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FROM THE PRESIDENT'S DESK

DON LINDBLAD

Hope those of you who attended the National Conference in Las Vegas had a good time. Several people have mentioned that the equipment displays were large and more than enough room for all of them.

The Minnesota Golf Association is sponsoring a U.S.G.A. Rules of Golf Seminar on March 24 at the Edina Community Center. As you may know there are many changes in the rules of golf this year as well as a completely rewritten rulesbook. You all will be invited to attend and I think it would be a good idea to be there if possible.

The M.G.A. has also adopted a new U.S.G.A. Handicap System this year as a result of the course rating program which was completed in 1983. Now courses are rated for both the scratch and the bogie player. All players will have a basic U.S.G.A. Handicap that will be adjusted at each course depending on the difficulty of that course. It sounds equitable but will need a lot of education to the players.

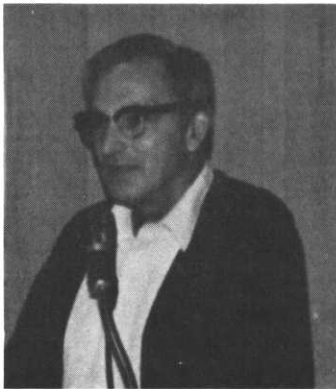
Now we must look ahead to spring of '84 with anyone's guess about what it holds for us. At this time I would be much happier if the snow cover would stay at least another three weeks. The greens I checked the other day looked good. Hope yours are the same.

Keith Scott and Jim Wodash are hard at work getting the March Mini-Conference on track. The weather by that time could raise some interesting questions for all of us.

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SOME ECOLOGICAL PRINCIPLES OF TURF MANAGEMENT



by DR. DONALD B. WHITE
Dept. of Horticultural Science
and Landscape Architecture
University of Minnesota

It is often useful to take a non-traditional view of our turf situations. A new perspective often results in some new ideas. My objective is to apply ecological principles to turf management that may give some insights into why things happen in the turfgrass community. I've added a few principles to my list and hope that they are useful to you as guideposts in examining problems and developing programs.

1. The first principle is really a definition. It is my definition of Turf Management: "Turf management is the management of competition between desirable (turfgrasses, trees, etc.) and undesirable (weeds, etc.) vegetation".

This says we manage our turf to favor the plants we want while penalizing the plants we don't want. Mowing, for instance, favors turfgrasses while penalizing young woody plants and most coarse weeds that can't tolerate decapitation.

The other principles are not definitions and are described below.

2. "All plants are different in response to the major growth factors (light, water, nutrients, air) and mowing".

The differences allow us the opportunity to manage the competition. Another example with mowing is that most turfgrasses respond to

regular mowing in a way that increases the population of tillers. The turf becomes more dense, capturing more light and crowding out or not allowing other plants to become established.

3. "There is an optimum set of conditions when considering the major growth factors, under which any plant type will be most productive and competitive".

If we can discern the optimum level for light, water, nutrients, soil, air, mowing, etc., for the plants we desire and maintain these conditions, then our turf will always be functioning at the best level of quality. An important note here is that optimum is not meant to be maximum. A maximum condition can only be maintained briefly and then a recovery period is required to bring things back to a sustainable condition (which some might call normal). It is something like running as fast as you can for as long as you can. The longer you run, the longer it takes to recover and catch your breath. Optimum means the best or most favorable condition for continued reproducible performance. The lesson for us is that if we drive our turf as hard as it can go (say by mowing as close as possible) it will sooner or later fail and the harder it has been driven (the closer it has been mowed) the longer it will take to recover.

4. "There are limits of tolerance related to conditions under which turf can grow".

