

James B. Beard
(initials)

NORTHERN MICHIGAN TURF MANAGERS ASSOCIATION

WEDNESDAY, AUGUST 26th 1981
HIDDEN VALLEY
GAYLORD, MICHIGAN

FRANK HEMINGER, SECRETARY-TREAS.
1147 SANTO
TRAVERSE CITY, MI. 49684
PHONE: 616-947-9274

The above date and location will be where our next BIG meeting will be held. We say BIG because this meeting will start at 9:00 A.M. and continue into the night, if you participate in all programs.

The first program is a three hour class in cardio pulmonary resuscitation (CPR) which will start at 9:00 A.M. Our thanks to Fred Miller for getting us a full qualified instructor willing to take the time and help us to learn how to be able to help others. The others could be your own family, your fellow workers, your friends, your members therefore it behooves us to be present for this session. Arrangements have already been made for a room and I believe it will be in the main building. This session should be finished in plenty of time to get in a round of golf on this beautiful 18 hole layout.

Mr. Carl Jeff is Manager of Hidden Valley, Ben Moore is the golf Professional and of course our Board member Fred Bond is the Golf Course Superintendent. The telephone number is 517/732-5181 and your call can be switched to the various places like pro shop, bar, etc. Reservations or starting times are not necessary nor are resersations for golf cars required. The host Superintendent invites you to play plus get your two bucks out for the usual tournament. Details will be available when you pay your fee.

As you know and as we have experienced in the past, the food at Hidden Valley is excellent and we will have dinner served at 6:30 P. M. Those of you coming for dinner, should schedule your arrival to fit this time as we will have a very busy evening. We have two excellent speakers for you. One speaker is in the "Golf Hall of Fame" and was 1967 P.G.A. Champion, Mr. M.R. "Chick" Harbert while the other speaker is Cecil Kerr, District Manager for the North Central States who is known to many of you and he has a very special story on something dear to all of us, "Professionalism". This is a most unusual program in its entirety and you cannot afford not to be present.

With all this activity, we will have dinner served at 6:30 P.M. so that our program can be started without delay. If you intend to come for the dinner and meeting, please schedule your arrival at the appointed time. As usual, we must advise Hidden Valley in advance of the number that will be present. Please be sure that your card is returned by August 21st. We would also like to have an idea of the number wanting to participate in the CPR Program so please so indicate on the card if you will be there for the 9:00 A.M. starting time.

Your cooperation in getting this postcard back as quickly as possible will be appreciated by those trying to complete arrangements. We thank you in advance.

Date change for our September meeting, it will be the 16th, GRAND TRAVERSE HILTON

FAIRWAYS COMPRISE the largest acreage that require maintenance at golf courses. In many areas of the transition and cool, humid zone of the United States, creeping bentgrass (*Agrostis palustris* Huds.) and Colonial bentgrass (*Agrostis tenuis* Sibth.) could be maintained as the principal fairway grass species. However, other turfgrasses in this area, including Kentucky bluegrass, perennial ryegrass, especially *Poa annua*, predominate. Without doubt, bentgrass, where managed correctly, provides some of the best fairways in its area of adaptation. Many of the most famous clubs in the Northeast, such as Baltusrol Golf Club, Springfield, N.J., Winged Foot Golf Club, Mamaroneck, N.Y., and Merion Golf Club, Ardmore, Pa., have chosen bentgrass for their fairways. Our technology and ability to grow bentgrass is certainly not lacking, so what are the problems?

Over-Irrigation

Perhaps no grass has been so mismanaged by irrigation practices as bentgrass. It ranks favorably but slightly behind Kentucky bluegrass and the fine fescues in drought tolerance. Bentgrasses are widely used in Scotland, where there is no artificial irrigation. The bentgrasses have also been found growing in desert areas. Yet somehow bentgrasses have the reputation of needing much more water than other permanent turfgrasses.

