

What's The Best Color For Flags and Sticks?

By Chad Eberhardt

EDITOR'S NOTE: From time to time subjects come up regarding golf course management that do not fit into a neat category. Most often these subjects relate to the art of course management rather than one of the sciences associated with it.

These subjects almost always are interesting, however. They merit discussion, comment and expressions of opinion and preference.

It is logical, therefore, to create a feature to focus on such subjects. Beginning with this issue and continuing on an "as needed" basis, you will be seeing "THE SPORTING GREEN" feature.

This feature will be distinctive not only for its interesting content but also for its color. You'll never mistake its singular green!

Be thinking of some topics you'd like explored in "THE SPORTING GREEN"; the choices are as broad as the sporting fields we manage.

Chad Eberhardt wrote this inaugural piece. Chad is the assistant golf course superintendent at Blackhawk Country Club in Madison. He is a 1990 graduate of the Turf Management program at the University of Wisconsin-Madison. He was the assistant at Bull's Eye C.C. Last season.

Special thanks to Sherri Milani and Pam Hoffman for their design of the logo for "THE SPORTING GREEN." —MSM

At the first meeting of Blackhawk Country Club's 1991 Green Committee, a complaint was brought up about our yellow flags and flagsticks. It was explained to us that the solid yellow is difficult to see for the members who are "color blind." I would not classify the complaint as major, but it certainly was interesting.

I thought, "How could we be discriminating against our 'color blind' members for so many years?" Here in Madison, one never knows what group will be the next to protest for equal rights on the steps of our capitol. So, I was bound and determined to head off any formal coming out of the Blackhawk Color Blind Linkster Association. I set out to seek the advice of every expert I could to find the ultimate flag/flagstick color.

My first call went out to the United States Golf Association's Public Rela-

Department. Craig Smith professed that in the 1960's, the USGA conducted a study that showed yellow to be the most visible color on a golf course. Therefore, yellow has been the color seen at all PGA Tour events except one where a basket proved to be stronger than a highly conformed to USGA recommendation!

John Kelly, Director of Marketing for Standard Golf, was expert number two. When I asked Mr. Kelly what he would suggest as "the" color, he suggested we let the statistics do the talking. The most popular flagsticks are solid yellow. Kelly added that yellow with a 30" solid black bottom is gaining in popularity since showing up on television at various Senior Tour sites.

The LPGA uses solid white flags and flagsticks. The most popular flag sold has been plain yellow. Red with white has been a distant second choice.

From the statistics, I deduced yellow must be the best. But, Kelly added, flag/flagstick color selection should be based on the natural background setting. For instance, yellow may not show up as well as red or black in the desert.

I asked Mr. Kelly what he would suggest specifically for Wisconsin golf courses. He said without a doubt, "yellow or white." Kelly did point out, however, that white can easily get lost on days when billowy white clouds are in the background.

It was becoming quite evident that yellow was going to be the experts' first choice. But, yellow is also the color that may lead to the next march up State Street. Who could I turn to next?

I figured an optometrist could help me understand what our "color blind" members are, or rather, are not seeing. Dr. Michael Shapiro, M.D., explained that color blindness is the often incorrectly used term for the common condition of being unable to distinguish between certain colors.

Literal color blindness, in which everything is seen in shades of gray, is extremely rare. The most common form of color vision defect is the inability

to distinguish in dim light between reds and greens.

I asked Dr. Shapiro for his advice on an appropriate flag/flagstick color for all the color blind golfers at Blackhawk C.C. I had to practically bend over backwards to convince Dr. Shapiro that color blindness is affecting so many players.

He said if the players really are having trouble with color differentiation, yellow would dramatically *improve* their condition. I told Dr. Shapiro that we have used yellow at Blackhawk C.C. for many years. He responded by saying that color blindness is so uncommon that it cannot reasonably be used as an excuse to change to a new flag/flagstick color.

I went to the University of Wisconsin-Art Department in search of one more expert. I found Ms. Marjorie Kreilich, Professor of Color and Color Theory. I presented her with the opportunity to be flag/flagstick color designer for a new golf course development.