Shade and non-shade tolerant grasses offer an example. There is a minimum amount of light under which 'Baron' Kentucky bluegrass can maintain competitive growth. If the minimum is exceeded, 'Baron' will not be able to compete with say 'Glade' which (is different) utilizes light more efficiently and tolerates lower light levels. Another example is that elite type Kentucky bluegrasses tolerate a lower mowing height than common Kentucky bluegrasses. Lower the height of cut and you eliminate the "Common" types. Lower it some more and you eliminate the "Elite" types and end up with poa annua or bentgrass.

5. "There are interactions between growth factors and we must realize that when we change one condition we change them all".

An example might be if we increase irrigation, we increase leaching potential (interaction of water with nutrients) and decrease air in the soil (interaction with

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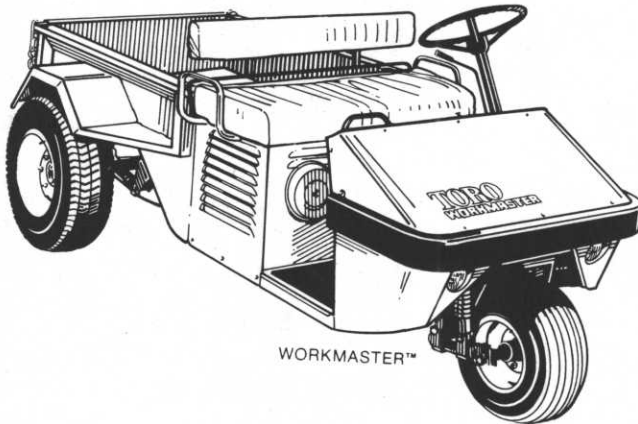
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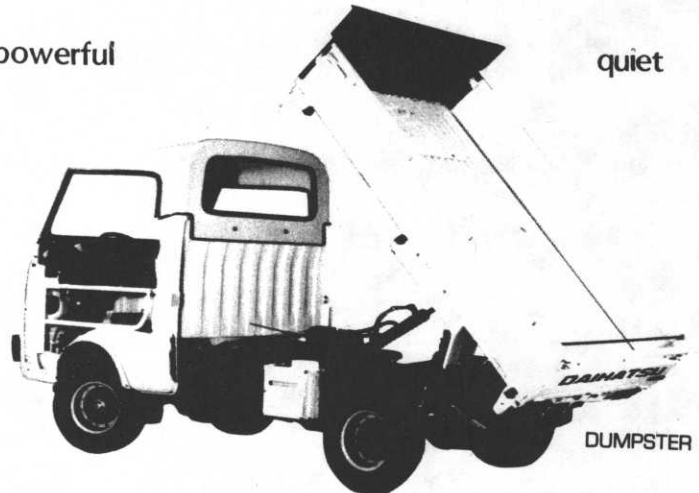
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oxygen and soil) and can change the pH, etc. The more we understand interactions the easier it will be to manage turfgrasses.

6. "There is an accumulation affect associated with constant or regular treatment applications".

If we constantly mow elite Kentucky bluegrasses at the normal height for common Kentucky bluegrass, the effect will likely be to accumulate excessive organic matter, thatch. If we continually apply lime when it is not needed it will accumulate a higher pH which may lead to reduced availability of some nutrients. If we regularly mow a putting green at the lower limit of tolerance, the effect will likely be to accumulate a continuing reduction in not only top growth, but also root growth and consequently accumulate an increased susceptibility to drought and wear damage.

7. "One shot treatments do not accumulate affects but tend to move things off center only briefly. Usually the tendency is for the situation to return to the original condition".

It is comforting to remember that nature is forgiving in many ways (just don't make the same mistake twice) and grass often grows in spite of us. Application of this principle allows us, for example, to mow shorter than is desired occasionally, say for overseeding, without doing a great deal of lasting damage. Conversely we must realize that in order to really change things we usually need to establish a program for continuing application of the change factor.

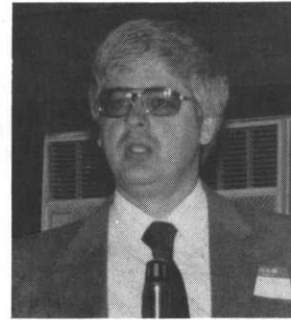
8. "When things are not going right, an effective strategy is to identify the factor or condition furthest from the optimum and correct it first".

