

THE BULL SHEET, official publication of the MIDWEST ASSOCIATION OF GOLF COURSE SUPERINTENDENTS.

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PRESIDENT' MESSAGE RECOGNITION OF RETIRED SENIORS

Christopher Columbus discovered America, George Washington is the Father of America, and our own retired Seniors (Golf Course Superintendents) are the developers of the excellent turf conditions that is on our golf courses today in this fine country of our's, the United States of America. The month of July is going to special for two reasons: Everyone will be flying the colors on July 4th expressing how proud they are of the United States of America and on July 13th the Midwest Association will be honoring all of its retired seniors at Sportsman's Golf Course in recognition of their achievement of advancing the professionalism of the Turfgrass Industry.

Think back 30, 40, 50 years and further to the time when there was very little power equipment and turf pesticides were few if any. This did not hamper the superintendents because these men had motivation and were enthusiastic about growing and developing good turfgrass. At our July meeting educate yourself a little bit. Sit down with some of the retired seniors and find out what it was really like to maintain a golf course. The M.A.G.C.S. salutes you seniors and would be honored with your presence on this special day, July 13th. Carts will be provided for your comfort and a lavish dinner to tantalize your taste buds. May all of you have many years of happiness and prosperity.

Len Berg

TEN COMMANDMENTS OF GOLF

- I. Thou shalt complain about how badly thou hast been playing before teeing off on the first hole.
- II. Thou shalt always stand close enough to thine opponent so that thy shadow can be seen.
- III. Thou shalt always remind thine opponent of hazards such as water, sand or out-of-bounds.
- IV. Thou shalt keep count of thine opponent's strokes, reminding him or her of any overlooked.
- V. Thou shalt determine when "Winter rules" are in effect, at thine own option.
- VI. Thou shalt determine when a mulligan is in order.
- VII. Thou shalt declare all thine own second putts to have been "a gimme".
- VIII. Thou shalt offer advice to thine opponent after every errant shot.
- IX. Thou shalt express sympathy for thine opponent whenever his or her putt rims the hole.
- X. Thou shalt conclude thy round by advising thine opponent that "everybody has one bad round".

BE PREPARED FOR CHEWING INSECTS

Chewing insects will soon be ravaging your gardens unless you use adequate control measures, warns James A. Fizzell, Horticulturist for the University of Illinois in Cook County.

There are two kinds of chewing insects. The larva or worm stage of beetles, moths or butterflies; and adult beetles. They all chew holes in leaves, flowers, fruits or stems. Worms may be one-fourth to four inches long, with varying colors and design markings. If you know what insects can attack a certain plant, you should be able to identify the problem rather quickly.

The IMPORTED CABBAGE WORM and the VARIEGATED CUTWORM are destructive pests of broccoli, Brussel sprouts, cabbage, cauliflower, and collards, but may also attack other cabbage family vegetables. The variegated cutworm may also attack other vegetables, such as tomato.

The imported cabbage worm is a fuzzy green caterpillar that will eat entire leaves, leaving just the leaf midrib.

The TOBACCO HORNWORM is a voracious feeder on tomato plants, warns Fizzell. It eats entire leaves, and shoots and even large sections of green fruit. It is a fierce-looking, hairless caterpillar that can get as thick as your pinky finger and up to four inches long. It is green with white diagonal slashes along its side and a formidable looking red spine on its rear end.

For the nonqueasy, the hornworm can be picked off by hand (though you might have to use both hands and feet to do it).

The variegated cutworm is a thick, fleshy caterpillar, that chews off stems at the soil line.

The cutworm is a night feeder that burrows into the soil just below the plant it is eating. Spray plants in the evening to kill this insect, or put cardboard collars around plants so the cutworms can't get to them.

CHONT AND KREH RECEIVE TUCO TURF SCHOLARSHIPS

Stephen A. Chont and Lawrence D. Kreh, seniors in Turf Management at Michigan State University, have each received a TUCO Turf Scholarship for 1981.

The awards were recently presented at the 51st Annual Michigan Turfgrass Conference by Russ Tiller, TUCO representative.

The annual scholarships are sponsored by TUCO, Division of The Upjohn Company, to assist turfgrass students in meeting their educational needs. The scholarships are awarded for scholastic ability, personal integrity and professed career interest in turfgrass management.