She apologized for not knowing anything about golf. I assured her that would not be a problem. Ms. Kreilich wanted some information pertaining to time of day and background settings. She was set to present me with her plan. At dawn and at dusk, we will put a yellow flag/flagstick out since the color yellow has a very high light value. At high noon, a red flag/flagstick will be used since it offers the most contrast of hues using a medium value. Yeah Right!

All I was seeking was a simple solution to a once simple problem. Ms. Kreilich sensed my frustration and asked me what color I would suggest.

I leaned back in my chair and looked around the room. All of a sudden, I caught a glimpse of my running shoes. There on the end of my feet was the ultimate color sticking out like a sore thumb. "Neon Yellow!" I exclaimed.

Ms. Kreilich concurred that neon yellow's very high brilliance is easily distinguishable from everything and everyone.

I called John Kelly at Standard to find out if Standard offered a neon flag/flagstick. He said no one has ever asked for that color. And besides, neon is not colorfast so it would fade to white rather quickly.

Oh, well, mission accomplished. Now all that is left to do is wonder if we will be seeing neon yellow flags and flagsticks on our golf courses in the near future!

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Thoughts on the USGA Golf Green Specifications Controversy

By Dr. Wayne R. Kussow
Department of Soil Science
University of Wisconsin-Madison

“USGA specs under fire, face change” read the byline of a recent article in the *Golf Course News* magazine. This has to be very disconcerting to anyone about to construct or reconstruct putting greens according to USGA specifications. My advice to anyone in this position is to proceed as planned and follow the specs to a “T”. As has been pointed out many times before, the failure rate of such greens under proper management is literally zero.

What is the USGA greens controversy? It’s a collection of concerns and frustrations seemingly without any central focus. In the construction of golf greens the main issues are the necessity of the coarse sand (“choker”) layer, the inclusion or not of some soil in the rootzone mix to increase water and nutrient retention, and poor definition of what constitutes good organic amendment.

Testing of construction materials is another concern. Lab measurements have not been concisely related to field properties and are therefore suspect in the minds of some people. There are concerns about the consistency of test results from one lab to another and frustrations over the time it takes to get back the lab results.

Finally, there are doubts about the universal nature of the USGA specs—whether or not the specs should be regionalized to factor in differences in climate, species of grasses grown, etc.

In my opinion, if there is a bottom line in the USGA spec controversy it is construction cost—not just the costs of materials and labor, but also the time consumed in locating and testing rootzone materials and mixes. Construction of USGA spec greens all too often turns into a very frustrating experience. The feeling of many people is that there have to be some alternatives.

What I find most disturbing about

this controversy is the attitude that everything is either black or white; that there are no shades of gray. This creates a stagnant situation in which battle lines are drawn and across which no meaningful dialog can occur. The end result is maintenance of status quo and stifling of the testing of new ideas and approaches that have potential for creating “gray zone greens specs”. These specifications could have different costs associated with them from which architects, golf clubs and superintendents could choose according to budgetary limitations, anticipated golf course use intensity and membership expectations.

Perhaps the most insidious side of the black and white attitude is the mentality that unless putting greens meet USGA specs in all respects the greens are doomed to failure and that unless a golf course has USGA spec greens it is a second rate course.

My observations and logic tell me that there are many greens in the gray zone (i.e., they do not meet all of the USGA specs) that are admirably meeting golfer expectations and are not in a state of decline. Let us also recognize that USGA spec greens are not ideal in all respects. Without some native soil in them nutrient retention capacities are so low that compensatory action in the form of frequent applications of low fertilizer rates become a necessity. This is fine for the well-heeled golf courses, but what about those with limited budgets?

It is also a well established fact that golf scores skyrocket if the surface of USGA spec greens are allowed to dry out. The answer to this problem is to keep the surface moist and soft and, in the process, create near ideal environments for algae and moss growth.

