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September/October 1986

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# A PATCH of GREEN

**PERIODICAL**

**ANNUAL MEETING -**

**October 22**

**GOLF DAY - October 6**

**SERIALS**

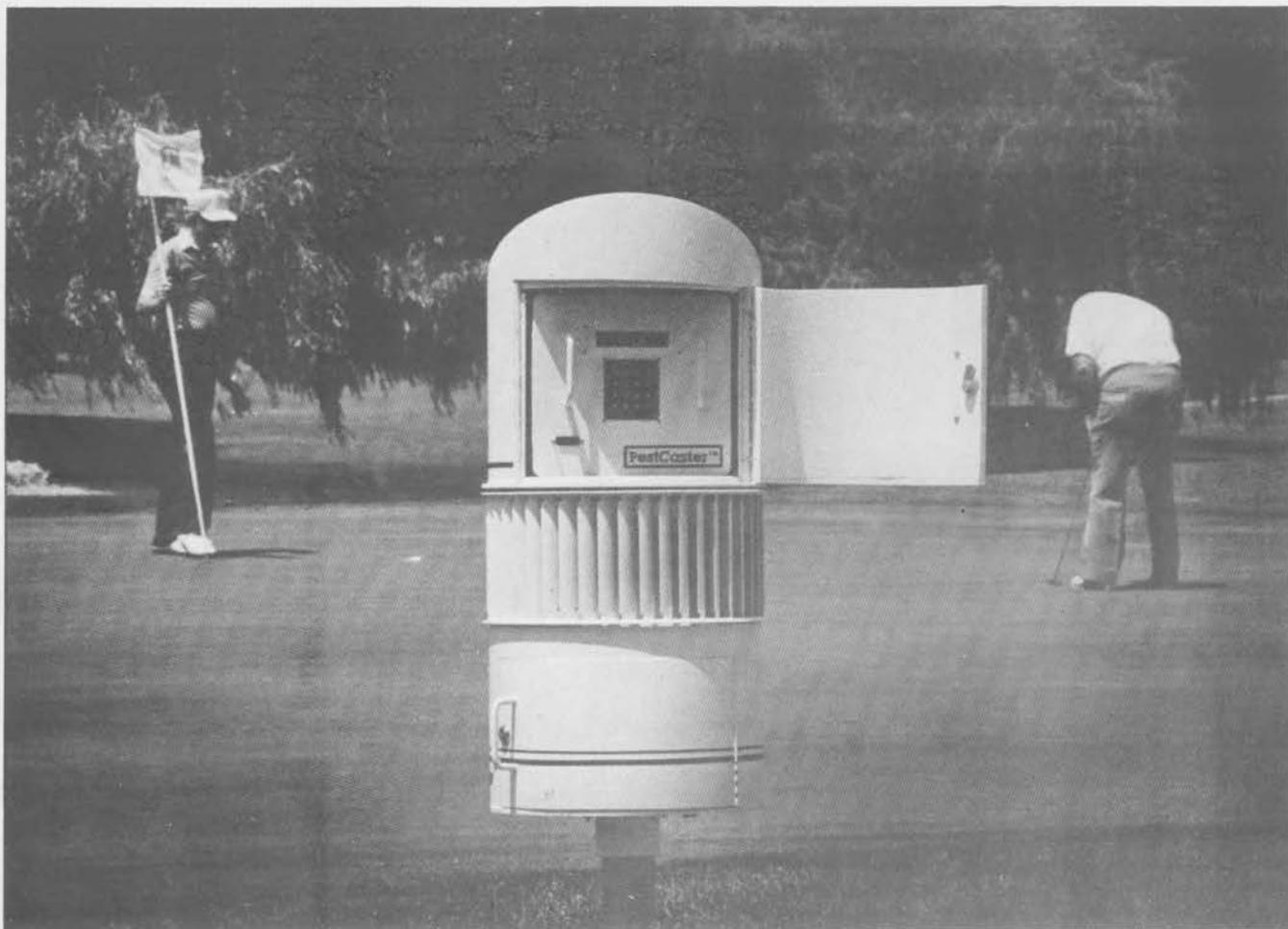
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## PRESIDENT'S MESSAGE

With the summer months behind us and fall just around the corner I'm sure everyone is relieved to be past the high stress months of July and August. Greens and fairway aeration will be on all of our lists, along with construction projects planned for the fall. It's the time of the year when turf will have an opportunity to recover from what I felt was, at times, a very busy and trying summer. I'm hoping that this fall will not be as wet as last year's or I may not get anything accomplished.

During the hot spells of the summer I hear many superintendents comment, and I include myself, "I'll be happy when November gets here". Or, "I can't wait until the snow flies". Well, November is just around the corner and now I feel guilty that I wished part of the year away due to a few hot, humid days. Time goes by too fast as it is. What we all need to do during these hard times is to maintain a positive attitude and to not let the strain of the summer affect our performance and our lives. Try to keep everything in perspective as it will only benefit you.

I also notice, during July and August, a tremendous amount of communication between superintendents. Everyone is sharing information and ideas as to the best methods to prevent and correct turfgrass problems. This is part of the make-up of a golf course superintendent. The ability to help each other in times of trouble and hardship. Let's keep the communication channels open between us all.

Put down on your calendar the date of October 22 as the day of the MBCGCSA annual meeting. Please try to attend this very important meeting. You will be briefed on the state of the MBCGCSA affairs during 1986 and you can voice your opinion as to the direction your Association is taking. The nominating committee has met to determine a slate of candidates to run for officers and directors of the Association. By attending this meeting it will allow you the opportunity to choose the candidate of your choice. If you are unable to attend you are permitted to submit an absentee ballot. (Contact Tom Mason for further information.) The list of candidates is strong and I encourage all candidates to campaign for election.

It is vital to keep our Association active and strong. Your attendance on October 22 will provide the means to help attain the present and long-range goals of the MBCGCSA.

Everyone have a great Fall.

Sincerely,  
Kevin Dushane, CGCS

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## NOW HEAR THIS, YOU GREENKEEPERS

For those of you who take the condition of your golf course for granted, it is time you understood that it's not easy being green. And it is expensive. Even Kermit the Frog could tell you that.

A study conducted by the National Golf Foundation and the Golf Course Superintendents Association of America jointly revealed that \$1.7 billion is spent each year to maintain this nation's golf courses.

A breakdown of the total indicated that \$137 million is spent for new maintenance equipment, and \$103 million is laid out in the improvement of existing facilities. The remainder, nearly \$1.5 billion, is the outlay for operating costs.

In light of this, a memorandum about golf course superintendents written by William H. Bengueyfield, National Director of the USGA Green Section, in the wake of the 1985 United States Open, at Oakland Hills Golf Club, in Birmingham, Michigan, takes on special meaning.