Before irrigating, it is good practice to use a soil probe to examine the moisture status of the soil. There should always be moisture enough in the rootzone to supply the plant's needs. When water is needed, only enough should be applied to restore the supply to the rootzone. Care must be taken not to irrigate to the point where macropores become saturated, since this interferes with oxygen supply, and grass roots will not function without oxygen. Wilt-ing of the turf occurs when air is cut off from the plant. Unfortunately, the natural tendency is to put on a little more rather than a little less. We have learned the concept that turf roots require water, but we have a more difficult time learning that overwatering greatly reduces soil air and causes grasses to wilt.

Poa Annua Problem

The major criticism of bentgrass fairways is related to the *Poa annua* problem. Is this criticism justified? Fairway irrigation has contributed to the problem, along with increased soil compaction and turfgrass wear injury caused by golf carts. Forgotten is the fact that many fairways were originally dominated by common Kentucky bluegrass and the fine-leaved fescues. These unirrigated grasses produced a good lie but not the tight lie preferred now by golfers. When the bluegrasses and fescues were irrigated, golfers demanded that the golf course superintendent lower the cut. With the lower cutting height and irrigation, *Poa annua* quickly invaded the Kentucky bluegrass and red fescue. This is the primary cause of the high predominance of annual bluegrass fairways. It should be noted that the annual bluegrass had much more difficulty invading the bentgrass. The bentgrasses are able to withstand the lower cut and, so long as it was applied at reasonable rates, the extra water.

Presently, the increased soil compaction and traffic injury from maintenance equipment, golfers, and particularly golf carts have greatly encouraged *Poa annua* in our present bentgrass fairways. Frequent over-irrigation also contributes to soil compaction and the extra moisture necessary for *Poa annua* germination. The bentgrasses are not as competitive with *Poa annua* on compacted soils.

Also important to a bentgrass program is the judicious use of fertilizer. Bentgrass fairways require minimal amounts of nitrogen, and the preferred program is to fertilize lightly but more frequently. This provides a slow, steady growth of the bentgrasses. High rates of nitrogen, particularly in late winter and early spring, encourage *Poa annua*. Higher nitrogen levels also increase the water requirements of the grasses. Applications of phosphorus to bentgrass fairways should be carefully considered because high soil phosphorus also encourages *Poa annua*. Most soils

in the United States contain adequate soil phosphorus levels, except areas in the southeastern states where weathering intensity is relatively high.

Sulfur fertilization has recently proven to be very beneficial to bentgrass turf. Dr. Roy Goss of Washington State University has been working with a *Poa annua* control program using sulfur as the key element to the program. Several clubs in the Mid-Atlantic Region have been applying sulfur to bentgrass fairways with good results. Sulfur materials available are elemental sulfur, ammonium sulfate, potassium sulfate, gypsum, and ferrous sulfate. Bentgrass fairways must receive proper cultural and mechanical maintenance practices to compete successfully with *Poa annua*. Soil tests should be taken periodically on bentgrass fairways to determine nutritional needs. Bentgrasses prefer a soil pH around 5.5. A higher pH in the fairway soils will favor *Poa annua*.

Too Expensive

Many people do not consider bentgrass for a fairway turf because they feel maintenance will be more expensive than for a Kentucky bluegrass or perennial ryegrass turf. Others equate the high cost of maintaining a bentgrass putting green with a bentgrass fairway. In reality, bentgrasses will provide an excellent fairway playing surface at only slightly higher maintenance standards than Kentucky bluegrass or perennial ryegrass. A comparison of management practices will help demonstrate the differences in bentgrass and Kentucky bluegrass/perennial ryegrass fairways.

1. The biggest difference in management will be the height of cut. Bentgrass fairways are cut between $\frac{1}{2}$ and $\frac{3}{4}$ inch, while Kentucky bluegrass/perennial ryegrass fairways are cut between $\frac{3}{4}$ and 1 inch. Best playing conditions are obtained on cool-season fairways by frequent mowing. However, Kentucky bluegrasses require more frequent mowing than the bentgrasses. The lower cutting height of the bentgrasses not only can produce better playing conditions, but also deters *Poa annua*. *Poa annua* is most competitive at $\frac{3}{4}$ to 1 inch.