This is a very important principle because it adds incentive to learn the others and occasionally allows us to perform seemingly magical things. The reason is that all factors interact and when the furthest from the optimum is corrected it usually interacts to shift responses to all the other factors closer to the optimum.

There are several more principles that are applicable to turf management situations. Maybe the best one to end with is 9) "If things are working well, don't fix them".

Best wishes for a good year in turf.

SOME COMMENTS ON THE SPRING OF 1984



by Dr. Donald White and
Dr. Ward Stienstra

This has been (still is for that matter) another typical Minnesota winter unlike any of the other recent ones.

Snow before freeze-up meant little or no frost in the soil all winter long. Lots of snow covered the ground longer than in many other years. This is the second of the last three years we have experienced rain in a thunderstorm during February.

On December 1 Dr. Don Baker's records showed that the soil temperature at 1/2 inch was 38.2; at 8 inches it was 39.8; and at 16 inches it was 42.4°F. On February 15 the soil temperatures reported are 33.6°F at 1/2 inch; 33.3°F at 2 inches and 4 inches; 33.7°F at 8 inches; and 35°F at 16 inches. They recorded only 1 to 2 inches of frost during the severe cold spell in January but it did not stay long. Normally we have around 40 inches of frost at this time in February. It has been a very mild winter under all the snow setting us up for cold temperature diseases. Maybe more importantly, it has allowed the melt water to penetrate the soil so that we have had little or no free water on the surface. Checking the soil situation in several places myself, I found no frost or standing water. The melt water seems to be moving right into the soil and at 2 inches the soil temperatures varied from 33°F to 36°F in our readings.

Our cold tolerance evaluations show that Poa annua did not develop as much hardiness as expected. But it should tolerate normal spring situations. It does indicate that the longer we keep the snow cover the better it will be for the grass, particularly if

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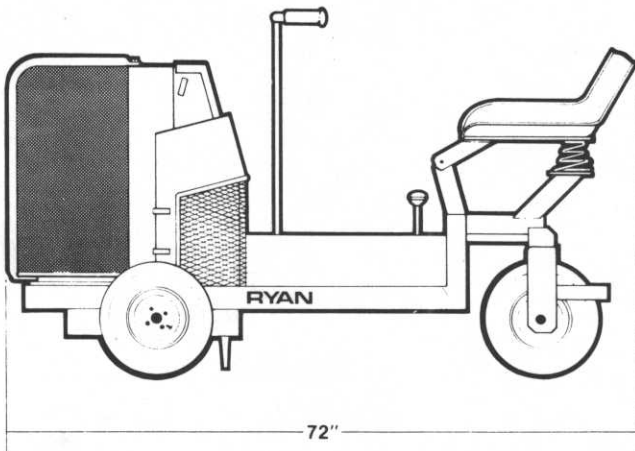
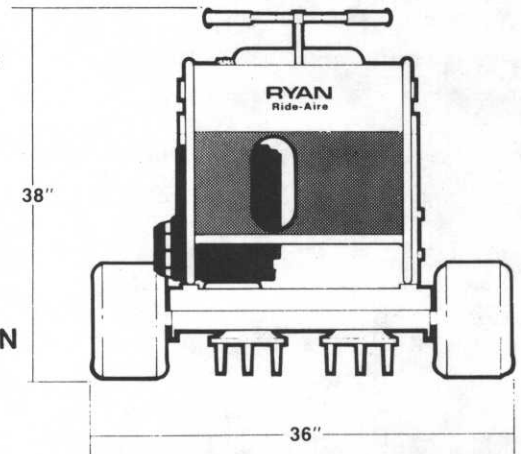
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severely cold weather returns. If you covered your greens last fall you may want to watch the grass carefully and not be in any great hurry to remove them until daytime temperatures result in growth. It is also important to check under the covers regularly for disease activity.

