournament Players Clubs have encouraged their golfers to walk by offering motorized pullcarts called PowaKaddys or riding carts that carry four bags, each at about 25 percent less than the normal fee. "Riding is synonymous with golf for most of our players, so it's an uphill battle," says Pete Davison, director of operations for the tour's 10 TPC courses.

Some enterprising courses are now allowing golfers to walk, but they charge a "trail fee" of about \$5 to make up for lost cart revenue. Not a bad compromise.

Gary Schaal, the PGA of America's secretary and owner of several resort courses, is experimenting with an even bolder plan. At three of his facilities, including Deer Track Golf and Country Club in South Carolina's Myrtle Beach area, golfers are allowed to walk without paying any extra fee.

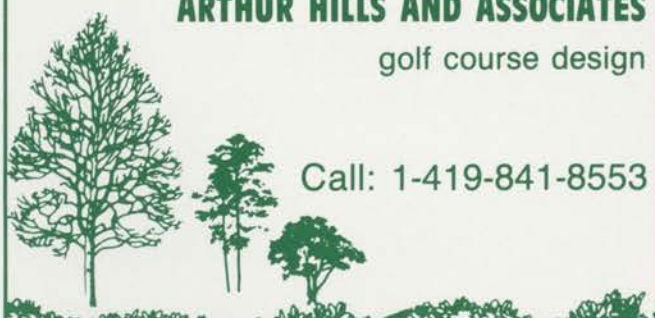
"I'm trying not to let the economic sense of cart revenue override the right to walk," Schaal says. "I believe in the exercise value of walking, but I still have a profit motive. I'm hoping that people who want to walk will come to my courses, and the good will created will mean more rounds played. The response hasn't been overwhelming, but after a year and a half we've generated enough new business to make up for lost cart revenues."

Of course, there's nothing wrong with riding in a cart occasionally. On a hot, lazy day on a slow course, it may be the way to go. But who likes to be told you *have* to ride—or even worse, you have to ride and keep your cart on the path? This silly rule forces you to pay for a cart, walk the distance of 18 holes anyway going from path to path, and invariably wind up with the wrong club in your hand.

When it comes to walking, I'm pro-choice and willing to take my business where it's welcome.

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# GOLF COURSE SUPERINTENDENTS ASSOCIATION OF AMERICA GOVERNMENT RELATIONS BRIEFING

## LEGISLATION

**Waste Disposal Problem: Used Tires**—What do communities do with old, used tires? This question plagues government officials as they propose legislative limits—such as landfill and incineration bans—without offering alternative disposal solutions. Such legislation is driving consumers to turn their backs on the law—almost 60 percent of worn tires are disposed of illegally. Superintendents who generate used tires from maintenance vehicles and golf cars should check into proper disposal methods (retreading, shredding, and recycling) with local officials.

## REGULATIONS

**Caddy Liquid Cadmium Voluntarily Cancelled**—A chemical company has voluntarily requested cancellation of a heavy metal product used on some golf courses. W.A. Cleary Chemical Corporation asked EPA to cancel the registration of Caddy Liquid Cadmium. This turf fungicide, which contains cadmium chloride, has been used in the North Central region of the United States and Canada for treatment of patch diseases and pythium. However, because few golf courses still use the product, this action will have only limited impact on the industry. Cleary and its distributors will cease sales of Caddy in December 1991.

**States Introduce Species Protection Programs**—Superintendents need to keep current with state initiatives for the Endangered Species Protection Program. One of the program's goals is to manage federally registered pesticides in ways that avoid harming sensitive plants and wildlife. Several states—California, Florida, Hawaii, Iowa, New Mexico, North Dakota and South Carolina—have already launched pilot programs. Once a state's plan is approved by the Fish and Wildlife Service, it will be adopted and enforced by the EPA and could become a model for other states.

Canadian superintendents should also review their government's endangered species program. The Canadian Wildlife Service is studying pesticide threats to their endangered species. For further information, contact Pierre Mineau at the Canadian Wildlife Service, 819/997-3045.