2. The bentgrasses require more water during the summer months because they become very short-rooted during July and August. Frequent light waterings may be necessary during these months. Kentucky bluegrass and perennial ryegrass are more deeply rooted; therefore, light, frequent waterings to these species during the summer may reduce the root systems and produce a more tender plant.

3. Disease control programs are needed for all grasses. The best disease control program, however, is a sound cultural program using minimal fertilizer and water, proper mowing and thatch control. The peak disease period for bentgrasses, bluegrasses, and ryegrasses will be during July and August when heat and humidity are high. Normally, depending on weather conditions and the fungicide selected, a 7- to 21-day spray interval is followed in fairways in the late spring, summer and early fall.

4. The bentgrasses are also surprisingly heat tolerant. This is a characteristic usually overlooked. Bentgrass greens are present in areas of the deep south, and bentgrass tees are common in the southern limit of the transition zone on modified soil mixes. It is possible to grow bentgrass fairways further south than is currently practiced, if soils are well-drained.

5. The wear tolerance of bentgrass is poor compared to Kentucky bluegrass and perennial ryegrass. Perennial ryegrass is the most wear tolerant of the cool-season grasses. Traffic control, particularly if golf carts are present, is mandatory to reduce wear on bentgrass fairways.

6. The bentgrasses are the most weed free of the cool-season turfgrasses. However, they are more susceptible to injury from herbicides, particularly pre-emergent and hormone-type chemicals. Clover, particularly on imperfectly drained, fine-textured soils, is the biggest problem. Kentucky bluegrass and perennial ryegrass have a higher tolerance to most herbicides.

The Future

Hopefully, the criticisms that bentgrass fairways are too expensive to maintain and are too subject to *Poa annua* invasion will be less in the future. Additionally, many managers may select bentgrass for areas previously considered too risky during the summer.

Intensive breeding work will one day produce bentgrasses with greater heat- and drought-tolerance. Wouldn't it be wonderful to have a bentgrass with the rooting characteristics of Kentucky bluegrass? Through breeding, we may one day have rhizomatous Colonial bentgrasses. This feature together with greater wear tolerance would significantly increase bentgrass use on golf courses throughout the country. The future for better bentgrass fairways through research now appears more promising than ever before.

JULY/AUGUST 1981

USGA GREEN SECTION RECORD

Thoughts on the Business of Life

The deep-down desire to stand well with our fellows, this laudable hunger to win the public's "well done, good and faithful servant," is inherent in every human soul. We may flout it when we are young or even in our prime, but when we begin to cast up our life's reckoning we cannot ignore it. This is one of the things that count, one of the things really worthwhile, this esteem and good will of our brother mortals, and the knowledge that we have sincerely tried to earn it.

B.C. FORBES

★ ★ ★

A Denver businessman had to go to New York to attend a conference. His wife stated her desire to go along.

"But I'll be tied up nearly all the time," he protested. "You wouldn't enjoy going at all."

"Oh, yes, I would," said his wife. "I'll spend my time buying clothes."

"What, go all the way to New York for a few clothes? That's silly. You can buy everything you want right here in Denver!"

"Oh, good," she cried. "That's just what I hoped you'd say."

★ ★ ★

GOLF IN THE LATER YEARS

My muscles are flabby;

I can't hit a drive.

My mind often doubts if

I'm really alive.

My chipping is lousy,

I never could putt,

I guess I'll stay home and

just sit on my butt.

My iron plays awful,

my woods are as bad,

I'm describing my game as a

shade short of sad.

So the outlook today is for

grief and for sorrow.

Say! who can we get for a

fourth tomorrow?

Report On Tersan

Tersan 1991 Turf Fungicide and Tersan LSR Turf Fungicide have recently received supplemental labeling as a tank mixture for preventative control of Helminthosporium leafspot, dollar spot and brown patch.

