James B. Beard

## NORTHERN MICHIGAN TURF MANAGERS ASSOCIATION

WEDNESDAY,	JUNE	16th.	1982
GRAND	TRAVERSE	VILLAGE	
ACME,		MICHIGAN	
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FRANK HEMINGER. SECRETARY-TREAS. 1147 SANTO TRAVERSE CITY. MI. 49684 PHONE: 616-947-9274

The above day, date and location, are very special in that it is our 6th annual benefit day for THE MICHIGAN TURFGRASS FOUNDATION. It is more so special in that you will be playing on the golf course where the Michigan Open was played in 1981 and will again be played there July 8-11, 1982. Mike Garvale is the superintendent of this fine layout and he promises a real test of golf over this beautiful 18 holes. He also hopes that you will make up as many teams as possible of your friends and participate. The golfing event will be a scramble and everyone will be asked to make a donation of \$12.50 per person for the grand cause which will benefit every friend of turfgrass in Michigan. In addition a charge of \$10.00 per person will be made when you register and this will be your share \$7.00 for  $\frac{1}{2}$  cart and \$3.00 into the prize pot. We would also like to see friends and suppliers who will volunteer prizes and we hope you will participate without being asked. Please bring your contributions to the party.

So get busy now with your groups and remember that you must have a starting time between 9:30 A.M. and 2:00 P.M. The number to call for this starting time is 616/938-1620. Doug Grove, is the golf professional and the Pro Shop is on the first floor of the Sand Trap, located on M-72, east of the intersection of U.S. 31 and M-72. Lunch is available at the Sand Trap restaurant, the same building where you register and pick up your golf cart. Besides Mike Garvale as golf course superintendent, he has as his assistants, Gary Pulsifer and James R. Olli. All three are members of our Association. We suggest that you keep in mind that this tournament will be, "<u>Better</u> <u>Ball of 4 Scramble</u>". So get busy, get your groups and get on the telephone for starting times.

Dinner will be served at 7:00 P. M. in the Hilton Hotel. So regardless if you play golf or come for dinner only, please schedule your actions accordingly. Those of you that come for the meeting and dinner only, please keep in mind that you should make a donation to the Foundation fund. The Hotel must know the number that will be there for dinner and as usual we are enclosing a postcard for you to list your guests as well as yourself. This postcard must be returned to Frankfort by June 10th as that is the date report back. In addition, there will be a prize for someone returning a card and you do not have to be present to win. Our winner last month was Fred Bond of Hidden Valley. His name was drawn at the Traverse City meeting and he received his present then. Your postcard should get action immediately.

We are most fortunate in having as our speaker for this occasion, Mr. Jim Latham, Manager Marketing and Agronomy, Milwaukee Metropolitan Sewerage District. This gentleman has traveled to many corners of the globe and has seen thousands of golf courses in his duties before and since being with Milorganite. His slides are among the finest, his words of wisdom something which we cannot afford to miss and so we have an outstandingtreat in our speaker.



## **Replacing Poa Annua With Bent**

by: Warren Bidwell

Trained in landscape architecture at the University of Cincinnati, Warren Bidwell is the manager of the golf course and grounds of Olympic Fields Country Club, near Chicago. As advisor to the growers of Penneross and Penneable bentgrass during the last 12 years, Warren has had an opportunity to travel to many other countries, and to address turf conferences around the world.

In dealing with this old and very frustrating problem is there really anything new under the sun? I suspect you are, like myself, forever looking for either a new idea with which to deal with the subject, or a different approach using an old idea.

It certainly is not my intent to tell you how to do your job, for I can only relate my personal experience and that of others in dealing with Poa.

A short history, then, is a good starting place. For Poa is not a new subject. I can easily recall the presence of this weed-grass when I began caddying in 1929 at Clovernook C.C. in Cincinnati, Ohio.

During the past fifteen years I have had the good fortune of worldwide travel under the sponsorship of turf interested firms, and I can assure you that Poa is a universal problem applicable to all climates, knowing no geographical bounds.

Almost no Poa is found in the desert country golf courses, of the U.S.A. But at the Furnace Creek Inn Golf Course in Death Valley, Calif., where the temperature has reached 137° in mid summer, there it was growing in the compost piles in November. In Capetown S.A., it was in abundance on a course overlooking the Indian Ocean, as observed in November of '74 during the NCR sponsored S.A. open.