Chont is the son of Mrs. Lillian Chont of New Boston, Michigan, and Kreh is the son of Mr. James Kreh of Caseville, Michigan, and Mrs. Ann Rosin of Bay City, Michigan.

BINNS AND KASYJANSKI RECEIVE TUCO TURF SCHOLARSHIPS

Nathaniel W. Binns and Jan Paul Kasyjanski, seniors in Turf Management at the University of Massachusetts-Amherst, have each received a TUCO Turf Scholarship for 1981.

The annual scholarships are sponsored by TUCO, Division of The Upjohn Company, to assist turfgrass students in meeting their educational needs. The scholarships are awarded for scholastic ability, personal integrity and professed career interest in turfgrass management.

Binns is the son of Mrs. Ralph H. Binns, III, of Halifax, Massachusetts, and Kasyjanski is the son of Mr. and Mrs. Theodore J. Kasyjanski of Glen Cove, New York.

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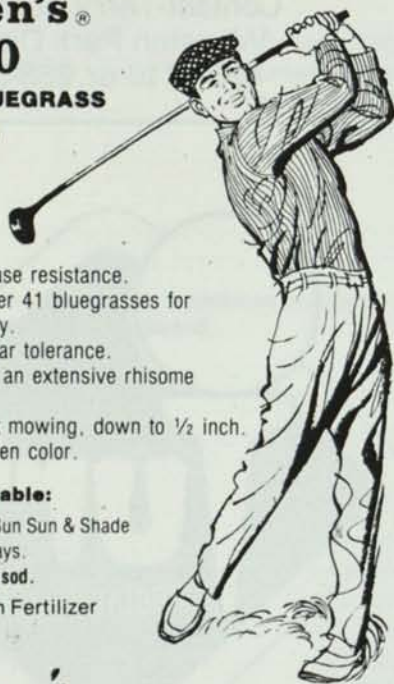
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SCALE DOWN YOUR SCALE PROBLEMS

Have you noticed any small, rounded bumps that seems attached to the branches of your plants? According to Lori Wesley, Summer Extension Horticulturist in Cook County, these bumps may be one of the many kinds of scale insects.

Scales are small, soft bodied insects that form a hard, protective coat around themselves as they feed (thus the name scale).

These pests feed on the sap from branches and leaves of many species of plants. A heavy infestation may cause moisture loss. This can result in dieback or twigs and branches and premature leaf drop. During dry weather, severe moisture stress can occur and a heavy infestation of scales can kill an entire tree.

In addition to causing moisture loss, scales secrete a sticky fluid called honeydew. This honeydew can drip off of your plants and accumulate on your cars, sidewalks, and patios. Sooty mold, a black fungus lives on the honeydew and produces black, sticky areas wherever the honeydew falls in your yard.

You need to understand the life cycle of the scales so you may be effective in controlling them. In the spring or summer, young scales, or crawlers, emerge from the eggs. These crawlers move to the leaves or stems of the plants to feed. In late summer the scales move to the stems to overwinter. The scales resume development the following spring and undergo a period of rapid growth. The female scales lay eggs beneath the hard, protective covering and die. Later the eggs hatch and the cycle repeats itself.

Scale populations are normally regulated by several natural parasites and predators. If a severe outbreak occurs you should consider other control means. It is very important that your control method is properly timed. In the early spring, a dormant oil spray can be used. This spray will smother the insects and allow the natural predators to control any scales that do survive. If it is necessary to use chemical means for control, timing is crucial. Spraying must be delayed until the crawlers hatch, and before they form their protective coverings. One way to determine the application date if you can't identify the species of scale is to gently turn over the scale with a pin and look for emerging crawlers. If there are crawlers, it is time for you to spray. Two insecticide suggestions are diazinon or malathion. Follow the mixing methods and application rates on the label.

James A. Fizzell, Senior Ext. Adviser, Hort.
University of Illinois at Urbana-Champaign

Dear Ray,
Always enjoy reading your interesting monthly **Bull Sheet** and your June issue was no exception.

I especially enjoyed James R. Watson's article on **Research Review of Sand**. Want to thank you, too, for using the NGF item.

