Repair Those Ball Marks and Divots
by Roy Damer, Chicago Tribune

Stan Mikita scored 600 goals during his Hall of Fame hockey career with the Chicago Black Hawks. Now his “goal” is to see people stop mistreating golf courses.

Mikita is the teaching pro at Kemper Lakes, a well-maintained public course in Hawthorn Woods. But he winces when he looks out of the club house windows over the beautiful landscape.

“I’m concerned about the abuse people give to golf courses — from pros to a guy who shoots 150,” says Mikita. “I’ve seen pros drive their carts onto tees and some golfers who step out of their carts right onto the green.”

In addition to driving carts too close to tees and greens, some golfers don’t fix their ball marks on the putting surface and don’t replace divots out on the course.

“Things are getting worse,” moans Mikita. “When I play golf in the evenings after work, it looks like the crater of the moon out there.

“That’s why I can’t play here. I’m looking all over the place checking on the condition of the course and I don’t concentrate on my game. I just can’t enjoy it here, and this is one of the nicest courses around.”

Mikita gave a good example of how even a new layout is mistreated.

“‘I was asked to play at the opening of Forest Preserve National,’” he says. “‘There are 120 invited guests — the first golfers to play the course. There was a shotgun start and my group went from the first tee. When I reached the third green, I had already come across four divot marks. Only eight people had gone through those two holes and already there were four divots.’”

There are two principle reasons golfers should fix ball marks on greens, replace divots and keep carts away from greens and tees:

1. It will help maintain the fine playing conditions that golfers want.
2. It will help keep the cost of golf down. If an employee does that work, the cost eventually is passed on to the golfers.

This is a problem that doesn’t just affect public courses. Members of private clubs report the same conditions exist there.

“‘Don’t get me wrong,’” said Mikita. “‘The majority of players will fix the course. But there are perhaps 10 percent of golfers who will leave everything whether they’re playing at Medinah, Butler National or anyplace.’”

“We have certain rules at Kemper Lakes but essentially we ask people to leave the course the way they found it. And it would be nice if they’d fix an extra ball mark along the way, too.”

Here’s a graphic illustration of why it’s important to fix ball marks. If it’s fixed within 5 minutes, it will start healing in 24 hours. If it isn’t repaired, it takes 15 days to start healing.
tional programs and field days, and they patronize the USGA Green Section Turf Advisory Service or some other competent technical consulting service — though I am obviously partial to the TAS and don't know that any other consultant can match the Green Section's variety of services. Also, I know all the USGA Green Section personnel and have a high regard for their abilities and dedication. Whichever consultant is retained, I hope and trust that he won't be intimidated by the superintendent or otherwise inhibited from making his most objective and constructive professional observations and suggestions. Anything less than a completely honest assessment by the consultant is an unconscionable waste of everyone's time and money and, in the long run, is unproductive for all concerned.

- Golfers should be made aware of the superintendent's managerial and technical skills and responsibilities. Few of them appreciate that he is responsible for 100 or more acres of valuable property, a six-figure budget, a six-figure equipment inventory, and a crew from a half-dozen to two dozen or more workers. In addition, he must have technical competence in the art and science of turfgrass management — a complicated and changing field, which is why his education must be a never-ending process. That's another reason why, if I were a superintendent, I wouldn't risk trying to go it alone without the periodic second opinion of a competent consultant, if for no other reason than preventive maintenance.

- So the superintendent is a manager of men, money, and turf — really a master of all trades and a daily problem-solver in a multitude of technical and professional skills. He must be a specialist in all of the wide categories of turfgrass management. His job is inevitably one of "crisis management," as well as careful planning for each day, week, month, and year. He must be a budget expert, purchasing agent, diplomat, and personnel manager, capable of dealing effectively with people of all levels, from minimum wage employees to club officials and members. He must be a keen observer of Nature (as well as of human nature), a chemist and a practical scientist, and in this respect, too, his role is changing. No longer can he get by with limited tools or supplies or scientific knowledge; in the modern world he needs better equipment and must be sophisticated in its use. As we all know, he will soon have to be a computer person as well.

- As suggested before, the superintendent is caught between those of us who like so-called "championship" conditions and those who prefer more forgiving conditions. I doubt that the resulting cross fire of criticism is always a valid indicator of how people really feel. No one wants impossible or unreasonable course conditions, but neither would most golfers want to play on a course without difficulties. If the secret of the game's appeal is that you cannot conquer it (or yourself), it follows that if course conditions are too undemanding, part of the fun is lost. How else can you explain the lure of Pine Valley or Oakmont? Preserve golf's essential challenge and the game will prosper.