I firmly believe that it is in the best interests of the USGA and golf per se for the Green Section staff to take the

lead in seeking out alternative, “gray zone” specs for putting green construction. No one is in a better position to do so. I envision a two-pronged complementary approach involving the Green Section agronomists and turf researchers. I’d like to see the USGA Green Section staff sit down and devise a quality rating system for putting greens. The next step would be for their agronomists to take the time on their visits to golf courses to rate greens and document key greens in terms of factors such as quality of construction materials, mode of construction as determined from full profile samples, green age and cultural practices. In this way the Green Section could begin to define suitable alternatives to current specs as far as greens construction is concerned.

The Green Section staff also needs to sit down with a group of researchers and meticulously design a field experiment that systematically studies the effects of deviations from the USGA specs on putting green quality. The research could have other objectives as well. One could be to do what should have been done long ago—relate factors such as lab measures of percolation rates to field rates. Through careful site selection the suggested need to regionalize construction specifications could be addressed as well.

Finally, I believe the Green Section needs to play a role in the reevaluation of testing methods for greens construction materials, in standardization of test methods and in devising a process whereby labs are monitored for consistency in their test results. To say that current tests are the best available is akin to saying that over the past 30 years science has been static. It’s time to turn some people loose on seeking out methods that can yield more reproducible results in shorter periods of time.



It's Time To Communicate

By Rob Schultz

Dear Hack:

I read the May/June GRASS ROOTS with interest, especially your stupid little insinuation that golf courses would be better off without golf pros.

Who babysat you from age 12 to 18 every summer day when you rode your bike out to the golf course to learn the game? Who got you your first real job? Who taught you how to putt, which is the only thing you can do right on a golf course?

Do the names Jock McClaren and Lou Warobick ring a bell? They were wonderful golf pros. I should ring your neck. If you're going to insinuate anything, how about if you say the world would be better off without hack writers like yourself.

Love, Mother

Dear Mom:

Lighten up. IT WAS A JOKE.

Love, Hack

God forbid if I upset any golf professionals because what I admire most about them is their levity. Part of it is salesmanship, of course, but most pull it off so well that you can never tell if it's not sincere. So a frowning golf pro is like Princess Diana with a mustache.

Unfortunately, some golf professionals have a blind spot when it comes to golf course superintendents. Some talk about how they want to work together. That's fine. But in the conversations I've had with some superintendents they get a feeling that the pros at their clubs want to improve relations with them, as long as they benefit.

You've got to hand it to the pros. They have perfected their profession to the point where jealous clubs have begun making life difficult for them by cutting into their bottom lines. You can't blame them for getting a little testy when someone even jokingly implies that they aren't as valuable as somebody else.

Nevertheless, as a group, the pros are much better off and better organized than the superintendents. In fact, the superintendents could learn a thing

or two from them about how they are perceived by the general public.

To John Q. Golfer, the golf pro stands up in the pro shop and looks like a white knight. He's the guy who can cure that slice. So he's indispensable to John Q. Golfer.

The golf course superintendent stands up in his shed and still looks like Ralph Kramden. Or, worse yet, John Q. Golfer doesn't even know the course has a superintendent. I'll be willing to bet any money that a well-manicured club's pro gets 50 times more compliments about course conditions than its superintendent. That's a travesty and it breeds bad feelings.

If the pros and superintendents really want to work together, they need to communicate, not just among themselves, but with the members and the public golfers about their roles.

The superintendent has to get the word out concerning who is responsible for how the course appears—good or bad. (Note: It works both ways. I know at least one course in this state where the pro takes all the guff for bad conditions while the superintendent hides in the shadows.) The superintendent has to prove that he's just as indispensable, or even more indispensable, than the pro.

At too many clubs, I see signs at entrances with the names of the club manager, the pro and even the assistant pros. But there's no mention of the superintendent. That must change.

At most clubs, I see signs listing do's and don'ts for golfers such as replacing divots and fixing ball marks in greens. But that's it. Each superintendent should put together a pamphlet—a rule book for course conditions—that members must buy IN THE PRO SHOP. And the money should go to the superintendent or bolster the maintenance budget.