Trust all is going well with you. Hope our paths cross one day soon.

Harry C. Eckhoff, Dir., Information Serv.
National Golf Foundation

Editor's note - It is the pleasure of the M.A.G.C.S. to send you the Bull Sheet.



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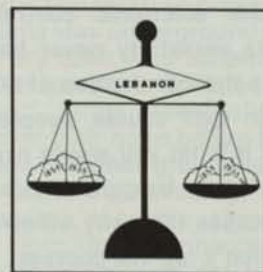
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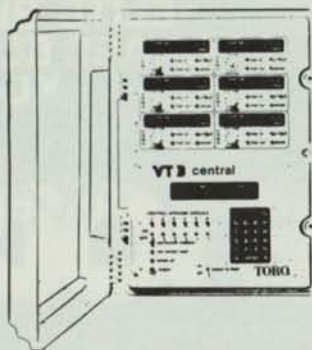
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IF THE FROG CROAKS ...

Through word of mouth and research I found the sky could be used as a weather informer. You've heard the saying, "Red sky in the morning, sailors take warning". This means that high pressure, dusty air has been pushed eastward of you, possibly letting in more humid air. Rain is especially probably within a couple of days after a red morning if you see high, wispy stratus clouds thickening the day after a pink-hued sunrise.

A gray sunset and pink sunrise put two rainy signals in sequence: "Evening gray and morning red, shower rain upon your head." A gray evening sky following a cloudy day offers strong evidence of inbound rain. The sky is loaded with humidity and droplets looking for a place to condense.

Another saying dealing with sailors and weather is "Red sky at night, sailors delight". This indicates fair, high pressure to the west. Dry dust particles suspended in the air give the air a pinkish glow. However, a vivid crimson in the sunset sky indicates high humidity to the west and suggests rain. Most weather systems in our area move in from west to east. Ice crystals in the high atmosphere west of you act like a prism, showing you the red spectrum from your point of view. One of the surest signs of dry air is a glimpse of the green spectrum just as the sun's rim dips below the horizon.

For those who are not into watching sunsets and sunrises, there is another weather indicator above you - the clouds. High clouds are a sign of light humidity in the air and a high "dewpoint". A high cloud ceiling indicates that air has to rise a long way and cool considerably before reaching the dewpoint and condensing. A lowering cloud ceiling indicates rain. You'll see the ceiling drop, for instance, when a warm front advances over you.

Cold front clouds foretell a quick, violent storm. Your first warning is puffy cumulus clouds that grow thicker and more turbulent. Then, usually in the west, you'll see a mass of dark clouds, often capped by an "anvil" tip pointed your way. The wall of clouds boils, crackles with lightning and pushes a lower, flat-bottomed "line squall" cloud ahead of it. As you face such a system invading you from the west, the surface wind will often sweep out of the south. Clouds overhead may be moving a different direction than the surface winds. Then the wall of thunderclouds hits, usually moving 30 mph or faster. The wind veers toward the north and by that time you've probably got the pedal to the metal on the Cushman and heading for the shop. Cold front clouds aren't very subtle, but they vigorously scrub the heavens and bring you clear cooler air in their wake.

The first clouds showing up on the other edge of an advancing warm front are the cirrus, up above 18,000 ft. where ice crystals form. At night, cirrus-"mares' tails" - give the moon a soft, out-of-focus glow, then patches of lower clouds move in. You won't actually see a sloping wedge with a warm front because the slope is gradual, about 1 in 200. The leading edge of a warm front may be 200 miles past you before the ceiling lowers from 18,000 ft. down to 8,000 ft. These lower clouds are altocumulus. Surface turbulence and increasing humidity combine to make them white and fluffy at first, then gradually thicker and darker. Now you can step up the odds to about 30% for rain within 24 hours. The satellite photos on TV at this stage of a warm front's advance will usually show a heavy overcast not far behind the gathering altocumulus. These are stratus, a laden, dull overcast that seems to absorb the altocumulus. Gradually humidity increases and a slow drizzle begins as the dragging tail of the

warm front starts to pass. All the signs of warm front activity can tell you 24 to 48 hours ahead that a long, slow fertilizer soaking rain is likely.