- The superintendent can exert a critical influence on the game just by his philosophy of golf course maintenance and by his adherence to it. If he is sincerely interested in maintaining a proper playing surface for the game itself, his club members will gradually accept the conditions, and in the process they will become better players. What a happy coincidence that golf course conditions making for a more challenging game can also make for better turf, and vice versa!

- I fear that many courses have ironically become victims of technical advances such as with irrigation systems, in that these "improvements" too often have led to severe problems in turfgrass management. Likewise the over-use of chemicals, such as fertilizers and herbicides, softens grass growth and weakens its performance in stress periods. As a result of over-stimulation of turfgrass in the spring, it becomes necessary to apply water more frequently during the summer. Once the soil is saturated, susceptibility to disease increases, as does the incidence of crabgrass. So golf course playing standards can suffer from a vicious cycle; it begins with the misuse of turf management techniques that can cause more problems than are normally caused by Nature. This pattern of mismanagement afflicts all grasses, cool-season and warm-season alike.

- So as we all look ahead, let us hope that our golf course maintenance programs will be directed more towards quality playing conditions than simply towards aesthetics. This will call for a greater understanding by golf club members and public course players, along with course superintendents.

I salute the superintendent — and so does the USGA, which has long served the superintendent's role and his cause. Let us count some of the ways:

(1) The TAS directly supports the professional knowledge and the professional image of the golf course superintendent.

(2) The superintendent's scientific ability and professionalism have been elevated to a higher plane also by the Green Section's support over the past 60 years of turfgrass research.

(3) The GCSAA Championship Trophy, which is presented each year to the winner of the Golf Course Superintendents' Tournament as a gift from the USGA, is a replica of the U.S. Open Championship Trophy, and this is a form of recognition symbolizing the importance of the golf course superintendent in the USGA's scheme of things and, indeed, his importance to the game of golf.

But the USGA could and should do more — and will, I assure you — to encourage club members, club officials, and golf officials in general to recognize the essential role played by a competent superintendent who maintains a fine course and protects the proper playing standards of the game. Meanwhile I would appreciate — and the USGA would, too — suggestions from the GCSAA or from any individual golf course superintendent, as to how else we can help you to do an even better job, or to make it easier for you, or to shine upon you a light that I know you deserve. We all serve golf in our own ways, but we must work together for the good of the game that we all love.
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Probably in 1935 when Edward S. Stimpson developed his idea of the stick to measure, with comparative accuracy, the speed of a putting green, it caused no hardship on anyone, and probably wasn't used very extensively either.

But in the mid-1970s, when the USGA Green Section resurrected this tool and made it available to its Green Section subscribers, I was apprehensive. Writing to Al Radko and Carl Schwartzkof, I discussed these concerns. The fears had to do with competition of speed of greens — between clubs with nothing else in common except that both have nine or 18 putting greens; no regard to budgets; terrain, soil, variety of grasses climate, amount of traffic, etc. Additionally, I posed the question, "What makes the golfer, professional or amateur, believe he can strike the ball so perfectly each time that he would know whether one green speed is different from another?"

All of the factors mentioned have a definite bearing on putting green quality and, closely akin, to putting green speed. Agronomic principles must be followed to produce quality putting greens. This was borne out in the symposium on fast greens in Milwaukee a few years ago.

At the January, 1983, Virginia Turfgrass Conference, a panel of seven discussed "Putting Green Management for Quality and Speed." In essence, all agreed that only good management will produce quality putting green turf, which in itself includes reasonably fast greens. To obtain tournament fast greens (10'6" and up), quality must be present! Thus it is impossible to distinguish between the two. I believe we would agree that only to lower the height of cut to gain faster speeds would surely cause dead grass. Therefore, before we can yield to the urge to quicken the speed of our greens, we must have produced superior turf that is agronomically sound to achieve and retain good grass conditions.

The Stimpmeter was used by USGA officials to control green speed at the 1976 U.S. Open, played at the Atlanta Athletic Club, and publicized to a degree. Sports commentators wrote about it in newspapers and magazines and broadcast it on television, and the contest was on. Repeatedly we hear how fast greens are, and the process of comparing one with another has materialized. Surely it has caused problems to some grass and undoubtedly to those caring for it.

In spite of these prospective problems for some, we have found a way to use the Stimpmeter to our advantage on our three golf courses at The Greenbrier. If viewed objectively, I feel it may benefit your operation as well. I would like to discuss some of the positive factors you might consider.