On the many courses of Spain, Australia, New Zealand and Japan, the usual question was always straight forward. "What do you chaps in the States do with Poa Annua?

Further questions always indicated a line of thinking that went something like this. "You rich Yanks should be able to handle it, you spend more money on turf maintenance than anyone else in the world." How true! Could it be that we encourage some of our own problems with this pest weed-grass?

In support of this question, and the beliefs of quite a number of professional turf growers today, I offer the following quote from Mr. Richard Tufts, past president of the U.S. golf association. "Golf under the more

natural conditions under which it is played on the British link courses, is a far better sport. The overmanicuring of our courses to meet the demands of our golfers has injured the game. Things have to be too perfect with us, and the only practical excuse for the maintenance of our roughs in almost fairway condition is the problem of delay in play created by lost balls."

I often recall our determined efforts to rid ourselves of Poa via the tri-calcium arsonate method; how many of my friends went down to defeat and lost their jobs because of their efforts. Then later on the membership realized he had more on the ball while going in this direction than they had realized. The success of this type of program takes years and, most of all, patience on the membership's part for positive results; that improved turf by replacing Poa with bent was possible after all. For the lack of faith, a good program was dying about the time EPA put an ax to the manufacturers of the product because of poor working conditions in the plants.

Why, then, have we pursued the challenge to rid our courses of Poa Annua? Again, quoting from the Green Section magazine, "A golf course superintendent would simply not survive in the U.S. with the turf management practices commonly followed abroad. Our golfers demand quality turf and uniform playing conditions. Our climatic differences dictate a total turf management effort; disease control, weed control, optimum fertility levels, uniform irrigation, soils to resist compaction, etc. The climatic factors and the turf use factor alone takes all the argument out of "who grows the best turfgrass in the world?" The question is irrelevant. Suffice to say the turfgrass plant, through good management, can be successfully grown around the world and under a tremendous variety of climatic conditions. It's a marvelous plant! It usually demands good management, and to grow it well, our constant attention. Turfgrass management is

fession."

Bob Shields, Supt. of Woodmont, and former president of G.C.S.A. took this approach. "I spike my greens monthly between April and October, two ways if necessary, and apply 1 pound of P. Cross per green." Bob only airified during August, verticutting the cores from his excellent soil structure. In ten years he transformed his mixed POA-SEA-SIDE BENT to all P. Cross Greens. Such a program depicts a good procedure in action, one that least disrupts the playability and gives little cause for concern from the membership or the superintendent.

There are other variations to be found in use around the country, like the monthly light top dressing programs of sand, accompanied by over seeding. This program drew a full house when presented by Dr. Madisen during the G.C.S.A. conference in Portland, Oregon a few years ago.

While at Wing Foot during his "1st time around", Sherwood Moore achieved some degree of satisfaction in eliminating Poa from fairway turf using an old timer, Endothal.

During my return trip to Australia last May to participate in their 6th national program in Hobart, Tasmania, I observed a very successful program using Endothal and a new product, Ethofumesate, marketed under the Australian trade name "Turmat". Upon my return, I wrote Ted Gilligan, superintendent of Tasmania Golf Club concerning his program, and I quote from his reply. "The chemical you speak of is Ethofumesate, which Scherings are going to market under the trade name of "Turmat". This is the product that is called "Tramat"; it is the same chemical but not registered for fine turf. The rate that I use this material is 1.5 litres of Tramat to 1.000 litres of water to 1 hectare or 2½ acres. As you can see this is a very low rate of water to that given area. I use this in the autumn, April/May and use Endothal in spring and summer also the center of a very humbling pro- at the same rate, but at 10 - 14 day Credit GREENMASTER

intervals, rather than 3 to 4 weeks as recommended by the manufacturer. The rate of the manufacturer is much higher than what I use which probably accounts for longer periods between sprays by them. I find that I cannot use it here when frosts are imminent."

The views of Dr. Roy Goss, Washington State University are reported in the August 1980 issue of Golf Course Management.