Bengueyfield wrote, in part:

"A golf course program of maintenance and management is an intricate combination of men, material, timing, climate, grasses, science, art, and much more.

"The modern golf course superintendent is first and foremost a grower of grass, but he draws his information from an extremely broad and increasingly technical field. He must have some knowledge of plant nutrition, plant pathology, entomology, weed control, pesticide laws, and he must be licensed and pass a state examination for the application of pesticide chemicals. He must have an understanding of irrigation techniques and design. He must have an understanding of plant life in general.

"He must know how to handle men (and members) effectively. His crew is largely comprised of low hourly wage-earners, often temporary or summer laborers, undependable and unskilled, and yet they are expected to operate pieces of equipment efficiently, carefully, and courteously.

"He must have ability as a mechanic, landscaper, and a keeper of records.

"He must prepare a budget and know how to live within it.

"He must be a planner and a purchaser, and it sometimes helps to have a thick skin.

"He must know and be responsible for everything that is going on, and usually it's going on over 150 acres or more every day of the season, seven days a week. A tee marker is out of place; a \$30,000 mower is unoperative; disease attacks; a restroom is unclean; a ten-inch irrigation line breaks at 2 a.m.; crewmen fail to show up for work; a new green chairman wants to cut the budget or begin a pet project with inadequate manpower, equipment or money.

"When everything is right, he rarely receives credit ('the weather has been good') or even a word of praise. When things go wrong, he is considered to be directly responsible, and every member, being his boss, holds him personally accountable, and usually incompetent.

"The superintendent who survives and devotes his life to his profession brings a certain perspective, a tradition, an enduring philosophy to how 'his' course should play. The philosophy is not just learned, but evolves through a combination of experience and education over a period of time."

And, to amend Bengueyfield's observations, Herb Graffis, the venerable American golf writer, wrote:

"As an elite company of guys who brighten the planet with their grasses for golf courses and playgrounds, superintendents, greenkeepers, and others (may) pause and look at the sports stage-setting they and God and their teammates have created and have the rich, undeniable contentment of accomplishment. Show me anybody else in business, art, gardening, music - anything - who has done any better to make a lovely picture for living!"

So, at your next chance, smile or say a kind word to that fellow who adds a quiet touch of beauty to your golf surroundings.

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## GREEN COMMITTEE REPORT

Our bunkers present a continuing problem for our members. For one thing, they have too much sand in them. For another thing, they don't have enough sand in them. For still another thing, the sand that we use is the worst possible stuff. And here is another other thing, studies by some of our members,

CONTINUED PAGE 17

# What You Don't Know, CAN Hurt You

Whether you're looking ahead to your own retirement or considering a company program to help employees plan for theirs, there are several basic factors that should form the groundwork for your thinking. The first - and one that probably sums up all the others - is that most people simply don't know how to retire. What's more, most of them don't realize that they don't know what retirement is all about - and even those who do realize it will seldom admit it to anyone else.

With this in mind, a sizable number of companies have already set up some kind of retirement planning programs for their employees, and a growing number are at least considering doing so. There are many difficulties, of course. For one thing, people approaching 65 are sensitive about letting others know that they want to be taught something, and they don't like the idea of becoming part of a class or group. At the same time however, individual counseling is prohibitively expensive in some cases, especially when employees who are nearing retirement age are scattered throughout geographically decentralized parts of a large corporation.

A recent survey carried out by the California Institute of Technology indicated that many companies are interested in preretirement planning, but they are hesitant about appearing to intrude into an employee's private affairs - and they are aware that a counseling service designed to give advice on the economic, legal, medical, and psychological problems of retirement can be an expensive proposition. To help solve these difficulties, the authors of the CalTech report have suggested a "model" program and a variety of ways in which it can be adapted to differing company situations. Other educational institutions, such as the University of Michigan and the University of Chicago, have also conducted research on retirement, and almost any public library has a long shelf of books on the general subject.

It is possible to use the available information to construct a program that will be of genuine assistance to employees nearing retirement age, if you concentrate your attention on the basic areas of ignorance and misinformation about the subject.

## INFORMATION AND MISINFORMATION

Starting with the premise that virtually nobody knows how to retire and that virtually nobody will admit it, you can teach employees five things they need to know - and you can point out why five more things that they think they already know are probably wrong.

## GEOGRAPHY

The first thing that people facing retirement need to know is simple geography - the kind that used to be taught in the sixth grade.

Most people of retirement age are inclined to be discontented with the environment in which they live. Surely, they think, something somewhere else must have more glamour. They do not know that hurricanes and snakes and insects and a perpetual army of tourists crawl across the peninsula of Florida; that tumbleweed and 110-degree heat roll down the streets of Arizona; that California was never meant for Social Security; that real estate operators in the Ozarks get rich selling chicken farms to retire city slickers.

I don't know why 65-year-old people don't know such things, but they don't - and they would be much less discontented with the place they live in now if they knew a little about other parts of the country.

## MONEY

The second thing they should know about is money. Most people do not have the money sense that is necessary if they are to prosper in retirement. They don't realize that a fortune of \$50,000 would not keep them in retirement in the style to which they are accustomed: Drawing 8 per cent interest, \$50,000 would yield \$4,000 a year, or \$77 a week. Yet people leave all their money in savings accounts or in certain government securities, where they get half or a third of the return that they could get from other safe investments - at a time when the extra income is vital. They cling tenaciously to life-insurance policies that they bought at age 38 to protect their young wives and children, and which at 65 have no validity in their lives. They jeopardize the security of their spouses and an inheritance for their children because they don't know how to leave their money behind them when they die. And in many cases, they don't even know that they don't know.

## SOMETHING TO DO

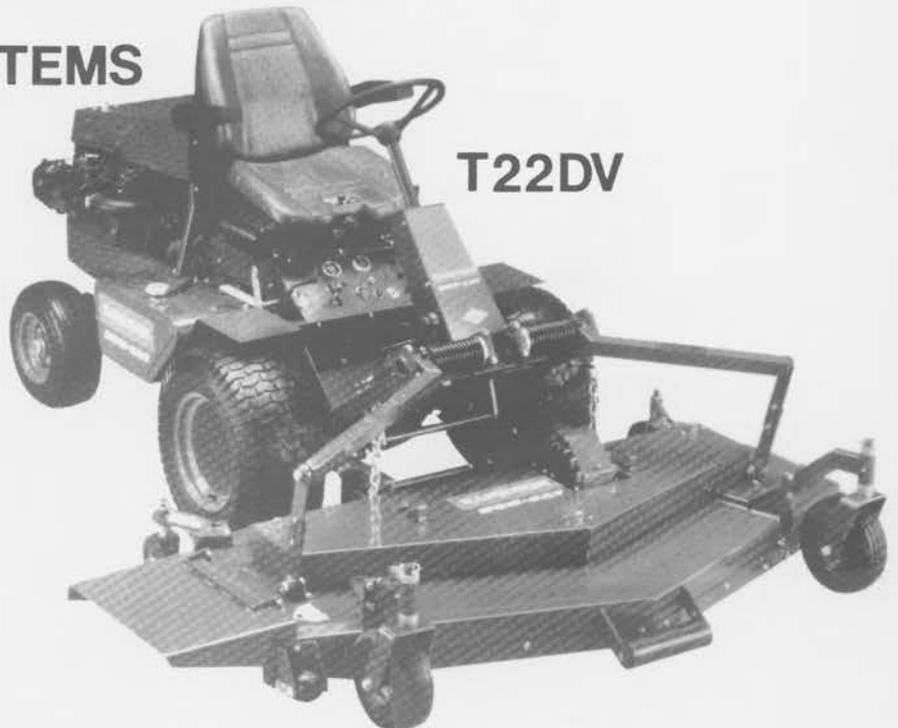
The third thing retiring people should know is the importance of a job - something to do. It doesn't matter greatly what it is, as long as it is substantial enough to be absorbing. Much of the counseling for retirement has failed up to now, not because it is not needed, but because the things that have been taught have had too little substance. In most cases, hobbies