## JUDICIAL

**Judge Recommends Permit for Controversial Michigan Development**—An administrative law judge has recommended allowing a developer to fill 3.68 acres of Michigan wetlands in a 266-acre project. The proposed \$10 million development would include an 18-hole golf course and 31 homes. In recommending that the Michigan Natural Resources Commission (who will consider the case this fall) issue the necessary permits, the judge said the proposed course "will not and is not likely to pollute, impair or destroy the water, natural resources or the public trust."

Several environmental groups joined to fight the proposal while the developer reportedly spent \$1 million to counter them. The judge based his ruling in part on a previous agreement between the Michigan Department of Natural Resources and the developer, which included groundwater monitoring requirements.

**Stricter Enforcement For Environmental Violations**—EPA continues to step up its enforcement efforts, adding jail time to its list of penalties for guilty parties. When one defendant was asked about high concentrations of toxic metals in his company's waste-water, he replied, "We're guilty. What are you going to do, put us in jail or something?" Little did he know that he would face three months in prison and two years on probation after pleading guilty to knowingly violating federal water laws.

In addition to prison, violators may face hefty fines. The EPA imposed a \$55,700 fine on a Pennsylvania company for hazard communication violations, while a Texas firm negotiated a \$40,000 settlement for failure to report chemical inventories.

The message: Environmental laws apply to everyone and will be enforced, and it is important to keep abreast of any new legislation.



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by James A. Fizzell, Sr. Ext. Adviser  
Horticulture, U. of I.

Are you confused by all the different bulbs sold at garden centers? More than 4,000 varieties of tulips are available, but to make your selection easier, they are grouped into several classes.

Some common types of tulips and their characteristics include:

**Darwin tulips**, which are late flowering and probably the most favored, growing 22 to 30 inches tall and producing large, deep-cupped, solid-colored flowers on strong stems.

**Parrot tulips**, with blooms featuring twisted petals with featherlike edges, grow 20 to 28 inches tall, and are late flowering.

**Cottage tulips**, long-stemmed varieties with slender buds and long, pointed petals, growing 16 inches to nearly three feet tall, and blooming in May.

**Kaufmanniana tulips**, which are early flowering and are sometimes referred to as "water lily" tulips because their pointed petals open horizontally like those of water lilies, growing only four to eight inches tall, and excellent for rock gardens.

**Fosteriana tulips**, which grow 8 to 20 inches tall and have blossoms as large as four inches. These were crossed with the Darwin tulips to procure the Darwin Hybrids, which grow 22 to 30 inches tall and are the largest and most spectacular of all the tulips.

**Double Late tulips**, sometimes called peony-flowered because of their resemblance to peonies, growing 18 inches to about two feet tall and very attractive.

To most gardeners, spring bulbs mean tulips, crocuses, hyacinths, and daffodils. Species tulips and species crocus are smaller, yet earlier than the hybrid types. There are a number of other "minor bulbs available that provide color in the garden and fill in among rock gardens, borders, under trees, or among shrubs. Most need to be planted in sun or part shade. Plant them in mass for the best show, 3" to 4" apart and 3" to 4" deep.

The following three are very early blooming:

**Galathus or Snowdrops** grow only 4 to 6 inches tall. The white flower is bell-like.

**Eranthis or Winter Aconite**, grow 3-4" tall and produce a deep yellow, buttercup-like flower about 1½ inches wide which grows above a finely frilled collar of bright green.

**Scilla siberica Spring Beauty** are best known for their intense blue, 1" star-shaped flowers on 4-6" stems.

**Muscari or Grape Hyacinth**, have tiny blossoms that appear on spikes in mid-April. Muscari come in blue or white. A showy double blue grapy hyacinth is Blue Spike.

**Pusdikinia** is closely related to Scillas. It flowers later in the spring. Pale blue and white striped flowers grow on a 5-6" plant.



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**Scilla hispanica** or **Wood Hyacinth/Spanish Bluebell** bloom in May. Bell-shaped flowers on 10-15 inch open spikes. Colors include white, pink and blue. They can take deep shade and bloom with the Darwin tulips.