The Poa annua should be reasonably safe as long as the grass does not sit in free water at the soil surface while it is exposed to freezing and thawing. The secret is to make sure that the melt water can run off if it is not absorbed directly into the soil. As winter continues we need to be sure that drainageways are free from obstructions so that water can move freely as the snow melts. Be sure to check for ice dams in water ways and be alert to free standing water.

It also looks like it could be a banner year for snow molds. Dr. Stienstra suggests that everyone should be alert for snow mold activity and that it would be prudent to be prepared to apply 1 oz. of 1991; or 4 oz. of Daconil; or 1/2 oz. of Calo-Clor per 1000 square feet if you observe much activity. Don't hesitate to call if any of those treatments don't work or if you see unexpected things and you think we can help.

Best wishes for a good "normal" year.

THE GREEN COMMITTEE AND THE SUPERINTENDENT



by KEITH SCOTT
Superintendent
Oak Ridge Country Club

As the superintendent at the Oak Ridge Country Club for the past 13 years I have had the opportunity to work with many fine green committees. I would like to share with you some of the procedures we adhere to.

The green committee is one of the most valuable and necessary working bodies in a country club. The way it functions can hold the key to success or failure for a superintendent.

Analyzing this committee could be broken down into three main areas:

1. How is the committee chosen?
2. What are its responsibilities and duties?
3. How does the committee work?

The most effective and successful green committees should be made up of a cross section of members with particular emphasis placed on low to high handicappers and young to older members. If women's play is a dominant factor at your club the ladies should also be represented. Members of this committee should be people who can communicate extremely well and whose judgement will be respected by the general membership.

Continuity is another factor in keeping a good green committee from year to year. Since I arrived 13 years ago people like Eli Budd and Charles Rubenstein have been involved on this committee. They keep the committee at 5-7 members per year, make sure that there is a board member on the committee and each year discuss committee appointments with myself. It goes without saying that these two gentlemen have been very instrumental in developing the golf course to where it is today.

The major responsibility of the green committee is to see that the objectives and the desires of the membership are carried out in terms of the maintenance and development of the course. Accomplishing the afore mentioned can be eased greatly by hiring a competent turf grass manager whose qualifications conform to the club's basic objectives. At the Oak Ridge Country Club an uninterrupted flow of communication is kept up between the general membership, the Board of Directors, the Superintendent, the General Manager and all other departments that may affect the golf course operation. This I find to be a key element in the working of a good green committee.

It is felt that meetings of the green committee are usually scheduled as need arises, rather than on a regular basis. We generally have four meetings a year - winter, spring, summer and fall. The winter

meeting is held in late November and is devoted to the study and approval of the budget. The spring and summer meetings are well suited to looking at the condition of the golf course in terms of player satisfaction. These two meetings can possibly be tied in with a golf outing. The fall meeting generally covers budget performance and changes for the coming year in regard to course modification and/or major construction.

The superintendent and the committee chairperson should agree on the time of the meeting and the agenda that is to be followed. Remembering that everyone is on a busy schedule, make sure that plenty of notice is given for the meeting. A properly typed agenda should be set up and minutes be kept for each meeting. At Oak Ridge we make sure that the golf pro and the general manager are invited to each meeting. Periodic reports to the committee and the general membership are a means of keeping them informed. Use the various club publications and it is a good idea the

report includes both accomplishments and failures.

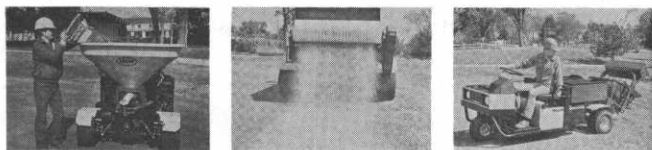
The superintendent should be alert to capitalize on any special pet projects of various chairmen and committee members.