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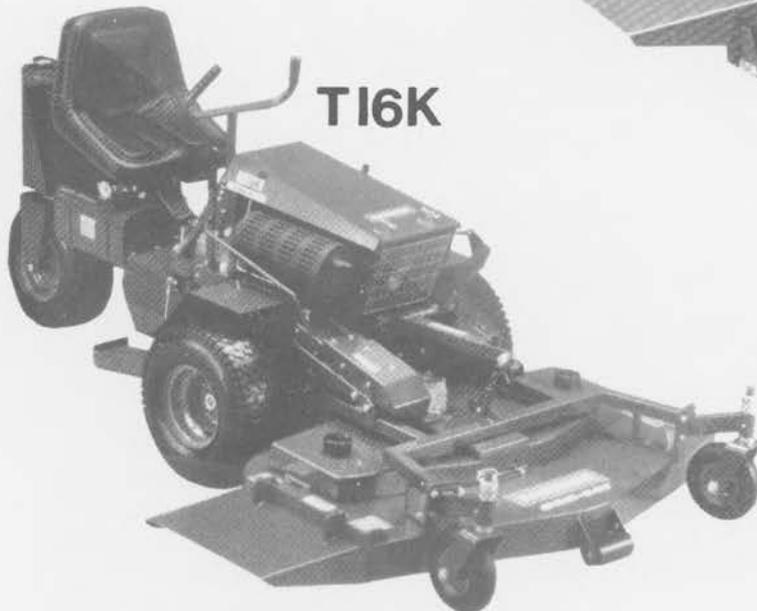
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# THE BUNKER SAND TRAP

by Judith Ferguson Gockel  
Agri-Systems of Texas, Inc.

Choosing a new bunker sand has many of the elements of organized gambling; if you are lucky or particularly skillful you could win, but the odds are not on your side. It is possible to even things up, if some of the basic guidelines for making the selection are observed.

In the laboratory, several factors are taken into account. We make recommendations based on particle size, distribution of the particles, particle shape, color, cleanliness and cost. After we have done all that, we then bring the whole thing into the real world, by firing a golf ball into a pile of the sand almost horizontally and then dropping it from a height sufficient to achieve something close to terminal velocity. If the material passes these tests, it is going to be fine.

For the individual in the field, doing the selection, there are some points to consider. The first consideration is particle size. Experience has demonstrated that having the majority of the particles in the .25MM to the 1.0MM range provides the most satisfactory results. By majority, incidently, we are referring to 85% or more of the material, not merely a percentage large enough to elect a President.

Particles exceeding 1.0MM work their way toward the top of any aggregation, while the fines are moved downward through the coarser materials. Any mixture of particles will demonstrate their characteristic while achieving stability.

Large particles blasted onto the green can cause damage to equipment, as well as becoming an uncomfortable hazard to bystanders. Deposits of the recommended sand range are usually very similar to the material used for topdressing; consequently they create few problems. An excess of fine particles often indicate the presence of significant amounts of soil materials; these associated silts and clays can create serious drainage problems, or complicate existing ones.

It is most desirable to have the bulk of the particles in the .5MM to .25MM range, except where frequent high or gusty winds occur. In this instance, it is advisable to go to the larger size range.

Particle shape is harder to determine and is largely a subjective determination in the field. There is no national standard for sand; one company's mason sand may be another's concrete or glass sand. You can at least request an angular or sub-angular sand, which terms have loose meanings to most suppliers.

The problems engendered by round sands make a determined search for angular materials worthwhile. Round sands are theorized to have been windblown at some point in their history; the forces which create them are too great to have been mere water movement. They are inappropriate for most golf course uses, since they shift under pressures of various sorts. A good analogy is a boxful of ball bearings. If you apply pressure at any point everything moves eventually. Pity the hapless golfer, slowly sinking beneath a tide of encroaching sand, while slashing hopelessly at his invisible ball.

Angular materials have some flat sides which interlock with those of other particles, establishing stability quickly, and retaining it well in the long term. It is possible to go too far into the region of the angular, truly sharp sands may pack too hard, making explosion shots difficult. These determinations are difficult to make without special techniques, and these sands are best selected with a laboratory procedure.

The term "angle of repose" is related to particle shape; the more angular the particle, the greater the angle of repose. The material is piled to the highest angle it will support without having grains of sand begin to avalanche down the sides of the pile. The test is done with material in the dry state; the presence of moisture increases this angle considerably in all sands.

Color is a consideration which requires special attention. While the beautiful white sands show up well on television, and are much sought-after by persons who must rely on visual appeal for sales of property or memberships. The white sands are hard on the eyes, and can make the ball hard to see in some situations. If you have a choice of materials, you might want to take into consideration your specific needs. If maintenance creates problems, bear in mind that the white and pale cream sands show contamination much more readily than some of the darker materials.

Compaction is another major consideration. The best results are usually obtained from the silica-based sands. There are white limestone sands which are available; however they tend to break down, creating an undesirable quantity of fines. The fines can cement together, creating drainage problems; they can also produce a good deal of duat in windy

CONTINUED NEXT PAGE

## BUNKER SAND, CONT.

conditions. This is your last choice if any other materials are available.

Cleanliness is a major consideration in the choice of a bunker sand. Many sands, including "washed" sands, have a significant silt/clay component. This is difficult to determine quantitatively in the field. Because processing methods vary so greatly, one company's washing procedure may be much more or less efficient than another's. As with with any of the conditions involving fine particles, the silt and clay can cause drainage problems, and should be avoided. A percentage of no more than 2% total silt plus clay may be acceptable in a material which meets all other standards.