**Alliums** or **flowering onions** vary in height from 9 inches to 5 feet. Alliums bloom in May, June, and July, with

white, yellow, red or pink flowers.

Plant the bulbs 2 to 3" deep and 6 to 15" apart in clumps of 6 to 12 bulbs. The Allium genus is best known for its edible members—onions, garlic, chives and leeks—but it also contains many ornamental species.

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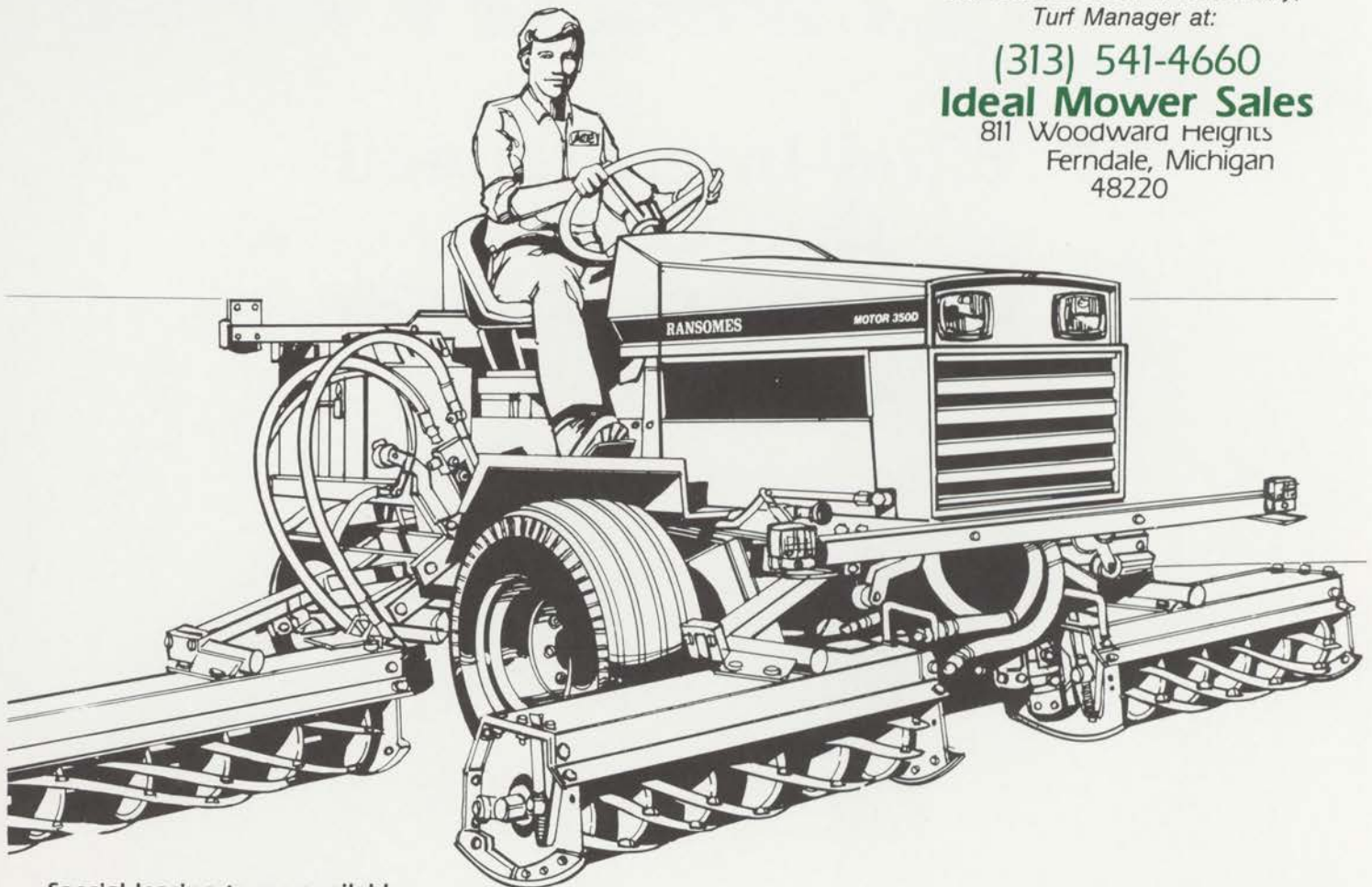
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# OUT OF SIGHT,



# OUT OF MIND?

Hidden beneath your course, an underground storage tank can be easy to forget — until trouble arises. If your course is faced with clean-up costs and liability claims from an accidental leak, are you prepared?