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We devised a simple mimeographed sheet to be completed by our three foremen. Each foreman takes a Stimpmeter reading daily on two of his greens, making certain notations. These notations are: number of the green, the weather, time of day, and whether it is wet or dry. He then checks two different greens on successive days until all 18 have been measured. This procedure is repeated throughout the season.

We have found certain truisms. Our courses will never be the same because of different types of bentgrasses and soil mixes used in their construction. All greens on the same course will seldom putt at the same speed. The location or setting of each green and how it is subjected to wind and sun cause it to be different. The amount of contamination, such as *Poa annua*, will cause a difference. Greens are always slower during the spring and in wet weather. Greens, generally speaking, are faster in the fall. There is a definite influence on speed following most maintenance practices.

We have tried to fine tune our management practices to produce the least amount of change possible. Fine tuning includes frequent light vertical mowing every two weeks instead of heavy monthly vertical mowings. We also mow our greens seven days a week instead of six or less. Frequent light topdressings are accomplished every three or four weeks instead of three or four times annually. Light, frequent fertilizer applications are made and provide slow, steady growth and recovery from player damage. We water as infrequently as the grass will allow, but enough to retain color and resiliency to hold a well-executed shot. We avoid frequent saturations. It is essential to mechanically check and service green mowers daily as opposed to a haphazard schedule. And there are other points. But please note that these same procedures will also produce the quality turf so necessary to answer the demands of today's golfer and, at the same time, permit us close mowing.

 Routinely recording the Stimpmeter speeds daily forces us to react to any large differences. There is a reason! Find it! Correct it! Without a doubt, our biggest culprit is the mower. We have found that we spend approximately four times the number of hours (and expense) on putting green mower maintenance than we did only a few years ago. Machines must be right! Sharp! And set accurately! Operators must be instructed on proper mowing techniques.

What does all this mean? We are using the Stimpmeter as a tool to measure our maintenance practices in a very positive way. The result: a finer putting surface for our golfers. It is probably true that 90 percent of America's golfers score best on slow greens. But from my 30-plus years as a superintendent, I believe even they prefer fast greens. Perhaps this is true because they feel they are playing on the same surfaces that the professionals expect and enjoy.

I personally like fast greens and always have. For years now, I have marveled at the guy who can have good turf and a dense, uniform stand of bentgrass that is as slick as a pool table. But to me, an ideal putting surface for our golfers is probably true that 90 percent of America's golfers score best on slow greens. But from my 30-plus years as a superintendent, I believe even they prefer fast greens. Perhaps this is true because they feel they are playing on the same surfaces that the professionals expect and enjoy.

I believe the USGA Green Section did us a favor in making the Stimpmeter available. We have another tool to help us do a better job. And in our effort to produce
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Some superintendents will add weights to their greens mowers for faster green speeds.

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better grass for better golf, we need all the help we can get! True, the Stimpmeter created a lot of attention both by me and others, but it caused us to look at it, to investigate its potential and then to find a way to use it to our advantage. I do not believe club members should use it for comparing their greens with the neighbor's or with those on TV. Frankly, I feel we must use it ourselves to compare our own greens, one with another, trying for consistency, but not with other clubs in town or across the country. Further, I believe the USGA recognizes that the differences in golf course location, terrain, budgets, and personal desire will dictate conditions and ultimately green speed. Further, the USGA's attempt to promote consistency within the same course is the primary and ultimate goal, not necessarily to match or duplicate the speed attained at other courses.

I've used and appreciate the Stimpmeter, but I encourage caution and restraint, especially in trying to duplicate the speed of greens at so-called championship courses. Let's agree to use this tool for our benefit and ignore the remarks made on TV that create competition for speed, just for speed's sake.

What causes a golfer, professional or otherwise, to believe he can stroke a putt so consistently that he could ever declare one green is faster or slower than another?

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Too much water affects putting quality and eventually grass quality.
Up with the Stimpmeter

by STANLEY J. ZONTEK
Director, North-Central Region, USGA Green Section

It started out as a crude, wooden, homemade instrument to determine the rolling speed of a putting green. Like most inventions, it evolved from a rather simple idea, developed in the 1930s by Edward Stimpson, of Boston. Today, the Stimpmeter has become a controversial but very precise means of measuring putting green speed. In fact, Joseph M. Duich, of Penn State University, has detailed just how accurate the instrument is when properly handled. In carrying out field research to determine factors affecting putting green speed, Dr. Duich found Stimpmeter measurements statistically well below the accepted standard deviation figures commonly accepted for field research studies. Researchers have found the Stimpmeter to be an extraordinarily accurate device.