Pros give lessons how to improve the swing. How about superintendents giving lessons on how to improve course conditions? Throw in a bonus lesson on how golfers can improve their yards and you're sure to have a large group show up.

Finally, the pro, superintendent and club officials must work together to end the white collar-blue collar, I'm better-than-you-are-because-I-wear-polyester-and-you-wear-those-dirty-overalls conflict. In other words, everybody should feel like they belong.

How many PGA executive meetings have included input by superintendents? Most meetings should include them. They should have equal status.

How many GCSAA executive meetings have included talks by golf pros? Most meetings should include them. They should have equal status.

Every business has some sort of conflict similar to what pros and superintendents face. The good businesses figure out compromises.

It's time for the golf business to become a good business and for everyone to work together to prove they all are indispensable.

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Two Editorials

By Monroe S. Miller

EDITOR'S NOTE: *This issue's feature might better be titled "Two Opinions From Across The Country" since they are editorial pieces.*

And they do come from across the country!

Charlie Cross is the golf course superintendent at The Meadowbrook Club in Jericho, New York. He's also the editor of "The Hole Nine Yards", official publication of the Long Island Golf Course Superintendents Association. It's a truly superb publication. I have discovered, as I've gotten to know him, that Charlie is an excellent editor and

golf course manager and a great guy. His editorial offers food for thought for a lot of WGCSA members.

Pat Finlen is the golf course superintendent at the Quivira Lake Country Club in Quivira Lake, Kansas. Pat is the relatively new editor "Heart Beat", the official publication of the Heart of America Golf Course Superintendents Association. Pat succeeds long time "Heart Beat" editor Dave Fearis and is doing a terrific job.

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It's All in Our Title By Pat Finlen

Much has been done in the past few years to increase the professional status of the golf course superintendent. We have certification, television and radio ads, charitable work, and the list goes on. But it seems that we overlook one critical area, and that is our name, golf course superintendent.

How many times have you been asked what you do for a living and your obvious answer is, "golf course superintendent?" If the inquirer is not a golfer, his first reply is, "So, you're a golf pro." After much explanation, you finally get across to the individual what you really do. But by then, he's most likely associated the word superintendent with someone who is a caretaker.

If he is a golfer, his reply is, "So, you're the greenskeeper." Either way, your image is not all that flattering. The word superintendent portrays very little professionalism, and it is synonymous with "building superintendent," "construction superintendent" and "public works superintendent."

Among non-golfers, our image is virtually zero. In fact, it is negative because of all the chemicals we use. Among golfers, we are the ones who work in the shack off the fifth fairway. Again, what great credibility! We seem to be fighting a losing battle with our introduction when we use the word superintendent. Our counterparts in the golf business are changing rapidly.

Golf pros are now becoming Directors of Golf. Club managers are becoming General Managers. But where are we? We're still superintendents in the shack off the fifth fairway.

I remember an article that once said our office should be side-by-side with the club manager's office and the golf pro's office. That way, our status would be clearly seen. No longer would we be seen as Carl from "Caddy Shack." That would be nice, but not very practical. One better way to increase our image and professionalism would be to drop the word superintendent from our titles.

Many superintendents have done just that. They are the Golf Course Manager, the Golf Course and Grounds Manager, the Director of Golf Course Maintenance and, even, the Director of Golf. Our responsibilities are much more than caretakers, and that is what the word superintendent refers to.

Our jobs encompass much more than taking care of the golf course. We are environmental stewards. We manage thousands of dollars on any given day. We are much more accountable for the profitability of a facility than the pro or club manager. But our title puts us at the bottom of the list. Maybe the time has come for a change to a more progressive title than "superintendent."

Fifty and Out

By Charlie Cross

The golf course superintendents profession has changed dramatically over the past twenty years. Once known as "grass cutters" or "greenskeepers" the golf course superintendent is now viewed as an educated professional who plays a vital role in the success of any golf operation. Educational programs offered by local golf course superintendent chapters and by GCSAA are readily available. These educational programs play a major role in helping the golf course superintendent continue his education; he is abreast of changes, innovations and trends in golf course maintenance.