Before you answer, consider this: Few, if any, general liability policies cover the cost of a leak from a UST. What's more, all golf courses with USTs must prove complete financial responsibility for those tanks by October 26, 1991.

If your course has a gap in its existing liability insurance, GCSAA now sponsors a specially developed UST insurance program that meets or exceeds all EPA

standards in covering clean-ups from motor fuel, heating and waste oil leaks. It also covers third-party liability and legal defense costs. Even better, the GCSAA program will work within your courses's existing insurance program through your current agent.

Close the gap in your operation's insurance and meet an important compliance deadline. Act now to get GCSAA-sponsored UST insurance and preserve your peace of mind.

For more information, contact Jardine Insurance Brokers, Merchants Bank Building, Suite 1212, Topeka, Kansas 66612 — Telephone: 800/727-0250.



UST Program underwritten by:  
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## TURFGRASS FOUNDATION CREATES ENDOWMENT

The Michigan Turfgrass Foundation (MTF) has pledged \$1 million to Michigan State University's turf program, creating an endowment to fund faculty and graduate student research.

The gift supports MSU's first university-wide capital campaign, MSU 2000: Access to Opportunity, a five-year effort launched in May 1988.

"This gift continues a longstanding partnership between the university and the state's turf industry," said MSU President John DiBiaggio. "We are extremely grateful to the Michigan Turfgrass Foundation for this gift and for the support of its members over the past 60 years."

The foundation's gift — its largest ever to MSU — will establish the Michigan Turfgrass Research Endowment Fund. Annual income from the new endowment will enable MSU to attract more graduate students.

## CALIBRATION DOs & DON'Ts FOR CHEMICAL APPLICATIONS

**\*\*DO** check sprayers before every application. See that spray patterns are uniform. Operate sprayer (filled with water) over gravel or blacktop and then see how the patterns dry.

**\*\*DO** calibrate each nozzle individually. Also check for worn or split hoses, clogged or cracked strainers and leaky valves.

**\*\*DO** change worn or damaged tips immediately. Check new tips for proper pattern as well.

**\*\*DO** calibrate equipment throughout the season and check each tip's flow rate.

**\*\*DO** check the label to determine recommended application rate.

**\*\*DO** adjust for differences in flow rate when spraying solutions with different densities than water. Solutions, such as 28 percent nitrogen, are heavier than water and would flow at a lower rate through the same nozzle than water.

**\*\*DON'T** think of calibration as a once-a-year task. Nozzles wear during use, so sprayer should be calibrated throughout the season.

**\*\*DON'T** try to calibrate your nozzles by blindly raising or lowering. Applying 10 gallons per acre at 10 psi will double its flow to 20 gpa only if the pressure is raised 4 times to 40 psi.

**\*\*DON'T** assume pressure at the nozzle is the same as the pressure at the gauge. Pressure is lost through friction in the hoses, valves and other parts of the system.

*CREDIT: Chemical Applications, Facts-n-Fillers  
Spring 1990*

## USGA WILL SPEND \$5.4 MILLION ON RESEARCH OVER NEXT THREE YEARS

The United States Golf Association will spend \$5.4 million on research over the next three years, more than double its previous rate, and has directed \$3 million of the total toward evaluating the impact of golf courses on the environment.

In announcing the association's decision to study how fertilizers and pesticides affect the environment, C. Grant Spaeth, the USGA's president, said, "Right now the game is threatened by the lack of knowledge about the environmental impact of pesticides and fertilizers used to maintain golf courses. I can think of nothing more urgent to golf than to answer this environmental question, and to propose responsible solutions."