If you're not really into looking at clouds, there are other methods of weather forecasting. One of these are barnyard animals. At the time of this writing I have been unable to convince my green committee chairman the need of a herd of cattle, hogs, sheep, horses or goats. If you have a more liberal chairman, here are some animal characteristics to look for in predicting weather:

CATTLE: A sharp drop in atmospheric pressure makes cattle more excitable and aggressive. As a storm nears, a cow herd on pasture or fairways will bunch up and graze earnestly; calves will stick closer to their mothers. Range, or rough, cattle tend to graze downhill toward valleys, often with their backs to the wind. In a long warm-front drizzle, cattle continue grazing.

HOGS: Traditionally, hogs have been able to "see the wind". Pastured hogs trot anxiously along fence lines as a low intensifies. Some start looking for shelter, root around, don't replace divots or carry wisps of grass as an instinctive throwback to the nestbuilding of wild ancestors. Confined hogs may become noisier or more frustrated, fighting more often.

BIRDS: Birds tend to flock together and roost or fly low to the ground before an advancing storm. Robins take shelter in trees and bushes. Humid, low-pressure air is less dense and harder to fly in. On fair, high-pressure days, birds fly higher. Crows which especially hate to fly in bad weather, perch when a storm approaches. Folk wisdom listens to crows "calling for rain". Sparrows are likely to assemble on electrical wires and chatter about an incoming storm. If it's a warm front with leaden skies, this will happen up to a day or more before rain arrives.

INSECTS: Crickets are nature's thermometer. Count the number of times a black field cricket chirps in 14 seconds. Then add 40 to that count. You will have a total within two or three degrees of your thermometer reading. If not, your thermometer or your counting is off, not the cricket. Remember, the cricket may be in a cool corner while your thermometer is up where it's warmer. When the temperature drops to the mid-50's, bees get mean, ants stay underground and flies gang up and struggle to pry open your screen door. Flies also get either more desperate or irritated before a storm. They get "sticky", biting ravenously. Ants reinforce their hills and cover their holes before a storm. A line of ants carrying eggs to higher ground is a sure sign of a gully-washing, sand-trap-eroding, toad-strangling storm. Night crawlers, of course, show up after a rain, but they're also more likely to emerge on nights before a rain. Last, but not least, we get to the woolly bear caterpillar. The woolly bear caterpillar is an inch or two long, including fuzz at both ends. There's some evidence that the wider his brown band in the middle, the milder the winter. If the black on both ends crowds the band down to less than a third of his body length by autumn, expect a chilly winter.

All of these weather forecasters are somewhat valid and truthful. Clouds may be more valid than sparrows but I wouldn't sit under an electrical line before a storm. There is no better way to predict weather than to watch professional meteorologists. On the other hand, if you hear the frog croak, bring your umbrella.

Credit - Minnesota Hole Notes
Jim Anderson, Supt.
Lost Spur Country Club

Dear Old Ray,

Damn if you're not a versatile genius. In addition to making grass grow and putting up with members you do a grand job of editing the Midwest **Bull Sheet**, which over the years I have found more aptly named than the New York Times, Washington Post, Los Angeles Times -Mirror and the Chicago Tribune and the hallowed Chicago Sun-Times which has been an admirable contributor to my old age security.

We seem to have bright minds coming up in the neighborhood where we joined in rocking the cradle of liberty for greenkeepers.

That feature you printed on "Extras on the Course - A Nice Touch" by Peter Leuzinger of the St. Charles Country Club indicates the imagination amounting to genius of an artist who is looking ahead. Here is a guy with the sensitivity, the perception and the savvy of a great master in the exceedingly fine and important art of golf course making and management.

Here is one of our kind who sees in the golf course the protection, the escape and the therapy of the golf course in saving the troubled human from becoming stir-crazy from the imprisonment of concrete, steel, glass and asphalt.

I am in an area about 20 miles wide and 90 miles long where U.S. and Canadian capital to the extent of half a billion dollars is being spent in golf-real estate developments. As an old man who has been around a lot I have been engaged in conversation with people who have plenty of fiscal action in this game. In plenty of places, Ray, I have discussed in previews exactly what your writer Leuzinger refers to as "The Extras on the Course". One of them is bound to be a modernization of the Donald Ross innovation of the lesson-practice tee which too long and in too private, daily fee, public and resort courses has been sadly neglected although it is the American invention which revolutionized the game and gave it tremendous impetus by replacing the old method of the playing lesson.