A trend that bothers me is that once a golf course superintendent reaches the age of fifty he has to start looking over his shoulder to see who is nipping at his heels. Many times what the inexperienced green chairman wants done on the golf course is to satisfy himself while giving no thought to what has been going on for twenty years. These two occurrences go hand in hand.

A golf course superintendent who is 50 years old has years of experience to offer his club. That's a wealth of knowledge. When it comes to golf course maintenance there is no substitute for experience. None!

If the golf course superintendent is neglecting his duties, then it doesn't matter what age he is. He should lose his job. Clubs that use excuses such as "we're on a youth movement", or "we need some new blood", or "our experienced golf course superintendent's salary is too high" are in most cases being unrealistic. What can be done to avoid the so called "Fifty and Out" situation that affects golf course superintendents?

From a club standpoint, education budgets should be adequate. Funds for national and regional conference attendance (there are numerous educational programs available at the conferences) should be available to the golf course superintendent. Funding for local and national superintendents associations memberships should also be made available. The education line in a golf course maintenance budget is the single most important line on the budget. There will be a good return on the investment.

(Continued on page 17)

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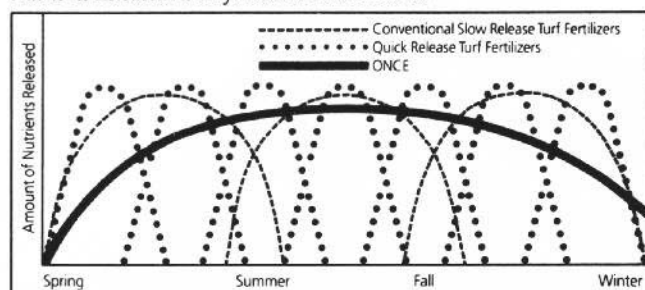
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(Continued from page 15)

Clubs should strive for continuity when changing green chairman or directors. Going from a chairman who may "just want it green" to one who is "more concerned with playability and the overall health of the turfgrass" is a tough transition. Green chairmen should understand what will be best for the membership and not just good for them. Changing green chairman frequently makes it tough for everyone. If a new chairman could hold the position for five years that would be great. I'm sure he would find the experience rewarding. Having long range plans and sticking to them will help smooth a transition from chairman to chairman.

From a golf course superintendent's perspective he should make use of all available educational avenues. No sticking one's head in the sand and thinking "I don't need this" or "I don't need that". Participate at conferences, seminars and at local superintendent association meetings. Delegate authority. Take the time to make sure all the daily tasks on the golf course are being done properly. Give your assistant responsibility. Supply him with a list of things to do that will make his head spin. You'll be surprised how much he

will accomplish. Train him to be your second set of eyes.

The golf course superintendent must play golf. He doesn't have to play well but playing his own course will help him realize how the members feel about the golf course.

How long should a golf course superintendent remain at the same club? That's a good question that I'm sure could be discussed for hours by golf course superintendents. If the golf course superintendent feels he has been doing a quality job and is not being recognized by the club then he should consider looking for another job. If the club is satisfied with your performance and you are happy with your job then there is no reason to change.

GCSAA could be playing a major role in the "Fifty and Out" situation but to my knowledge nothing is on the table at this writing. I feel that GCSAA is golf oriented and not people oriented. Granted, the educational programs available to golf course superintendents are excellent. Improving the image of the golf course superintendent through media relations, an excellent publication in "Golf Course Management" and trying to make the public more aware of who we are and what we do are excellent avenues in

promoting the golf course superintendent. But something is missing. GCSAA should be investigating how counseling could be available to members who lose their jobs. Helping those who have lost their jobs and providing assistance in locating another job should be at the top of the agenda for GCSAA. A seminar or two which address issues the older golf course superintendent faces on a daily basis should be a reality. GCSAA should be putting less emphasis on the international scene and more emphasis on the national scene, us! Good will is nice to spread but good will starts at home.

The "Fifty and Out" situation is an interesting subject that warrants further discussion and scrutiny. I've seen a number of good older golf course superintendents become pressured with outrageous expectations at their golf course. A number of experienced golf course superintendents have lost their jobs for reasons I will never know.