The final consideration is cost. As the ideal material must be screened, and in most cases washed, you can predict that your costs will be substantial. Don not assume that the most expensive material is necessarily the best one; the material may have had to be processed much more intensively than its less expensive competitor in order to meet acceptable standards. In some areas there are local "name" brand materials with good reputations, these tend to be quite expensive, and not always better than a less well-known one. The cost of hauling cannot be overlooked in the cost equation, since this factor can double or triple your total cost. In submitting material for testing, it is helpful to indicate relative costs of the materials, since we can weigh our selection using the same factors you do and assist you more effectively in

making a choice.

There are a few things to bear in mind as you prepare to put your new materials in place. First, do not mix new material with old, contaminated sand. The bunker should be emptied, drainage checked and corrected, and then the new sand should be added.

Also, try to stage the addition of the material; have it brought to the course and dumped on a driveway or other hard, clean surface. Then transfer it to the prepared bunker. This permits examination and control of incoming materials. It is a good idea to specify that the trucks doing the hauling be cleaned before picking up your load. This prevents contaminating materials such as gravel or cement being picked up by your fresh sand.

Finally, check with the supplier of your selected materials to determine that the deposit of the material you select is adequate to supply your needs for some time to come. Limited availability can affect your future additions, and require that you go through the whole process again much sooner than you would wish.

A little time spent initially on assessing your specific needs, making inquiries concerning available materials, and solving the initial cost versus maintenance cost equation will provide you with a more satisfactory longterm result. The more information you have, and can provide to us, the better able we will be to recommend the best material for your needs.

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Douglas T. Hawes, Ph.D.,  
Certified Professional Agronomist,  
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**PURPOSE:** To pass on what we learn willingly and happily to others in the profession so as to improve turf conditions around the country.

**FROM THE FILES:** Bentgrass for fairways:

I was all prepared to write a long article on this subject. Then I picked up the February issue of Golf Course Management and found Warren Bidwell, the Penncross-Penneagle man, had beaten me out. If you are interested in this subject read his article. A couple other articles one might read to review this subject matter: "Bentgrass fairways . . . why not?" by P.M. O'Brien, in the Jul/Aug 1981, Record; and "They are mowing fairways with triplex mowers and picking up the clippings, too!" by S.J. Zontek, in the Jan/Feb, 1983, Record.

From these articles and what little I have seen of bentgrass fairways I have reached the following conclusions. Some of which are a little tentative.

1. To be successful with creeping bentgrass fairways the following procedures should be worked into the maintenance program. Reduce nitrogen levels to no more than ½ lb. per 1000 sq. ft. per growing season month. Preferably even less if previously you have been on a high nitrogen program. Definitely less if you are not going to remove clippings. Remove clippings especially during the summer months where disease is a problem. Mow with light weight triplex or perhaps five gang units. Cut at ½ inch (plus or minus a sixteenth). Try to keep the golf carts off. Have uniform irrigation coverage over the fairway area. Maintain no more than a 35 yard wide fairway unless on very sloping land. Maintain a lot of intermediate rough (Ky blue) at 1 and ¼ inches. By keeping the bentgrass areas small, you reduce mowing and fungicide costs.

2. Bentgrass fairways have their most valid use just north of where Meyer zoysia provides the best possible fairways. Or put another way - that part of the northern U.S. where Kentucky bluegrass is a dismal failure for fairways cut at ¾ of an inch or less. That is most of the northern U.S. It should be noted here that I am biased positively on zoysia and negatively on Kentucky bluegrass for fairways.

3. Creeping bentgrass fairways can work quite nicely. However, the superintendent must have the tools to work and he must be knowledgeable in bentgrass management.

Why will bentgrass fairways work where Kentucky bluegrass failed? Turn to Madison's "Practical Turfgrass management" or Beard's "Turfgrass: Science and Culture" and see which turf species are best adapted to a low mowing height. Then if you have to maintain closely mowed fairways do as Madison suggests, "choose the management, then select a grass that will respond to that kind of care."

Sure you are having trouble with creeping bentgrass greens during hot, humid summer months. But you are mowing them almost daily at less than ¼ inch. At ½ inch creeping bentgrass is 10 times more vigorous. The soil underneath fairways mowed with lighter equipment is going to be less compacted therefore the turf on top will be healthier. Clipping removal, low nitrogen levels and careful water management will reduce disease problems. But diseases will remain a problem.

I have yet to see a bentgrass fairway go through a real hot humid summer month. Snow mold scares me. Be sure to keep soil potassium levels high for more disease resistance.

You don't think your club will go for the \$9 to \$15,000 increased cost of mowing? Let alone the fungicide bill? After having played off a course clipped bentgrass fairway you may find they are very willing to pay for the improvement. Again, this is something the better golfers are going to insist on. For years they have been screaming about bluegrass fairways cut too high. Now they are finding out that high cut fairways are not necessary. Watch out! The move to bentgrass fairways is beginning to steamroll.

## ON THE NEGATIVE SIDE:

Madison in the above text notes results of an experiment conducted in England where clipping removal after several seasons resulted in: harder turf, the turf dried out sooner, the turf was browner in the winter and moss was present. On the positive side for the experiment - considerably less *Poa Annua*. The latter I have seen and others are beginning to report.



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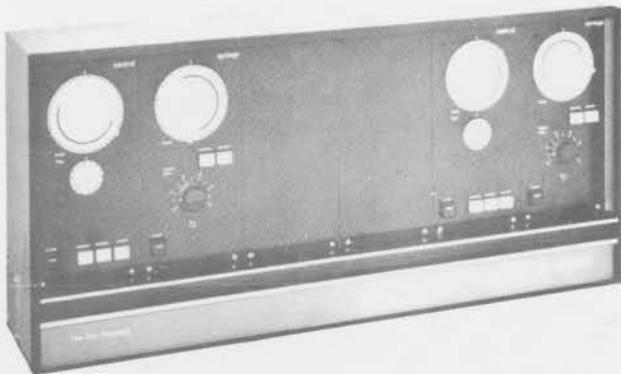
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# POTASSIUM - A Miracle Element?

by Robert C. Sherman  
Associate Professor  
Department of Horticulture  
University of Nebraska

Evidence gathered in surveys of turfgrass nutrition programs shows that golf course superintendents are taking more interest in the role of potassium in their turfgrass nutrition programs. The surveys were conducted at GCSAA Nutrition Seminars. Further evidence came from superintendents attending regional turfgrass conferences. The growing interest in potassium nutrition has also coincided with the increased use of light, frequent sand topdressing and with the use of higher sand concentrations in rootzone media.

Potassium is one of 16 essential elements required by plants for growth and development. Though it is an essential element, potassium is not a constituent of turfgrass tissues. It is found in plants only in the elemental form ( $K^+$ ). Potassium enhances carbohydrate synthesis and translocation, protein and amino acid synthesis and enzyme activity. It controls transpiration, respiration and uptake of certain nutrients, like nitrogen and magnesium. It has been reported to enhance rooting and stress tolerance of turfs.