Accuracy, however, is not the basis of the contention swirling around the Stimpmeter. The problem lies in its improper use and misunderstanding of its purpose. Julius Albaugh, superintendent at the Westmoreland Country Club, in Wilmette, Illinois, has written an article explaining the concerns of some superintendents over the misuse of the Stimpmeter. He has raised valid questions. His article appears in this issue of the Green Section Record, as well as in other periodicals throughout the country.

As with any tool used in golf course maintenance today, the Stimpmeter can either be used properly or it can be abused. When the USGA began to produce them in quantity, in 1976, Stimpmeters were given free of charge to golf course superintendents only at clubs subscribing to the Green Section's Turf Advisory Service. Today, they are available for a nominal charge of $25, but sales are still restricted to golf course superintendents or golf clubs. They are not sold to individuals. It was never the USGA's intent to make them available to the general public. They were and still are only intended for the turf management professional.

The Green Section agronomists and course superintendents alike realize that most golfers want to putt on good greens, i.e., consistent, smooth, true-rolling, and green putting surfaces. Most golfers prefer greens that are not too fast or exceedingly slow. No one, at least in the past 50 years, has advocated playing the game on brown, scalped greens.

It was inevitable, however, that once a means for accurately measuring green speed became available, there would also be the need to establish certain ranges (See Table 1). The published ranges have been developed from extensive surveys and tests made on putting greens throughout the United States under all kinds of conditions and over a period of several years. Measurements were made at championship sites as well. Thus, the general ranges for putting green speed were determined and are published as part of the instruction manual for each Stimpmeter.

Never has the Green Section attempted to standardize or dictate putting green speeds for its members clubs. That decision must be left to each individual golf club through its green committee and its course superintendent. We also point out that there is an important distinction between the reported speed ranges for regular membership play and tournament play.

We believe that putting greens can be maintained without too much extra work in the medium fast to fast range for regular membership play without unduly stressing the grass under most conditions. However, this decision still rests with each individual golf club and is directly influenced by the character of the course, the maintenance budget and the wants and desires of players at that facility. If you ever hear that the USGA Green Section advocates 10-foot or 11-foot green speeds, don't believe it! It isn't true.

Unfortunately, the spoken word tends to become oversimplified as it is passed from one to another. To most novices, faster greens simply mean lowering the cutting
height. The lower the cut — the faster the green. Right? Wrong! There is far more to it than that. Without any question greens have been scalped from the desire to achieve fast putting surfaces. But it does not necessarily follow that fast putting surfaces require scalped greens. The difference lies in management, soils, grasses, budgets, climate, and other variables.

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Today, as a result of research like Dr. Duich's and the practical experiences of golf course superintendents and the Green Section agronomists, there is a greater appreciation of what goes into preparing greens for modern championship play without scalping or killing the turf. It is only in the preparation for certain USGA Championships that specific putting green speeds are established by the USGA Championship Committee. The courses where such events are played now work very closely and carefully with Green Section agronomists over a period of several years to have their course in the best possible condition. These courses have a higher than average maintenance budget, and everything peaks, including the incredibly fast green speeds, for the one week of the Championship.

It is interesting to note green speeds from major championships during 1982. The green speeds for the U.S. Open, held at Pebble Beach, California, ranged from 9'6" to 10". For the Masters Tournament (a non-USGA event), the green speeds were over 11' on the average. Most of the commentaries support the viewpoint that, for the U.S. Open, the speeds were very appropriate, whereas, for the undulating greens of Augusta National Golf Club, the speeds were very fast indeed. Perhaps the pendulum may now swing back from the very high putting green speeds of recent years and come closer to the speeds found in Table 1.

There is a need for the Stimpmeter. It has a place on our golf courses. Let's not bury it. Let us not permit the few who have misused or misunderstood the Stimpmeter to destroy its value to golf and the golf course superintendent. Rather, let us understand it and use it for its intended purposes. If the green committee chairman or the golf course superintendent comes under pressure from the membership because of improper use or interpretation of the Stimpmeter, immediately call the Green Section agronomist in your area. He understands and he can help. He is there to assist you, and he can provide important information as it relates to putting green speeds and other agronomic difficulties. Together, let us work toward our common goals of smooth, true, and consistent putting greens that are properly paced.

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John Zoller, Kent Davis, and Bill Bengesfield using the Stimpmeter at Monterey Peninsula Country Club.