In summary I feel that open communication between all people involved is a necessity and in my case I know that has developed a mutual feeling of loyalty and confidence with my committee and the general membership.

TRAINEE

A student majoring in horticulture at the University of Wisconsin, River Falls is interested in further training in golf course management through a work-study program at the university. He has had six years of experience at a nine-hole course and desires experience at an 18-hole course. If you might have a position for him during the summer of 1984 and would like more information about the student or the work-study program, please call Dr. Terry Ferriss (715)425-3852 or Dr. Donavon Taylor (715)425-3395.

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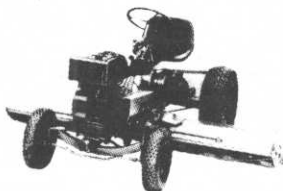
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POSITIVE CHANGE

by LARRY THORNTON
Assistant Superintendent
Interlachen Country Club

The role of assistant superintendent has gone through many changes over the past decade. The changes have been of a very positive nature. Hopefully, this article will give some insight into a positive approach to golf course management.

In the past the assistant's role has been one of being used in the area of greatest need. An assistant could find himself on a machine, behind a machine or even in mud up to his knees, having an intimate relationship with a shovel. On the other hand, the assistant may be the mechanic, irrigation specialist or a personnel trainer showing someone else how to have an intimate relationship with a shovel.

At Interlachen Country Club the assistant's role has been all of these things and much more. In the past few years my main responsibility has been training employees,

the irrigation system and working with Dutch Elm Disease. These have been areas where my abilities have been most needed. Those priorities in the last few years have started to change.

With the growth of our operation with respect to personnel, addition of machines and addition of chemical and cultural programs, we have doubled the size of our operation since 1972. The magnitude and scope of things that are being done at Interlachen have made it beneficial to take a new and positive approach to the role of the assistant.

I am presently involved in helping make management decisions and have been to various degrees for four years. There are numerous advantages for having an assistant directly involved with the decision making process.

One of the most important is the increased level of communication. To maintain a high level of quality and productivity, good communication is essential, especially during periods of growth and alterations. The superintendent and assistant will basically be thinking on the same wavelength having consistent policies and practices. Not only is communication better but the confidence and respect level also increases; thus enabling the superintendent to feel more at ease during precious time off. There is more flexibility with respect to golf course and home matters. An involved assistant can help in preventing summer "burn-out". By alternating weekends off duty the summer hours don't tend to be quite so demanding for the superintendent or the assistant.

Another major consideration is the benefit the assistant gets from such a program. Being directly involved creates an atmosphere more conducive to learning and contributing. In this respect the assistant is close to anything new in the field as well as learning the inner workings of the club functions. Having this knowledge is a definite plus if the assistant wants to run a course of his own someday. If not, the assistant's job is at least not a dull one. By being directly involved the assistant's job remains one of growth and variety.

A final positive aspect is the old adage "two heads are better than one". Perhaps the single most important resource a golf club's



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personnel can contribute is their brain power. By having direct involvement, a better over-view of special projects, budgetary needs, and basic organization will probably be achieved.

In summary, direct assistant involvement in the decision making process is mutually beneficial. This involvement helps the superintendent by creating a better organization and creates a positive working atmosphere for all involved. For me having input into our organization has been a healthy release for my energy and creativity as well.

If your organization does not have involvement you may find increasing your personnel's scope of responsibility helpful. We have.

Hope you all have a great 1984!

RANDOM THOUGHTS

It's easier to eat an elephant if you cut it into small pieces first. — Impact.

EDITOR'S CORNER



by DOUG MAHAL
Chairman
Editorial Committee

What a strange winter this has been weather-wise! Record snow in November, record cold in December and January and I don't know what to think of February. To date there still is no frost in the ground and perhaps thankfully. One can guess where all that February water would be lying now. A turf sample I brought in during mid-February is doing very well and in fact needs cutting about every other day.

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