Turfgrasses require fairly large quantities of potassium, second only to nitrogen and there is growing evidence that potassium may be useful to turfgrasses in equal amounts to nitrogen, particularly in relation to environmental stress tolerance. The term "luxury consumption" has often been associated with potassium since it may be taken up by plants in greater quantities than that required for growth and development. Luxury consumption of potassium has been associated with crop production and subsequently has been related to turfgrass management. This association may not be fair or realistic, since clipping yield and dry matter production are not of primary concern to superintendents. But increased turfgrass stress tolerance is. Tolerance for heat, cold, drought and wear grows with increased potassium fertilization of turfs. Therefore, luxury consumption of potassium likely does not occur in relationship to turfgrass stress tolerance.

A drought avoidance study conducted at Nebraska on a Kentucky bluegrass turf growing on a soil that was high in potassium (i.e., greater than 500 pounds available per acre) demonstrated that wilting tendency decreased with increasing potassium, ranging from zero to eight pounds per 1,000 square feet during the growing season. Recovery from drought injury was also enhanced by potassium fertilization.

The evapotranspiration rate declined and turfgrass depth and extent of rooting increased with potassium fertilization in this Nebraska study. Wear tolerance increased and desiccation injury decreased with potassium treatment in a Michigan study conducted on a Penncross creeping bentgrass green. These responses were observed even though soil potassium levels were considered to be high. Similar reports of stress exist for warm season turfgrass species like St. Augustine grass and bermudagrass.

Potassium deficiency symptoms are usually subtle and not seen as easily as in nitrogen-deficient turf. Deficiency symptoms often show up as reduced tolerance to environmental stress and to disease. Potassium deficiencies occur most often on sandy soils that receive frequent irrigation. Daily irrigation on a seaside creeping bentgrass green growing on a sandy rootzone resulted in a soil potassium level only 79% of a similar grass growing on the same rootzone, but given the same amount of water in three installments per week. In this study, potassium content of turfgrass tissues showed a similar trend as the soil levels; lower levels were found in the frequently irrigated turf.

On sandy soils with low nutrient retention capabilities, it is better to apply potassium in light and frequent, rather than heavy and less-frequent, applications. This is particularly the case when frequent irrigation is also required to maintain desired turfgrass quality. The low nutrient retention capability of sand coupled with frequent irrigation, results in much of the potassium being leached from the rootzone and a subsequent reduction in potassium uptake by the plant. Light, frequent topdressing with sand results in similar potassium management problems as those encountered with high sand content rootzones. Superintendents need to be aware of these relationships and to adjust their nutrition programs accordingly.

Potassium is not a miracle element; it is an essential nutrient and superintendents should keep its role in perspective. A fair degree of evidence supports potassium's role in turfgrass stress tolerance, but controversy exists among turfgrass researchers regarding its potential benefits. For example, concern has been raised about high potassium levels increasing *Poa pratensis* competition in turfs, but little research

CONTINUED PAGE 17

# THE PROOF OF A GOLFER

For many, many years the poetry of Edgar A. Guest appeared daily in the Detroit Free Press. It was topical, about the butcher, the baker, the candlestick maker, about cold days and hot days, winter and summer days, high button shoe days to most of us now.

But as true now as it was then is this piece, "The Proof of a Golfer." Golf was very near and dear to Eddie Guest's heart - he was a longtime member of Detroit Golf Club, a regular on the course and in the Men's Grill upstairs.

The proof of the pudding is the eating they say,  
But the proof of a golfer is not  
The number of strokes he takes in a day  
Or the skill he puts into a shot.  
There is more to the game than the score which you make  
Here's a truth which all golfers endorse:  
You don't improve your worth by the shots which you make:  
But the care which you take of the course.

A golfer is more than a ball-driving brute  
He is more than a mug-hunting czar.

To be known as a golfer, you don't have to shoot,  
The course of your home club in par.  
But you do have to love every blade of the grass,  
Every inch of the fairway and greens.  
If you don't take care of the course as you pass;  
You're not what "A good golfer" means.

Just watch a good golfer some day when you're out,  
And note what he does as he plays,  
He never goes on leaving divots about,  
Till the grass is put back, there he stays.  
Observe him in traps as he stands for his shot,  
Then note when the ball has been played,  
He never unthinkingly turns from the spot,  
'Till he's covered the footprints he made.

You may brag of your scores and may boast of your skill,  
You may think as a golfer you're good;  
But if footprints you make, in traps you don't fill,  
You don't love the game as you should.  
For your attitude unto the sport you enjoy,  
Isn't proven by brilliance of force;  
The proof of a golfer - now get this my boy,  
Is the care that you take of the course.

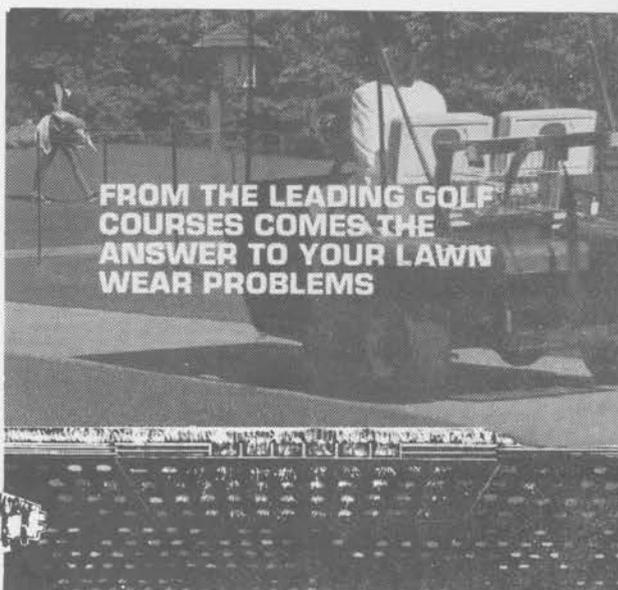
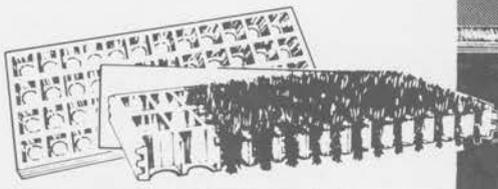
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Acti-Dione R.Z., 10#-Anti-Biotic Fungicide.  
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### TURFCOMMS, CONT.

Vargas, J.M., Jr. in his "Management of Turfgrass Diseases" paints a rather negative picture for bentgrass fairways. He claims you will have to keep the diseases under control or you are going to end up with "creeping" annual bluegrass fairways. Again I am going to point out that creeping bentgrass is a very vigorous grass at a 1/2 inch mowing height. Disease is not a serious problem at that height compared to 1/4 inch or less. But disease does spread awful fast in a dense succulent stand.