"It is the obligation of professionally dedicated turfgrass researchers and golf course superintendents to provide the best quality turfgrass surfaces and grasses with the least number of management headaches. With constantly increasing operations and maintenance budgets, we must search for methods of reduced maintenance costs including labor and materials. Bentgrasses have a wider range of adaptation for putting greens in North America than any other grass. There are fewer problems associated with the care and maintenance of bentgrass by far than the management of Poa Annua. Considering summer heat stress and winter desiccation factors, alone we find the survival rate of bentgrasses significantly better than Poa Annua. On the disease front, fewer fungicides are required to maintain excellent quality bentgrasses than Poa Annua. Although some hand syringing may be necessary under extreme summer conditions with bentgrasses, labor can be significantly reduced as compared to managing pure strands of Poa Annua. As a matter of fact, a little stress tends to tip the balance in favor of bentgrasses rather than Poa Annua.

Investigations have been continuing as part of our turfgrass project at Washington State University's Western Washington research and extension center at Puyallup, Washington, on the methods of controlling Poa Annua since 1958. As early as 1961, we knew the value of pre-emergence herbicides in controlling the germination of Poa Annua. Since that time a great deal of effort has gone into nutritional management with special emphasis on the use of higher levels of sulfur, reduction of phosphates, maintaining adequate levels of potassium and moderation in the use of nitrogen. Unquestionably, irrigation plays a vital role in balance between bentgrass and Poa Annua. Over-irrigation is one of Poa Annua's greatest

### Replacing Poa Annua (continued

allies."

At this point I believe we should broaden the subject to include fairways, then ask the question, "Why replace Poa Annua with bent?" In geographical areas that cover both the cool season and warm season turf growing region, we know from ex-perience that Poa has some very basic weaknesses that show during the stress of the summer months, a time when our turf should provide the best possible playing condition. Lack of ability to cope with the H&H twins (heat and humidity) are the first to come to mind. Unfortunately, the negative aspect of this weed-grass does not end here. Short roots and susceptibility to summer turf diseases provide additional points against trying to live a successful professional life with Poa, because we may be reminded of the famous beer T.V. ad, "When you're out of Schlitz, you're out of beer", or more aptly put, brown is bad, green is good. Bringing this subject into sharp focus, we must recognize that our turf scientists have clearly demonstrated that bentgrass develops a far greater root structure than Poa, requires less irrigation, and responds more favorably to a well timed program of fertility to help ward off the rigors of summer problems. This is most important as we go into the 80's and must face the escalating cost of producing satisfactory turf for our membership. With the upward swing of P. Cross and P. Eagle seed production, plus price adjustments at the consumer level, we can look forward to greater incentive toward converting from POA to bent.

> All business is really the art of pleasing, and only the man or woman with the right kind of personality can please. Personality goes to the root of a person. A 24-carat personality carries with it all the qualities that make up the finest type of manbood. We cannot wear the right kind of personality and be the wrong kind of person. B.C. FORBES



AUGUST 1981

### THIS IS THE WEEK THAT WAS -GREENKEEPER'S DIARY

by Bill Smart (Reprinted from Heart Beat)

MONDAY - Want to spray bad dollar spot on greens. Cushman won't work. Sprayer won't work. I don't want to work. Nobody else wants to work. Two of the crew stayed home and did not work. Just had a phone call that the Junior Golfers are to have a shotgun start on both nines at 8:30. Hung up in the caller's face. Should not have had that last beer last night. Mowed greens and tried not to notice that the cups needed changing and the dollar spot is even worse than I thought. Did not mow 13. Hate it. Between the winterkill, oil-spillkill and the disease, we ought to tow it to the SPCA and have them put it to sleep. Chairman left message at the Pro Shop to get in touch with him at once. He better not hold his breath. Hit 95 by late afternoon. Late for supper, wife mad, supper lousy, I'm mad. Watered 'till dark. Showered and went to bed. Wife sexy - I'm not.

TUESDAY - Went in at daylight the air feels like a police dog's breath. Got the sprayer working. Can't figure out why the chemical companies package dusty chemicals in bags that are impossible to open without getting it all over yourself and the sprayer, not to mention breathing it. The cheapest cereal on the market is packaged in easy-to-open-and-close containers. We all should go granular - that would snap their eyes open. Fairway tractor stuck in wet spot right next to the huge localized dry spot the crew calls Iran. Why are there so many cars in the club lot? The Pro Shop says it is a ladies member-guest transferred from another club that had a fire in their kitchen. I think I'll set one in ours and let them eat at Burger King. Go home early -sleep thru supper. Wife mad again, too tired to be mad. Mow rough 'till dark. Showered and ate cold left-over supper. Felt sexy - wife still mad from early evening. Lost interest.