Apply one ounce of Tersan 1991 and three to four ounces of Tersan LSR to five gallons of water for each 1,000 feet of turfgrass to be treated. Make initial application when disease first appears and continue applications on seven to 14-day intervals for as long as needed. Use the shorter intervals and higher use rate when conditions are unusually favorable for disease development.

A note on the supplemental labeling indicates that repeated and exclusive use of Tersan 1991 has led to the development of benomyl resistant strains of dollar spot fungi in some locations and may lead to the development of tolerance in other strains of fungi. "The use of Tersan 1991 as a tank mixture with Tersan LSR may delay development of tolerant strains of fungi. If Tersan 1991 or other benzimidazole or thiophanate-type fungicides have been used exclusively in the past and are no longer effective, a tolerant fungal strain may already be present; consideration should be given to prompt use of other types of suitable fungicides. The combination of Tersan 1991 and Tersan LSR should be used only in areas where tolerance problems have not occurred previously."

Supplemental labeling has also been granted for use as a tank mixture with Daconil 2787 fungicide (flowable or wettable powder) for preventative control of dollar spot, Helminthosporium leafspot in combination with brown patch on turfgrass.

For dollar spot and brown patch, apply one ounce of Tersan 1991 and three fluid ounces of Daconil 2787 Flowable (or two ounces Daconil 2787-75% wettable powder) per 1,000 square feet. Make initial application when conditions favor disease development and repeat treatment on seven to 10-day intervals as needed. Use the higher rate of Daconil 2787 in the combination if disease conditions are particularly severe.

The same note on strain tolerance for Tersan 1991 and Tersan LSR in combination applies to the use of the Tersan 1991 and Daconil 2787 combination.

Always read the label on pesticide products before use. Ask your LESCO salesman for details on Tersan and Daconil products.

DURSBAN

According to Dow Chemical Co., there have been reports from New York state of bird kills on turf and activity of certain EPA employees to ban Dursban in the turf market. From what Dow could learn, of the 14 reported incidents, post mortem analysis has indicated only two birds showing Dursban residues. Both of the Dursban residues were at levels known to be sub-lethal to birds.

The Handicap Survey

More than 7,000 American golfers had their say when the Handicap Research Team surveyed the nation's players on their games — and views.

THE HANDICAP System may seem to be little more than an elaborate numbers game, an arithmetical exercise that would have given Albert Einstein pause, and yet, for avid golfers, that magic figure — whether it is 4 or 40 — is as much a part of them as their Social Security Number. Indeed, unlike their SSNs, their handicaps can take a turn for the better — or the worse.

Two years ago, therefore, when a Handicap Research Team was formed with instructions to study the system and expose its warts, the HRT went directly to the golfers themselves for information. After a preliminary test, a questionnaire was distributed to 22,000 USGA Associates; approximately 8,000 responded to a series of 56 questions. Of those, the responses from 7,143 Associates were used finally in the HRT's study.

Although the respondents might not be typical of the average American golfer, a profile did emerge of those who replied. It was found, for example, that the average Associate is 50 years old, stands 5-foot-10, and weighs 177 pounds. Ninety-six percent are male, and 96 percent play right-handed. This composite Associate took up the game at 24, but he has played at least 15 rounds each year since the age of 31. His handicap presently is 14, but he was in his prime at 39, when he carried a 9 handicap.

His course is a par 71 that measures 6,369 yards and has a course rating of 69.9. He slices more often than he hooks, and most of his penalty strokes result from hitting balls out of bounds. Over his last 20 rounds, his scores fluctuated by 15.7 strokes. Concentration is a problem, and while he averages 14 tournaments each year, he is convinced that most of them are won by high-handicappers or by golfers who manipulate their handicaps to keep them high. He believes also that the handicap system is abused.

Most respondents are in favor of a system by which all scorecards are numbered. (Every time a golfer plays, he is given a scorecard with a number. The golfer then is responsible for returning that scorecard. If he does not return it with a score, he is penalized.)

The composite Associate who responded believes that courses are not rated fairly; they should be rated as they play, rather than by the principal criterion of distance. Finally, this Associate feels that the Handicap System should be more responsive, standardized, and better explained to golfers.