The work will be done by land grant universities throughout the United States, assuring that studies are relevant to a variety of conditions, such as soils and climate. Additionally, the USGA committee that oversaw turfgrass research has been renamed the Turfgrass and Environmental Research Committee, and has been expanded to include recognized authorities from environmental agencies and organizations.

Spaeth said the USGA will enter into the program with no preconceived position. "We must maintain a position as the honest and independent broker."

These studies will examine questions such as whether fertilizers and pesticides contaminate ground water, and if they do, the duration of their impact.

Studies will also be geared toward the development of alternative and non-chemical methods of pest control, and the influence of golf courses on people and wildlife.

The project will be the responsibility of the Green Section Committee, chaired by Ray Anderson of Chicago. Jim Snow is National Director of the Green Section and Chairman of the Research Committee, and Dr. Mike Kenna is Director of Green Section Research. Dean Knuth is Director of Green Section Administration. The Golf Course Superintendents Association of America plans to cooperate with the USGA on this enterprise.



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## FACE TO FACE COMMUNICATION GETTING ALONG WITH PEOPLE

To get along with others:

- \* **Don't say** everything you think. And watch your body language. It may say more than you intend or want to say.
- \* **Make few promises**, but keep the ones you make if you want to be trusted.
- \* **Have empathy**. Make merry with those who rejoice; mourn with those who suffer.
- \* **Keep an open mind**. If you are the only one coming up with the right answers, something is wrong. Discuss, don't argue.
- \* **Let your merits speak for themselves** but be ready to discuss them when asked. Do not talk about another's weaknesses unless necessary.
- \* **Treat** everybody with importance.

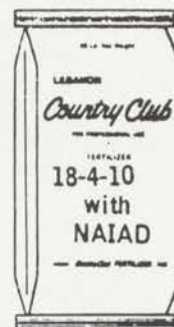
CREDIT: Joseph P. Cangemi  
Western Kentucky University  
writing in *Psychology Magazine*



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## PREVENTION OF RESISTANCE TO DMI FUNGICIDES IN TURF PATHOGENS

The North American Fungicide Resistance Action Committee DMI Working Group is a cooperative effort among producers of these highly active, demethylation-inhibiting (DMI) fungicides to prevent the development of resistant pathogens.

Selection for resistant individuals can, over time, lead to loss of field efficacy.

The following recommendations should help to reduce selection pressure on the fungal population and, therefore, to preserve the excellent activity of these fungicides against diseases of turfgrasses.

\* **Lower risk of resistance development** can be achieved when these materials are applied preventively or early in the disease epidemic.

\* **Use proper equipment** to apply the recommended gallonage to ensure thorough coverage.

\* **Do not use DMI's alone season-long.** Use a tank mix or alternate sprays with a non-DMI fungicide. Alternation with other DMI fungicides will **not** help prevent resistance development.

\* **Consult your local Extension Service** if you are unsure about appropriate alternation or mixing partners.

Your adherence to this anti-resistance strategy benefits all users of these fungicides.

### DMI Fungicides Currently Labelled For Use On Turfgrasses

TRADE NAME	PRODUCER
Banner	Ciba-Geigy
Bayleton	Mobay
Rubigan	Elanco

## RETIRED WORKERS GET THE JOB DONE

Retailers and other service companies are turning more to retired workers to fill front-line jobs dealing with customers. Most companies are delighted with the results and are planning to recruit more older workers. Some benefits cited:

- \* **Older Workers** anticipate customer needs better than younger workers do.
- \* **They provide** positive role models for younger workers.
- \* **They bring** expertise to the job

CREDIT: PR Reporter



"Hm-m-m! A 3- and a 5-iron—think I'll try a 4-iron."

## FRANK AND ERNEST

By Bob Thaves





## REFERENCE LIBRARY

### Recently Released Professional Literature

**Master Planning: The Vital First Steps in Golf Course Construction:** 12-page pamphlet. Free (SASE) from American Society of Golf Course Architects, 2212 N. LaSalle St., Chicago, IL 60601.