I have sent Al Radko of the Green Section some observations on the potentials of the neglected Ross tee which by supplying the need and function of a convenient golfing area that will be pleasantly useful to those who haven't time for 9 or 18 holes and may not have the land available still will make golf available to them and provide what golf needs in these changing times; something of a golf garden or a golf park that will blend happily the charm, convenience, exercise and delights of the old time beer garden and the ever new possibilities and fascination of golf.

If I have to spell this out for a golf architect I am afraid the man (or woman) who does not see what is happening to golfers and golf in designing courses will give the clients an obsolete and costly job of just another golf course in ten years.

In a way the opportunities afforded by modern application of the Ross tee in supplying An Extra on the Course may be somewhat in the class of the Green Section's own marvelous public service. You and I can remember that before the Green Section grass was regarded mainly as food for beasts instead of something for the health, happiness and esthetics of humans.

I think the USGA is doing a job of updating itself in a change of life much better than organizations in other sports are doing and is recognizing what wonders the Green Section hath wrought and perhaps even trying to coyly acquaint the public with this service.

But I do know how right your man is in his word to his colleagues, the landsmen Joe and I had. He deserves gratitude for his brain-stirring suggestion of Extras on

the Course and every golfer in the Chicago and Midwest District will delight more in golf because of this suggestion in the **Bull Sheet**.

"The Nice Touch" ... Ray, you know I have played golf on many courses in many countries and I have seen "the nice touch" of some greenkeeper or superintendent or whatever he was called speak the universal language of beauty and friendliness. In Japan, France, and Italy there have been Extras on the Course that charmed me and some guys with whom I didn't share a language and I felt the companionship of what some man of the course had done to say something extra in the beauty of golf. You know what an ordinary golfer I am and certainly no authority in golf architecture (a field in which damn near every other golfer is) but when I have been asked what is the best golf hole I ever saw I say it is one on a Madison, WI course where there were lilacs in bloom around a tee. It was a golf hole with beauty of fun and love in bloom and music by Strauss, Lehar, Friml and Romberg. I think it was a par 4 hole on a hill. The course was Maple Bluff, I think.

But who cares? I am not one of the 350 journeymen, boys and wandering girls who works at playing golf courses for which they don't pay maintenance expenses so really I don't suppose I am entitled to an Extras on the Golf Course. But as one of the 17 million Americans who pay to play golf and delight in enjoying that "Extra" today and tomorrow I rejoice that in these days of agonizing budgets there are men in golf who want to give golfers "Extras on the Course".

I laughed when I saw your man was at St. Charles. Many times I played there, loved the course and with those playmates in the lockerroom there was always the part of golf I played with enthusiasm and proficiency. The next morning I enjoyed the Extras. They were aspirin tablets. Ray, think of what hangovers I have survived. Blessings upon you and yours, always.

Herb Graffis

GCSAA SELECTS SAN FRANCISCO FOR 1985 CONVENTION SITE

San Francisco's soon to be completed George R. Moscone Convention Center will be the site of the Golf Course Superintendents Association of America's 56th International Turfgrass Conference and Show Jan. 30-Feb. 5, 1985, GCSAA President Michael R. Bavier, CGCS, announced today.

"Besides its excellent convention facilities, San Francisco offers a wide variety of activities for the entire family. We're confident that San Francisco will be one of our most popular conference destinations," Bavier said.

Since its beginning in 1927, GCSAA's Turfgrass Trade Show has grown so large that relatively few convention centers in the U.S. can house its more than 200 annual exhibitors, Bavier noted. The Moscone Convention Center, scheduled for completion this fall, is the largest column-free exhibit hall in the United States, with 275,000 square feet of unobstructed exhibit space. It is unique in that its main facilities, including the exhibit hall and the 30,000 square foot ballroom, are 30 feet underground.

The San Francisco conference schedule also includes a golf tournament, seminars, education sessions and the association's annual membership meeting. It will mark the association's first return to the West Coast since its 1981 conference in Anaheim, which had a record week's attendance of 17,946.