WEDNESDAY - Slept late, went in at 7:00. Changed cups 18 greens, hit 14 rocks. No record, but close. Thirteen green has disease that looks like vomit . on close inspection it is vomit - what a relief! You can always hose off vomit. Birds working on greens - how many cutworms does it take to fill up a crowl I think their mother was raped by a rooster the way they scratch with black toenails and dig with their breaks. The member who owns the ice cream plant told me we need more sand in the traps I told him his maple walnut needs more nuts. He said, "Times are Tough" l agree. Went in the club for a cup of coffee and the manager asked me if I knew anything about the septic backing up. Left without getting the coffee. Fairly normal afternoon except we are down to one cushman. Are flat tires contagious? Home for supper at the right time for a change - no one is home. Note says heat a TV dinner. Go down to the Old Eagle Inn and wash a steak down with a half-dozen hinnies. Finish mowing rough. Wife mad. Don't care. sleep on floor after watching Sands of Iwo Jima. Love Big Duke.

THURSDAY - My yellow crud is back. Every year it comes the end of July. Interesting light green spots get weaker looking then turn yellow . . . then gray . . . then dead. Some say it's Fusarium, some say anthraznose, some say.fu-nose. Wife says it's my imagination. My assistant got rid of the persistent red leaf spot patch on the practice green, he cut it with an eight-inch patcher and threw it in the pond. Sure is wonderful what they teach at the U. of Mas. . .

FRIDAY - In at dawn again and fell over the barn dog before I could get a light on. Friday is the day we do EVERYTHING. Assistant late again, sometimes I wonder about him. He wouldn't even hold still when I had to cut the bubble gum out of his hair, got mad because I cut his headband. This is the day I was going to spray because I missed last Friday that should have gone on the Friday before that. Maybe Monday. Maybe by then the cutworms will have turned to moths and flown away. Looped around the course in the pre-dawn light and saw four joggers, a mushroom picker, two ball hoppers in the pond, three members walking dogs, an old Italian lady cutting dandelions and a partridge in a pear tree. Threw a rock at the last mentioned. I love the course early in the morning - so quite, so peaceful and tranguil. I think I'll call the state troopers and have all these people arrested. Picked up the remains of a big beer party by the 15th then went to work.

SATURDAY – Everybody in the world laves weekends but Greenkeepers. More turf disasters have happened on Saturday and Sunday than all the Mondays, Tuesdays, Wednesdays, Thursdays and Fridays put together. Right off the bat four pins and a dozen markers missing and the usual moronic messages written in the sand traps . . . why can't they write inspirational thoughts or the weather report? A neat group artied last night. All imported beer, an empty Southern Comfort bottle and two Cutty Sarks – members' kids.

SUNDAY - Greens mower failed to show 'till I had mowed five greens, I would have fired him, but then I would have had to finish. Things looking pretty good today. Can't wait 'till Monday to see what the hell will happen next.

After hours of exhaustive study and millions of dollars spent, the government has determined the mortality rate for smokers and non-smokers is exactly the same — 100%. The only difference is in the timing.

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## Upgrading the K301 Kohler Engine

I am writing this article because I feel my mechanic and I have found a very inexpensive way to upgrade the Kohler K301 twelvehorse engine.

Since I have been at Troy C.C., we have had a problem with the Super Pro and Greenmaster, three triplex mowers overheating. Discussing this with other superintendents, I have found this to be a problem on hilly courses, such as ours with this engine.

Four years ago, we purchased a new Greenmaster three triplex mower. It had a new upgraded engine, the K301 fourteen horse. The added two horsepower was enough to alleviate our problem. We also learned the manufacturer had upgraded the Super Pro engine in the same manner to solve the overheating problem.

Three years ago, we were going to put short blocks on our Super Pro and Greensmaster three, which had the twelve-horse engines. Both engines have had the cylinders bored to .030 a few years before. We thought we could not have them bored again because the cylinder walls would become to thin.