**Excel Industries Full Line:** Pocket size brochure describes professional features of rotary mowers. Free from Excel Industries, Box 7000, Hesston, KS 67062; phone 1-800-835-3260.

**Golf Course Professional's Guide to Turfgrass Selection:** Divided into geographical regions. Free from Lofts See Ind., Chimney Rock Rd., Bound Brook, NJ 08805.

**Tree, Turf and Ornamental Pesticide Guide:** Information from the basic manufacturers' labels and the EPA pesticide summaries. \$15.50 from Thomson Publications, P.O. Box 9335, Fresno, CA 93791; phone 209-435-2163, fax 209-435-8319.

**Evolution of the Modern Green:** 24-page brochure by Dr. Michael Hurdzan. \$5 from American Society of Golf Course Architects, 221 N. LaSalle St., Chicago, IL 60601.

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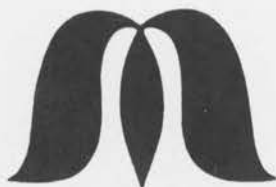


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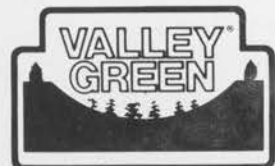
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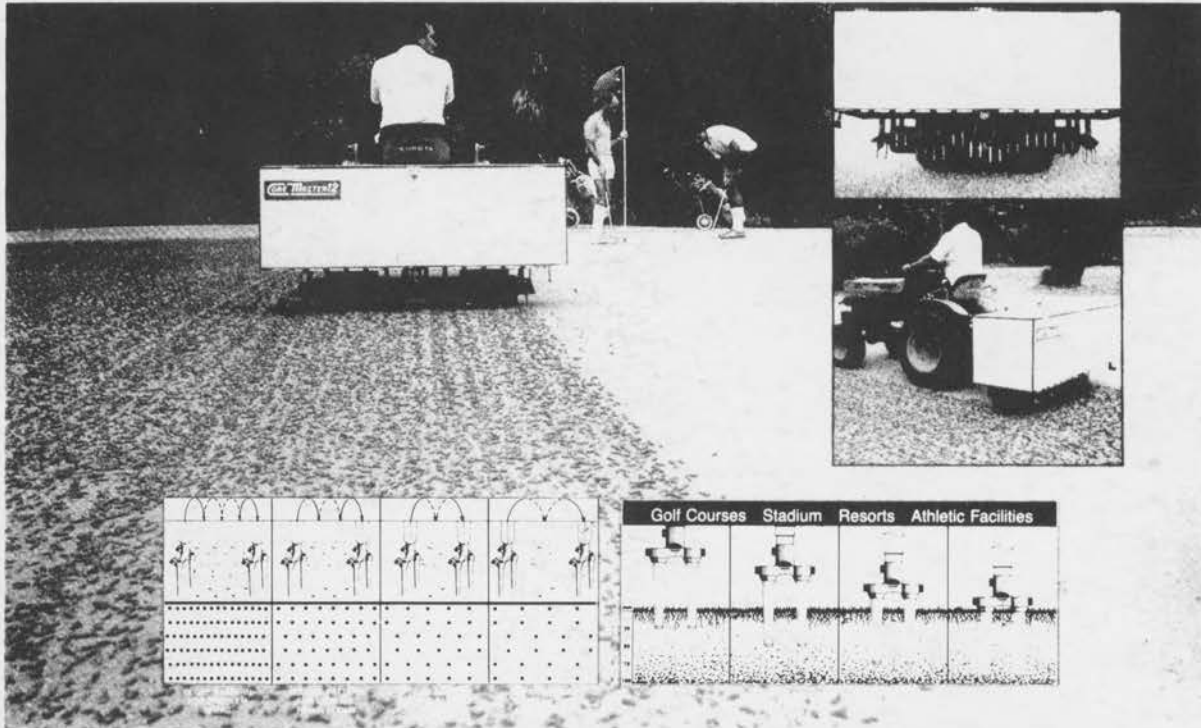
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