### A NEW TOOL TO HELP YOU:

The plant growth regulators (PGRs) Cutless and Embark appear to be able to assist in giving bentgrass the upper hand over Poa Annua. Some superintendents have already used successfully 6 and 8 ounces per acre of Embark on greens. Yes, I meant to say greens. I'm not recommending it for putting green use. But if some can use it safely on greens, use on fairways at those rates should be safe enough. Do not respray the same spring. Cutless shows as much if not more promise than Embark for bentgrass fairways.

### POTASSIUM, CONT.

evidence supports this concern.

More work is needed to further delineate the role of potassium in golf course fertilization programs and superintendents should be willing to approach its use for enhancing stress tolerance in a reasonable manner. A concerted research effort with potassium is being conducted at the University of Nebraska. This research is part of an extensive cultural practice research project supported by the USGA.

(Credit: USGA Green Section Record)

### GREEN COMMITTEE REPORT, CONT.

including those not qualified to make or evaluate studies, and some specialists, show that our sand is the right sand. Some of our members who like our sand very much never practice getting in or out of it. Some of our members who hate our sand never practice getting in or out of it. Most of our members are better at getting in than getting out. Anyway, our bunkers, their design, their sand, and their maintenance, are undergoing serious study and will probably be the subject matter of ongoing work on a carefully planned and scheduled basis over the next several years. If it became necessary to rebuild any bunkers, and if you get in one during the course of reconstruction, the chances are that it was not intentionally placed in that condition just in anticipation of your particular problems - but we are all prepared to accept that excuse, so go ahead and use it.

## PLANNING YOUR TOMMORROW, CONT.

are not enough to fill the void in the life of a man or woman who has worked for a living all their lives. Fishing is not. Welfare work is not. Civic projects are not.

You can wean a man away from the work he has done, but you will have trouble weaning him away from what he found in that work: competition, inspiration, absorbing interest, and the very concrete matter of money.

Many retired people want to do something that pays them money - and not always just because they want the money. They know, and our society pretty well confirms, that a job that pays nothing isn't much of a job. For that reason, it is probably a mistake to spend too much time trying to teach a person about to retire and activity that has no tie-in with money. The way to find appropriate activities is to look first for an off-shoot of the work or business the person already knows best. Another possibility for most people is something that produces a crop, from seed in the soil to the breeding of animals.

### HOUSING REQUIREMENTS

The fourth thing retiring people should understand is housing. There is virtually no such thing in this country as housing specifically designed for a retire couple. All our housing seems to be for families or for working people - and retired people are neither any more.

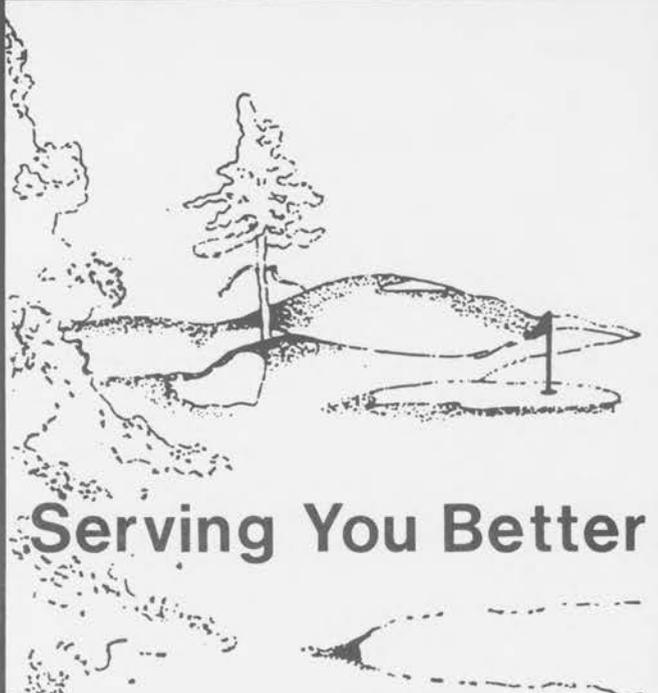
Unless they can afford to pay for help in keeping it up, a large house can be a headache for a retire couple. The convenience of having extra rooms for grown children who may occasionally visit them is usually far outweighed by the extra work and expense involved in maintaining a home that is far too large for their everyday needs. Perhaps the nearest approach to appropriate retirement housing is a two-bedroom trailer, parked under a tree on a small plot in a summer-and-winter climate; it has the affinity to nature that many older people enjoy, and it doesn't have leftover bedrooms to care for and second-story gutters to paint.

Housing is where people spend their lives. It takes the second largest piece of their incomes. Yet all the ramifications of selecting a home that is both practical and agreeable have been overlooked in many of the programs designed to make life after 65 more palatable. Teach them about housing, about trailers, about retirement facilities that are available in the sunshine states, and about nearby facilities.

### PUBLIC WELFARE

The fifth area that retiring people should be acquainted with is public welfare services. We have in our midst many of the country's finest experts on all phases of the problems of life - yet the majority of people wouldn't touch them with a ten-foot pole. There seems to be a social stigma associated with public welfare, and many people shy away from asking for counsel, participating in government-sponsored activities, or taking advantage of the many services that public welfare offers. Yet nowhere else

CONTINUED NEXT COLUMN



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could retired people get better counsel on many of their problems and better services to improve their lives.

### THE GRASS IS GREENER

These are the main areas that retiring people need to know about. In addition however, many retiring people approaching retirement age cherish five misconception that should be corrected.

The first of these is the belief that when they retire and get their pensions, the best thing to do is pull up stakes and move. One of the greatest fallacies ever sold to mature Americans is the idea that the finest place to retire is somewhere else - and that if it's got sunshine, it's ideal. Florida and California are crowded with miserable retired people who wish to heaven they had stayed where they are. They have discovered that faraway places with or without sunshine, can be extremely unfriendly to people in their sixties. They have learned that once they pull up stakes and move their possessions far away, there is seldom the spirit or the money to go back again. And they have found that a man who is sitting around these retirement paradises is no longer a successful and well-liked Rotarian from New York or Cincinnati - he's just another old gent with a pension.

If a retiring Chicagoan, for example, could pick up the square mile of city that surrounds his home and gather on it his friends and acquaintances, a few familiar streets, a couple of State Street stores, the **Chicago Daily News**, and perhaps the White Sox - if he could pack up this square mile and cart it off to Miami, he might have something worthwhile.

Naturally, he can't do that - and it's the things he can't pack up, not the climate he's getting, that are essential to a happy retirement. Familiar things and places are priceless as we grow older - make no mistake about that. There are, of course, many circumstances that warrant picking up and moving after 65, but don't let anyone think that it's the only path to retired happiness.