The clubs, golf course superintendents and GCSAA all need to take a closer look at the "older golf course superintendent" issue. Remember, nothing replaces experience when it comes to golf course maintenance. Nothing!

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Low Chemical Landscape Management On a Golf Course

PART I: Getting Plants Off to a Good Start

By Dr. Lois Berg Stack
Extension Specialist, Ornamental Horticulture
University of Maine Cooperative Extension

“Low Chemical Landscaping” and “Integrated Pest Management” are the landscape phrases of the 1990’s. But these concepts are hardly new! The practice of using biological control (using one organism to control another) is at least 100 years old: ladybird beetles were released into California citrus groves in 1888 to control harmful insects. And IPM programs—integrating physical, cultural, environmental, mechanical, biological and chemical pest management techniques—dates back at least to the early part of this century. Since that time, IPM has gained more and more momentum. We are now at a point where much of the basic research about insect and pathogen biology, crop tolerance and damage levels, and environmental parameters has been done. IPM programs are now an integral part of many agriculture production programs.

IPM programs have been developed less in the landscape industry than in vegetable, fruit and field crop production for various reasons. First, those crops are generally grown in large plant numbers, where pests concentrate and can be monitored easily. In landscapes, on the other hand, we are likely to have a few each of many plants, each with its own pest problems. This makes scouting and non-chemical control a real challenge. Second, the necessary research on ornamental crops was not conducted to any great extent for lack of funds, because landscapes were not “big business” until fairly recently—but we all know that has changed. And third, some serious issues have surfaced in recent years that demand a rethinking of the use of pesticides in all of agriculture, including the landscape sector. These issues include the following:

- Overuse of chemicals has led to pest resistance, pest resurgence and some harmful effects on humans and other nontarget organisms. It doesn’t matter which sectors of agriculture may

have contributed to this situation; all sectors are being scrutinized.

- Overuse or improper use of some chemicals has caused groundwater contamination in many parts of the country.

- FIFRA has required that pre-EPA-approved pesticides be reregistered within 10 years, a process which may cause the loss of some materials that the landscape industry relies on.

- Instances of pesticide contamination of food have produced a social climate in which the general public is increasingly unsympathetic to agricultural use.

The landscape industry has had some difficulty adopting IPM practices because of the lack of needed scientific data and the diversity of ornamental plantings, but the research base is growing, and there are enough success stories to show that it can be done. A company in North Carolina, for example, offers landscape IPM services commercially to homeowners (Grossman, 1989). Another company in Maryland offers commercial scouting services to nurseries (Daar, 1988). And, as Michael Semler pointed out in the last issue of *The Grass Roots* (Semler, 1991), golf course superintendents have used the principles of IPM, if not the terminology, for a long time.

The prospect of establishing a full-blown IPM program for all the plantings on your golf course is daunting, but you can break it up into logical steps by considering how to develop a healthy landscape at each of the three phases of landscape development: Design, Installation and Maintenance.

Designing a Landscape for Low Chemical Maintenance

Low chemical landscape management does not just happen—it must be planned for from the beginning. In an analysis of the design and maintenance needs of urban parking lots, Pfeiffer et. al. (1987) found a significant

relationship between design and construction practices, and future landscape management needs. The study found, for example, that soil compaction and inadequate irrigation had the greatest impact on plant survival and vigor. Early planning for those problems can improve the success of the plantings. Other problems included inappropriate plant selection, out-dated construction specifications, and conflicts between planting bed design and pedestrian traffic patterns. These factors combined to decrease the effectiveness of the landscape, and increase its maintenance needs. The study showed that careful attention to plant selection, specification review and maintenance projections during the design stage can avoid long-term maintenance problems.

The first step in designing any landscape is to determine its functions. Ornamental landscape plantings on the golf course may serve the functions of separating the holes and guiding golfers around the course, beautifying the course, controlling wind, minimizing soil erosion, and providing sound and visual barriers. Once the functions are determined, the remaining four steps of designing are just “filling in the details.”