Yet, the HRT emphasizes that there is no such thing as the average golfer; factors such as age and handicap preclude the existence of such a mythical creature.

The survey, however, produced much information, embodied chiefly in its correlative questions, which are cross-tabulated in the Report's index. For example, respondents answered a question about the use of 96 percent of the differential in calculating a golfer's handicap, but age and handicap of the respondents were taken into account through correlative questions.

This, then, is a view of the HRT's survey, conducted under the direction of Frank Thomas, the USGA Technical Director.

SURVEY QUESTIONS ranged broadly, some personal, others aimed at the way these Americans play the game.

Do you have a current USGA handicap?

On what course do you most often play?

How many rounds of golf do you play in a typical month during the season?

In tournaments, do you score better or worse than your average?

Do you take lessons?

Assuming there is no wind and the terrain is relatively flat, how far do you hit these shots: tee shots, longest iron shot, on an average? What club do you usually use for a 100-yard shot? A 150-yard shot? A 175-yard shot? A 200-yard shot?

What kind of hazards are most troublesome for you?

Which type of hole — par-3, par-4, or par-5 — are you most likely to play in par (or better)?

Is the present USGA Handicap System fair to you?

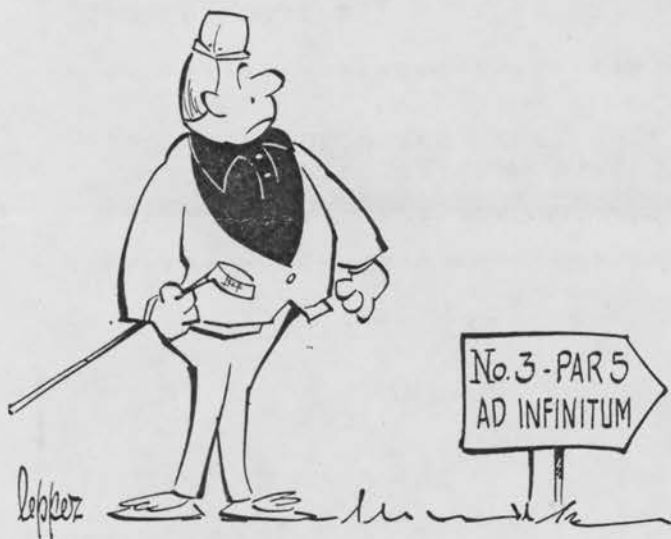
Do you think the problem of handicap manipulators winning tournaments is significant?

Responses relating to distance tended to confirm what has been suspected: we perceive that we hit the ball considerably farther than we really do. For example, of the Associates who responded, approximately 200 believe that their typical tee shot — their typical shot, now — is in excess of 275 yards. Dan Pohl led the PGA Tour last year by averaging 274.3 yards.

Of those 200, half believe their typical tee shot travels in excess of 325 yards. By contrast, through approximately one-third of the PGA Tour schedule, just over a dozen drives have gone more than 300 yards. Through the Heritage Classic, which was played at the

Harbour Town Golf Links, in Hilton Head, South Carolina, March 26-29, Larry Rinker had hit the longest tee shot, a 340-yard drive during the Inverrary Classic, in Lauderhill, Florida.

Indeed, the average drive of the 7,143 respondents to the questionnaire figured out to 224.7 yards. That is within 20 yards of Mike Reid's average drive on the Tour in 1980. It is very unlikely that the average tee shot of this group, a group whose average handicap is 14 and whose



average age is 50, is over 224 yards. It must be remembered, however, that the respondents, for the most part, were guessing; they had no means of measuring these shots accurately, because very few golf courses place markers about indicating distance from the tee as they do distance from the green. Again, this is merely how we perceive ourselves.

NONETHELESS, MUCH of the information was highly useful and interesting, despite the question of whether the responding group was typical of the much larger body of American golfers.

Some further information:

Less than 20 percent of those responding were taking lessons at the time of the survey, and a significant majority believe they play better in tournaments against lower-handicap players, whether in stroke play or match play.