MIDWEST BREEZES

There is no Midwest Breezes in this July issue of the **Bull Sheet**. The reason for this is evidently the M.A.G.C.S. members are not aware that the **Bull Sheet** publication belongs to their association and it is their responsibility to furnish the editor with news either local or of educational value. A large percentage of our members are not contributing. I am sure there are many **Bull Sheet** readers that would like to read of the fortunate things that happened at your club or at your home, as well as those not so fortunate. Give it a try and see if we can't change the Breezes to a wind.

The editor recently received a letter and a check from Dr. Fred Grau for the amount of \$50.00 to help cover expense for his copy of the **Bull Sheet**. This certainly was very generous of him and we appreciate it. This editor has known Dr. Grau for many, many years and I am well aware of all the good things he has done for the golf course Supts. and the game of golf from tee to green. My better judgment was to return the check to Dr. Grau with a request that it be sent to the **Musser Foundation** as a contribution to the **Paul E. Weiss Sr. Memorial Fund**. It would be great if all of you who read this would make a contribution to the **Musser Foundation** and mail it to **Dr. Fred Grau, P. O. Box AA, College Park, MD 20740**.

Dear Ray,

My June 1981 issue of **The Bull Sheet** just arrived. Your decision to print my little paper on "Leadership" is very much appreciated. After re-reading it I am glad that I wrote it. I hope that the challenge will be noted by those who direct the destinies of each entity. I will always work toward the goal of UNIFICATION. Several states have developed successful turfgrass councils which embrace ALL turfgrass interests. To achieve a similar coalition on the national scene will take the kind of leadership which the turfgrass industry has not yet evolved. But - there is hope.

I've been receiving your fine publication for a long time, gratis. I think that it is time that I made at least partial restitution. Accordingly, I enclose my personal check in the amount of \$50 which I hope may help.

Fred V. Grau, President
The Musser International Turfgrass Fdn.

Editor's Note - It is the pleasure of the Bull Sheet to send you the publication.

Contributions to the Paul E. Weiss, Sr. Memorial Fund in the H.B. Musser Turfgrass Fellowship, Inc. from March 19 thru May 12, 1981.

David K. Aldrich	\$15
Gordon A. Wessner	10
George Readler	15
Wm. E. Lyons, Sr.	25
Fred V. Grau, Sr.	50
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James Knoll Gardner	15
Total of 5/12/81	\$310

To each contributor we express appreciation for honoring the memory of our friend Paul in a way that will live forever. The income from the Paul E. Weiss Sr. Memorial Fund perpetually will assist talented graduate students earn their advanced degrees. "Paul would like that", Verna said.

PLANNING AND BUILDING THE GOLF COURSE

The National Golf Foundation's 1981 edition of **Planning and Building the Golf Course** is now available for distribution.

While the title is the same as former editions, its content (50 pages) is 100 percent new material developed for NGF by Killian and Nugent, Inc., golf course architectural firm located in Long Grove, IL.

Planning and Building the Golf Course is an illustrated guide for the design and construction of regulation nine-and 18-hole golf courses. Included in its 13 chapters are sections on:

Why A Golf Course: cites the numerous advantages courses provide a community.

Who Builds Golf Courses: municipalities, private clubs, daily fee course owners, housing developers, resorts, corporations and municipal lessees.

Variations in Golf Course Design: regulation, executive and par-3 courses.

Planning Criteria for Golf Courses: safety factors, related facilities, practice facilities and additional recreational facilities.

Golf Course Planning Process: site selection, beginning of design, site analysis, the routing plan, course's "character" and general principles of golf hole design.

Details of Design: greens, tees, hazards, trap design considerations, construction drawings.

The Irrigation System: hydraulic and electric, water rights, ponds and water holes, wells, pumps, water requirements.

Golf Course Construction: surveying, clearing, grading, drainage, greens and tees construction, bunkers, seeding, sodding and landscaping.

Since golf course development, especially in its architectural aspects, is a veritable science, the National Golf Foundation has always urged all golf course planning groups to put themselves in the hands of a competent, qualified golf course architect.

This new book (cost \$7.95) should create a better understanding among course developers of what is involved in building a new golf facility.

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