### TAKING IT EASY

The second misconception about retirement is the idea that it can be loafed through. A man who has worked all his life cannot stop working when he gets his pension without something happening to his body and mind - a sort of gradual rusting away. Almost without exception, the retiree man who goes to the cemetery first is the one who retires and just sits down.

A man about to retire is a man of some distinction: He is the personnel director of an insurance company, he is general foreman at a manufacturing plant, he is an experienced accountant, he is a skilled machinist. Whatever his job, it is a form of distinction - about the greatest distinction that most people get. It is identity, the distinguishing factor that a man tells the store when he opens a charge account and that he tells the parents of the boy who wants to marry his daughter. It is what sets him apart on the street where he lives.

When a man retires, he loses this distinguishing mark - but not his need for it. People want some kind of distinction, and they can't get it by loafing. What, then, can a retired man do? He can do **something** - run a sawmill in Canada, operate a small business, provide an income-tax counseling service, raise pedigree beagles - anything to be more than just an old pensioner. And it should be something that he can point to with a reasonable amount of pride. In 2000 years we may rise above the need for recognition and attention, but we're not there yet. In the freedom that retirement and a pension will give him, a person should seek an activity that will give him identity, recognition, and attention from the people who know him. Perhaps not everyone feels this need - but a great majority of people do, and they should be prepared to do something about it when they retire.

A third misconception about retirement is the belief that people on a pension can hold on to everything they had before they retired: their prestige in the business community, their prominence as civic leaders, their new car, their whole standard of living. Age has become a great leveler in America, and retirement can take away much of what people have spent forty years or more to build.

People over 65 can become bitter about it. But it is for better to accept what must come, prepare for the new freedom that retirement will bring, and arrange a new life and possibly a new career that can be built on top of the old. This is an area in which informed counseling can accomplish a great deal.

### PARENTS AND CHILDREN

The fourth mistake people make is to expect too much from their children. It isn't easy to tell people that their children aren't as splendid as they think they are, but it is a hard fact that a majority of parents who base their retirement plans on their children are doomed to bitter disappointments.

Retired people might like to spend a good deal of time with their children. Unfortunately, their children don't seem to have much time to spare - but they could use a baby-sitter. It would be a good idea if parents had some warning that this kind of thing might happen.

Moreover, experience has indicated that parents would be well advised to observe these precautions: They should not give the major part of their money to their children until after death; they should let their children take over control of any business they may own; they should not sign papers that allow their children to run their affairs; and they should make wills providing security for the surviving spouse before the children are considered.

This is not merely a method of providing against the possibility that their children will take advantage of them, but a necessary means of protecting their own individuality and position. Older people cannot surrender their dominant position as the parent generation and become dependent on their children. They must maintain their independence, retain the power to choose what they will do and where they

# Proper Pesticide Application

By GERALD L. FAUBEL, CGCS  
GCSAA Director, Saginaw Country Club  
Chairman GCSAA Government Relations Committee

Is your ability to successfully perform your job being jeopardized by another golf course superintendent? The "Other Guy" may not understand how to properly apply a pesticide. By misapplying the pesticide, damage to the environment may occur. When enough reported cases of environmental damage have been received, the pesticide will be reviewed by the proper authorities (EPA). If the pesticide is determined to pose a real threat to the environment the pesticide will be removed from the market.

In the most recent case, Diazinon was determined to be a threat to the avian population generally found on golf courses and sod farms. Primarily, goose and duck populations have been seriously harmed from grazing on turf treated with Diazinon. Unfortunately there may be some individuals willing to misuse a pesticide to rid themselves of a local goose population.

Ciba-Geigy in their recent defense of Diazinon before the EPA Scientific Advisory Panel, cited a survey which dealt with nuisance Canadian Geese on golf courses. Ciba-Geigy stated:

"The survey conducted by Conover and Chasko demonstrates that Canada geese are perceived as a widespread problem of golf courses in the eastern United States and that a significant proportion of course managers appear willing to use or would condone killing geese with lethal chemicals. Quantitatively, the study shows that 26% of the 8,328 (i.e., 2,165) golf courses in eastern states may have geese problems; with -10% of respondents strongly favoring or favoring use of lethal poisons these data suggest that such activities may have the potential to occur on over 200 golf courses. As nearly 50% (26 to 54) of reported bird kills attributed to Diazinon have involved Canada geese, it must be asked what proportion of these incidents may be intentional misuse of the most widely used, and therefore, most available turf unsecticide."

By this statement, Ciba-Geigy has stated the misuse of their product - Diazinon is the problem and not the product itself. The Scientific Advisory Panel did agree about the potential misuse of Diazinon by the applicators.

Golf course superintendents in general have had a long standing professional pride in their responsibility toward the environment. They have treated their surroundings with great respect and with a great deal of justifiable pride. The golf course superintendent receives many accolades from the membership when

everything looks green and wonderful. The other side is the tremendous pressure on the superintendent by an irate membership when the golf course has blemishes from too much or too little of something. Brown grass is not pleasant for anyone. The real problem is the perception as to what a golf course should be. The blemish free, green lush turf, free of insects and disease might be a thing of the past if some people have their way. It may just happen if we continue to use the same turfgrass cultivars we are attempting to grow at the present time. No matter how much money a club is willing to spend on their chemical and fertilizer budgets, the chemicals and fertilizers may not be available to use, because they may be a threat to the drinking water supply and/or the environment.

The USGA/GCSAA is coordinating an extensive turfgrass breeding program at various sites throughout the United States. Other factors such as plant physiology and improved maintenance techniques are being developed. **Greater Stress Resistant Turf** - stress factors such as water, fungus, insects, heat, salt and compaction.

The golf course superintendent should realize the serious nature of the problem. There will be fewer pesticides, less water and the demand for improved turfgrass. Conditions can be improved for everyone, a safe and clean environment can be maintained. Through the cooperative efforts of all the people interested in the game of golf, the necessary research and development can be accomplished.

Presently, GCSAA has contacted the Miller Chemical and Fertilizer Corporation in an effort to find an effective repellent for water fowl which can be used safely on golf courses. EPA has suggested safer methods be developed, such as injecting pesticides into the thatch layer to deposit them at the site of the pathogen. Exposure to the environment of a pesticide must be reduced and the pesticide must not enter the food chain or the water supply.

Worker safety is another consideration. Applicators need a good protective water proof suit; go to the Golf Professional and purchase one of the new rain suits. It probably is made from one of the new synthetic fabrics which will provide excellent protection. One of the most difficult things to wear is a breather or respirator. To reduce exposure consider using flowables, liquids and products which come in safe packages, such as Dow Chemicals' new soluble package. One of the keys to safe use is safe handling and reduced exposure.



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## PLANNING YOUR TOMMORROW, CONT.

will go, and maintain their integrity as parents. By doing so, they will be far more likely to have their children stay close to them as they grow older, for they will continue to represent a rock of stability in an uncertain and difficult world.