We began comparing the K301A fourteen-horse engine with the K301 twelve- . horse engine. The model numbers being almost the same meant the blocks themselves were identical. Only the specification numbers were different, meaning internal parts would differ. With a Kohler small engine manual, we started comparing the different specifications. We discovered the only difference was the cylinder bore size. In the twelve-horse engine it was 3-3%" verses the fourteen-horse which was 31/2". This being the only difference, all we needed to purchase was a piston and a set of rings for the fourteen-horse engine. Then we took the engine to a machine shop and had the cylinder bored to 31/2". We put the engines back together, and these two machines are currently in their forth summer of use. They have never overheated and have performed as well, if not better, than I could have ever expected. Our cost analysis was a savings of approximately \$325. on the two machines.

I am passing this information along as it is an easy way to upgrade these engines at very little cost. Mark Graves

Credit: Our Collaborator

A salesman had recommended a particular toy for a young boy's birthday present. The boy's mother asked, "But isn't this too complicated for a fiveyear-old?"

"This, Madam, is an educational toy designed to prepare him for life in today's world," the salesman replied. "Any way he puts it together, it turns out wrong."

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# New Fusarium Blight Treatment by Dr. Joseph M. Vargas, Jr.

he debate among plant pathologists still goes on over the cause of the disease known as Fusarium blight. However, while the debate of the cause or causes of Fusarium blight goes on, a new chemical management tool has come on the market.

The fungicide is triadimeton which will be sold under the trade name of Bayleton. It has been one of the most effective fungicides for the management of Fusarium blight in research trials at several universities including Michigan State. Triadimefon is different from other Fusarium blight fungicides in that it is only effective when applied as a preventive treatment. Other Fusarium blight fungicides can be applied either preventively or curatively. This means if triadimefon is to be effective it must be applied to the turf before Fusarium blight symptoms appear or before the "frog eyes" from previous years become active again. This will vary from one location to another. One should check with the turfgrass experts in their area to determine the date when Fusarium blight normally occurs. Triadimefon should be applied 2-3 weeks prior to the time Fusarium blight symptoms normally occur.

The exact rate for effective management of Fusarium blight with triadimefon are still being investigated. The test results range from 2 oz/1000 sq. ft. to 8 oz/1000 sq. ft. and from one to two applications/season. This should not be surprising considering the confusing nature of this disease. But even more important in explaining the rate difference may be the cultural regimes under which the Kentucky bluegrass was maintained. Kentucky bluegrass turfs maintained with good cultural practices should have milder outbreaks of Fusarium and, therefore, lower rates should be more effective in managing Fusarium blight. Fungicide treatments are far more effective for more diseases where good cultural practices for disease management are followed.

Good cultural practices for Fusarium blight management consist of nitrogen fertility in the summer months and light frequent irrigation during the warm weather. Kentucky bluegrass turf undergoing senescence (natural aging and dying) is more susceptible to Fusarium blight than those not undergoing senescence. Nitrogen fertility in the summer helps prevent the Kentucky bluegrass from undergoing senescence. This goes against traditional beliefs of only applying nitrogen in the spring and the fall on Kentucky bluegrass and avoiding summer nitrogen application. However, these recommendations were based primarily on research demonstrating the times of year Kentucky bluegrass could best utilize the nitrogen coupled with data showing high rates of nitrogen makes Kentucky bluegrass more susceptible to heat and drought stress. This would all be relevant if your primary goal was "growing grass" but it isn't, or at least it shouldn't be. The primary goal of any turfgrass manager should be "maintaining turf". More explicitly maintain healthy, dense, pest-free turf. Whether the plant can better utilize the nitrogen in the spring and fall compared to the summer is not the point. The point is Kentucky bluegrass needs some nitrogen applications in the summer to avoid senescence and severe Fusarium blight outbreaks. While excess nitrogen, 2 to 3 lbs/mo. in the summer, may make Kentucky bluegrass more susceptible to heat and drought stress, 1/2 lb actual nitrogen in June, July, and August will not noticeably increase Kentucky bluegrass susceptibility to heat and drought stress and it will reduce its susceptibility to Fusarium blight.