First, do a thorough site analysis to determine what the location will provide for plants. Determine slope, exposure, soil characteristics, water availability, and weather and climate factors. Determine what the site offers and, perhaps more importantly, what it does not offer.

Then, select plants that will adapt to the site. This is far easier than selecting a favorite plant and then trying to locate a place where it will survive! Many references provide extensive plant lists to help you make the best selections (Dirr, 1990; Gerhold, 1989; Hasselkus, 1991; Sabuco, 1987; Wandell, 1989). Within many species

(Continued on page 21)

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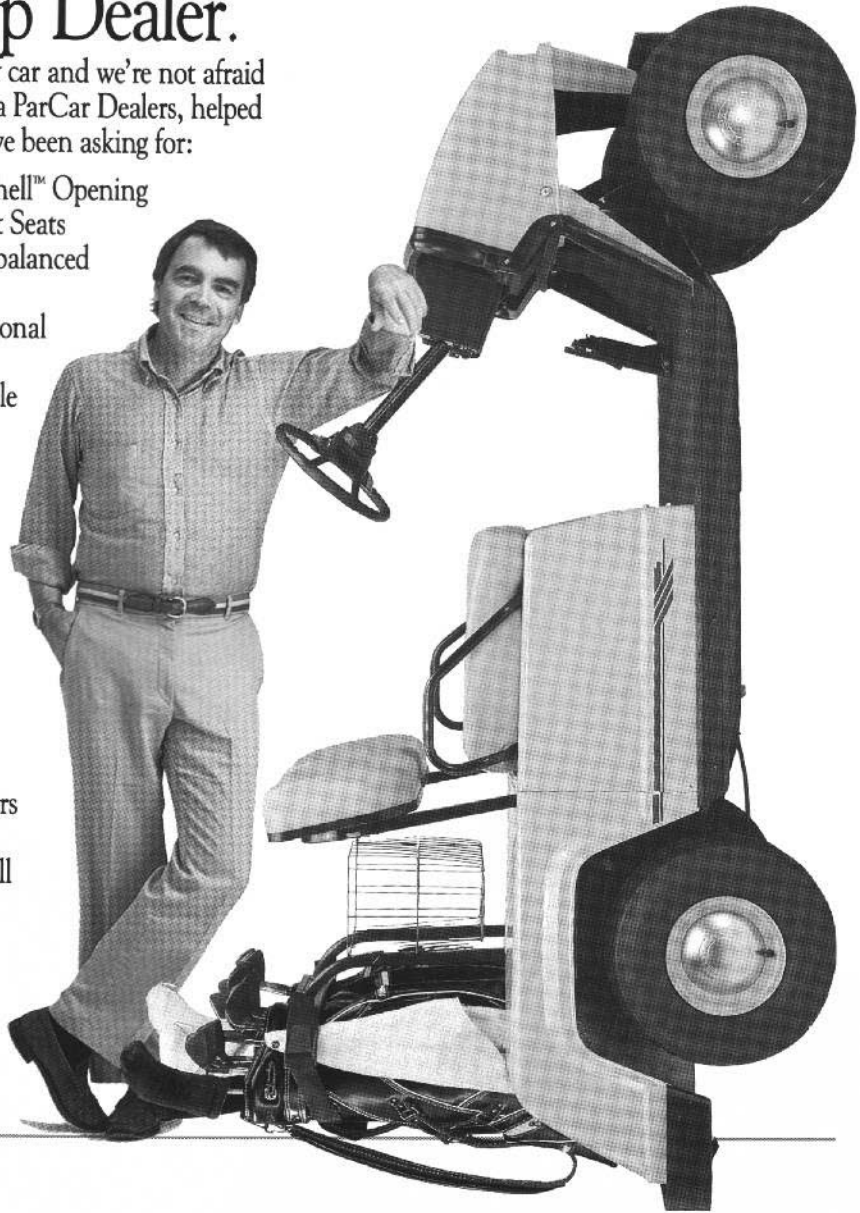
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