## SURVIVAL OF THE FITTEST

The fifth and greatest error that people make about retirement is to lose sight of their own value. Far too many people fail to appreciate just what they are and what they have accomplished in their lives.

In a world that is still based on the survival of the fittest, these people have survived. And they have survived, not in any easy or placid era, but in one of the most momentous periods of history. They have survived World War I. They did not die in the flu epidemic that accompanied it. They did not poison themselves on the home brew and the bathtub gin of the twenties.

They survived the stock market crash. Their hearts and their nerves were hardly enough to withstand the economic and political upheavals that followed. They lived through the Great Depression. The rise of Hitler and Mussolini left them intact. And when World War II came, however they managed it, they survived. Postwar readjustments, income taxes, Korea - all these they lived through. And up to now, they have survived the H-bomb and the automobile.

They are, in fact, remarkable human beings, and they have a firm foundation for faith in themselves - yet most people on the verge of retirement have never looked at it in that light. Not one in ten thousand has any idea what talents or potentials may be inside him. How do retired people know they can't write a book? Can't invent something that will benefit mankind? Can't compose music or write poetry? How do they know that they can't preach a sermon or teach a philosophy that will sway men's hearts?

This may be in the realm of the inspirational - but it is also true. And if 65-year-old people could appreciate some of the possible greatness within themselves, instead of believing that their lives ended when their pensions began, they would have taken the first important step on the way to a happy and satisfying retirement.

## RETIREMENT PRIORITIES

What are your priorities for successful retirement? Mark the top five in order of importance, one being the most important and five being the least important.

- |   |   |
|---|---|
| <input type="checkbox"/> Adequate Income      | <input type="checkbox"/> Companion                |
| <input type="checkbox"/> Minimum Expenses     | <input type="checkbox"/> New Source of Income     |
| <input type="checkbox"/> Good Health          | <input type="checkbox"/> Privacy                  |
| <input type="checkbox"/> Comfortable Housing  | <input type="checkbox"/> Time to do as I please   |
| <input type="checkbox"/> Safe Neighborhood    | <input type="checkbox"/> Go when and where I want |
| <input type="checkbox"/> Part-Time Employment | <input type="checkbox"/> Ability to Relax         |
| <input type="checkbox"/> Warmer Climate       | <input type="checkbox"/> To Be Myself             |

CONTINUED NEXT PAGE

**PLANNING YOUR TOMMORROW, CONT.**

- |   |   |
|---|---|
| <input type="checkbox"/> Fulfilling Hobby         | <input type="checkbox"/> Doing Something  |
| <input type="checkbox"/> Money Producing          | <input type="checkbox"/> Productive       |
| <input type="checkbox"/> Hobby                    | <input type="checkbox"/> Learning         |
| <input type="checkbox"/> Interesting Past Time    | <input type="checkbox"/> Something New    |
| <input type="checkbox"/> Friends                  | <input type="checkbox"/> Feeling Needed   |
| <input type="checkbox"/> Adequate Medical         | <input type="checkbox"/> Doing Things     |
| <input type="checkbox"/> Insurance                | <input type="checkbox"/> I always dreamed |
| <input type="checkbox"/> Available Transportation | <input type="checkbox"/> Others           |
| <input type="checkbox"/> Peace & Quiet            |   |
| <input type="checkbox"/> Increase of Activity     |   |
| <input type="checkbox"/> Travel                   |   |

**MAJOR LIFE NEEDS**

- BELONGING
- SOCIALIZATION
- INFLUENCE
- VALUED KNOWLEDGE & SKILLS
- USE OF TIME (A STRUCTURE TO OPERATE WITHIN)
- GOALS
- ACHIEVEMENT & CREATIVITY
- AFFIRMATION
- ENTERTAINMENT
- ADVENTURE & GROWTH, INCLUDING TRAVEL & EDUCATION
- TERRITORY OR "TURF"
- ROLE IMAGE
- SUPPORT SYSTEMS
- PHYSICAL FITNESS
- CONTEMPLATION

**TO MOVE OR NOT TO MOVE**

Consider:

- Neighborhood
- Friendships
- Familiarity of surroundings
- Position in community
- Economics of current residence
- Will current living conditions meet future needs?

How to prepare to make a decision:

- Talk with people in the area you are considering
- Visit the same area more than once, & in different seasons
- Subscribe to local newspaper
- Keep your home & try out a new area - keep options open
- Rent for a while
- Think five to ten years ahead
- Evaluate costs carefully
- Decide jointly with spouse
- Will you have the opportunity to: pursue your interests? Be with people?
- Evaluate your support system
- Will you have freedom of movement
- Will the people around you share your values?

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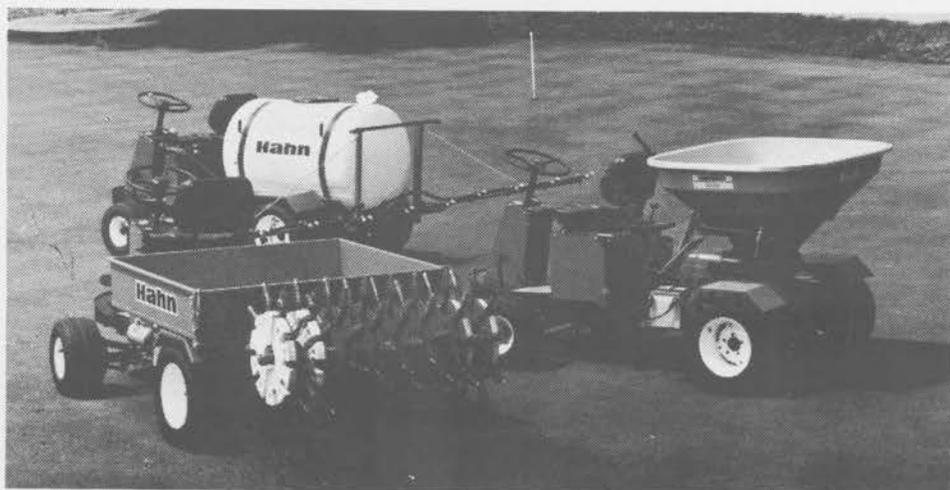
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#### the spreader ...

Precise rate settings for a uniform pattern. Top dress sand in 12 to 20 ft. swath, apply seed, fertilizer and lime 20 to 40 ft. Up to 500 lbs. per minute.

#### the utility truck bed ...

Reinforced steel, 1500 lbs. capacity. Converts to dump bed with addition of Hydraulic Package.

#### FAST, WIDE COVERAGE

#### 4-WHEEL STABILITY

Low center of gravity. For more stability and safety.

#### BIG HIGH FLOTATION TIRES

Reduce compaction. Drive on golf greens safely. About half the PSI of other utility trucks and sprayers.



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