Light frequent watering also goes

against traditional beliefs of heavy infrequent irrigation to encourage deep root growth. The idea behind this is that the soil will dry from the top down and the turfgrass root will grow down in search of moisture. Heavy infrequent irrigation will encourage deep root penetration in the spring and fall when the soil temperatures are cool. However, regardless of how a turf is irrigated in the summer, the natural tendency of all turfgrass species is to have shorter roots in the summer when warm soil temperatures occur. Therefore, the argument for heavy, infrequent irrigation to encourage deep root growth in the summer is not valid.

Light, frequent irrigation does reduce the severity of Fusarium blight. Its action is probably three-fold. One, it supplies water to Fusarium blight infected plants that have only short root systems. Secondly, if applied at midday, helps cool the turf better enabling it to survive heat stress. The third effect may be the encouragement of microorganisms which are antagonistic to the Fusarium fungi or other precursors of Fusarium blight.

The lawn care industry now has a new fungicide for the management of Fusarium blight, triadimefon (Bayleton), to go along with the other fungicides Tersan 1991, Fungo 50 and Cleary's 3336. The main difference with triadimefon is that it must be applied preventively before Fusarium blight begins to develop. Regardless of which fungicide is used to manage Fusarium blight, it will be far more effective if it is incorporated with good cultural practices discussed above.

The doctor explained to Walters that he had a serious ailment for which an operation was absolutely imperative.

The patient turned pale and asked, "Isn't it very dangerous?" "Yes," the doctor replied. "Five out of six who have this operation die, but as for you, you have little to worry about." "Why not?" eagerly inquired the patient.

"Well, you see you're a cinch to recover because my last five patients died," the doctor reassured him. The Bagpipe

Dr. Wm. H. Daniel, Purdue University reports that the phone number listed in your membership booklet for him is now obsolete. A new computer-type phone system has been installed and the new numbers should be listed in your booklet:

W.H. Daniel	317/494-4785
Ray Freeborg	494-4784
Jo Horn	494-8039

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Michigan State University through funds donated by the Michigan Turfgrass Foundation has installed a "Code-A-Phone" answering service for turfgrass. Each week a new message will be available to anyone calling and this message will give suggestions on disease outbreaks or warnings, the same on other problems involving turf, plus if you have a problem and would want an answer, you can leave a message asking them to contact you and they will do so within 24 hours to try to aid you in your problem or need for information. This service will be available to all professional turf managers and is not available or designed for the home owner. Home owners should consult their county agents who in turn could use this service. This service will be available when you receive this letter and please mark down the number in the membership booklet: 517/355-5221

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Better turfgrass management decisions can be made if grass characteristics are studied according to a nationally recogonized turfgrass scientist at Texas A & M. The study of root growth characteristics in the rhizatron of the TAMU Turfgrass Field Laboratory revealed this vital finding, according to Dr. James Beard, turf and crop physiologist with the Texas Ag Experiment Station. The root dieback occurs, Beard says, at about the same time as spring greenup of grass, when it begins to put out new leaves. If you seek to encourage' new growth of leaves and applications of nitrogen can kill or damage grass. Instead of fertilizing with nitrogen, in early spring, adequate fertilizer applications the previous fall should be made to sustain spring growth. Delay nitrogen applications until two or three weeks, after greenup. Mowing of grass needs to be done, Beard says, with care and understanding. Mowing reduces the amount of the plant available to intercept sunlight and manufacture plant food for growth

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★★★ "Does this union have any death benefit?" "Yup. When you die, you don't have to pay any more dues."

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No man is a failure who, after he has blundered, picks himself up and says, "I'm smarter now." When your undertakings don't pan out as well as you hoped, bear in mind that the projects through which other persons have achieved dramatic success are the result of experience gained in trying things that *didn't* work. Edison is the most famous example. He tried a thousand different ways to perfect an electric light without success. After each one he knew more than he did before. He didn't call his miscalculations failures. He called them "experiments." Try calling yours that and see what it does for your morale. The Little Gazette

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June 16th, Grand Traverse Village, just north of Traverse City on U.S. 31 to M-72, east on M-72 to Sand Trap, north side of M-72 about  $\frac{1}{4}$  mile form intersection. Make your starting times and mail your post card today. Thanks.