Interestingly, while length may be the traditionally dominant factor in rating courses, it is 10th down the list in the respondents' assessments of their chief problems. In the opinions of the golfers, here is the pecking order of problems (with the percentages of response in parentheses): concentration (21.3 percent), consistency (13.0), accuracy (10.7), driving (8.9), putting (8.7), psychological factors (8.1), chipping (8.0), judging distance (7.2), bunkers (7.2), and length (6.9). The concentration problem ranged across all ages as the most serious.

Conversely, poor putting is believed to be the easiest problem to overcome. One-fourth of the respondents consider putting the least troublesome aspect of the game. Chipping was second (17.9 percent), and bunkers third (16.4).

NARROWNESS RANKS first among fairway difficulties (31.2 percent), well ahead of hazards situated near the landing zone (21.3). Once they are on the putting surface, more respondents found slow greens troublesome than they did fast greens, 19.9 percent to 17.7. At that, opinion was fairly evenly divided: 17.6 percent were bothered most by sharp breaks, 17.5 by long putts, 13.8 by undulations, and 13.6 by the grain.

Par-4s commandeered 47.3 percent of the votes for the holes the players are least likely to par, while par-5s appeared to be least troublesome. This is qualified, however, by the ability of the players: scratch golfers to 10-handicappers find par-3s most difficult; 11- to 25-handicappers are bothered most by par-4s, and 26-handicappers and above find par-5s most difficult.

While 71 percent called the existing Handicap System fair, a follow-up question was the key; it allowed respondents to comment on the System's strengths or failings. Of 3,368 written comments, 732 said that the System is accurate, applying equally to all. Criticisms emerged as well. For example, the high-handicapper has an advantage over the low-handicapper, the System is not policed well, and the System does not prevent tampering with scores.

Measured by the frequency of individual comments, the survey revealed that golfers who manipulate their handicaps to keep them unfairly high are very much on the minds of those questioned.

At the top of the list is the belief that the system is abused and policing is poor. Second on the list is the claim that handicap manipulators score much better in tournaments. The fourth most frequent comment is that a tournament handicap is needed to prevent manipulation. Ranking sixth is the view that numbered scorecards should be issued to players to guarantee that all scores are turned in.

The responses afforded ample evidence that the handicap is an element of golf that generates substantial interest; the survey further shows that any improvement in the existing system will not take place in a vacuum — the golfers will have their say, contributing to the final result.

(This is another in a series of articles on the Handicap System.)

The United States Golf Association would like to express its appreciation of all those Associates who participated in the survey that helped the Handicap Research Team identify the problems of handicapping. The responses were highly useful.

The editor is sorry that he could not acknowledge the beautiful gifts and prizes which were donated at the Michigan Turfgrass Benefit Day at Cadillac Country Club, on June 17th, however this information has just become available. We would like to thank therefore for their generosity and kindness the following:

Ellis Sales, Kalamazoo
 Dave Kendall, Cadillac C.C. Professional
 W. F. Miller Co., Grand Rapids
 Spartan Distributors, Sparta
 Sprinkler Irrigation & Supply Co., Royal Oak
 O. M. Scott & Sons(Jim Bogart- Jim Brocklehurst)

If you have not paid your 1981 dues, your Treasurer Frank Heminger's address is listed on the front page of this news letter. Will you please make his job a bit easier by sending your check now. Thanks.

YOUR 1981 DUES ARE PAID
 NOT PAID

SHUCKS -
 WE DONT EXPECT
 YOU TO PAY
ALL YOUR BILLS...
 ON TIME...



BEARD
 COLLECTION



JUST OURS

\$7.50 \$10.00 \$15.00 \$25.00

Our next meeting will be held on September 16th, at Grand Traverse Hilton Village. We hope to have as our speaker, one of Jack Nicklaus representatives to fill us in on what is in store for the future of golf in the Traverse area.

PLEASE PUT YOUR CHECK IN THE MAIL
 ALONG WITH YOUR POSTCARD. THANKS
