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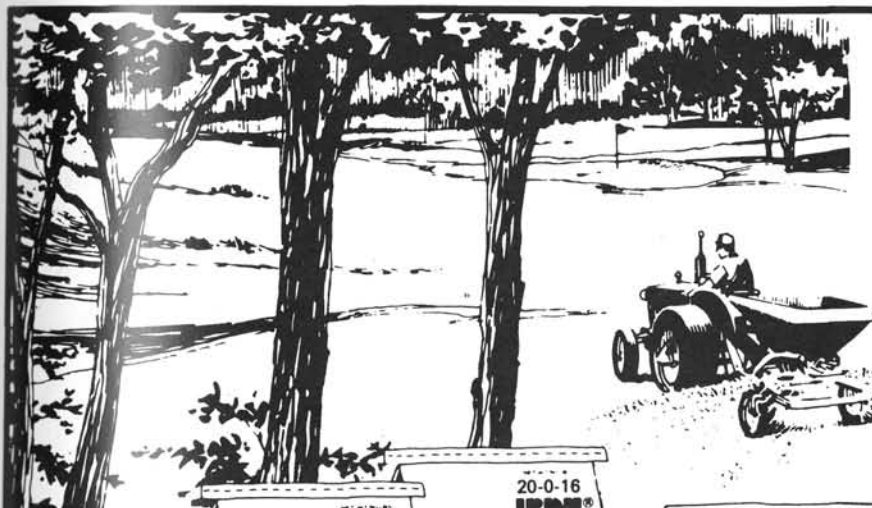
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WILL HAVE A GOOD
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NOVEMBER 27, 1981
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BLOOMINGDALE, ILLINOIS

OFFICIAL NOTIFICATION

The following proposed changes in the Bylaws for the MAGCS have been submitted to the Bylaws Committee and will be voted on by the membership at the annual meeting in November, 1981.

Proposed Change No. 1

Addition to ARTICLE II, Section 5
Loss of Membership

(Existing): Failure to pay dues and/or assessments; active promotion of disunity or dis-loyalty; or failure to attend a meeting for a period of six (6) months.

(Proposed New): Failure to pay dues and/or assessments; active promotion of disunity or dis-loyalty; or failure to attend a meeting for a period of six (6) months; **HONORING REQUESTS FOR TECHNICAL HELP FROM A GOLF COURSE OR CLUB WITHOUT PRIOR WRITTEN AND SIGNED APPROVAL FROM THE GOLF COURSE SUPERINTENDENT OF THAT COURSE; SEEKING EMPLOYMENT AT A CLUB OR GOLF COURSE WITHOUT OFFICIAL NOTIFICATION OF THE JOB VACANCY BY THE BOARD OF DIRECTORS OF THAT CLUB OR GOLF COURSE; OR FAILURE TO ASCERTAIN AND UPHOLD THE WAGE SCALE OF THE DISTRICT IN WHICH YOU ARE SEEKING EMPLOYMENT.**

Proposed Change No. 2

Addition to ARTICLE IX
Amendments

(Existing): Providing the proposed By-Law change is presented in writing to the By-Laws Committee thirty (30) days in advance.

(Proposed New): Providing the proposed By-Law change is **SIGNED BY NOT FEWER THAN TWENTY [20] VOTING MEMBERS OF THIS ASSOCIATION AND** presented in writing to the By-Laws Committee thirty (30) days in advance.

Roger A. Stewart, Jr. CGCS
Chairman, By-Laws Committee

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Builders Plumbing is holding irrigation seminars again this fall. Two of the seminars will be held at our headquarters office in Addison, Illinois on November 19 and 24 starting at 9 a.m. These seminars are for -

- Golf Course Superintendents
- Key Golf Course Personnel
- Green Committee members are welcomed

Some of the topics to be covered include -

- Pumping Plants--Types, uses, basic controls, curves
- Installation Procedures
- Maintaining Pipe and Wires on Your system
- The use of Micro-computers

Builders will be providing lunch.

This seminar will be repeated several times throughout Illinois and Indiana so your readers can have a choice of other dates.

Reservations should be made by calling (312) 629-8100 IRRIGATION DEPARTMENT--we will be sending out flyers with this information to our mailing list.

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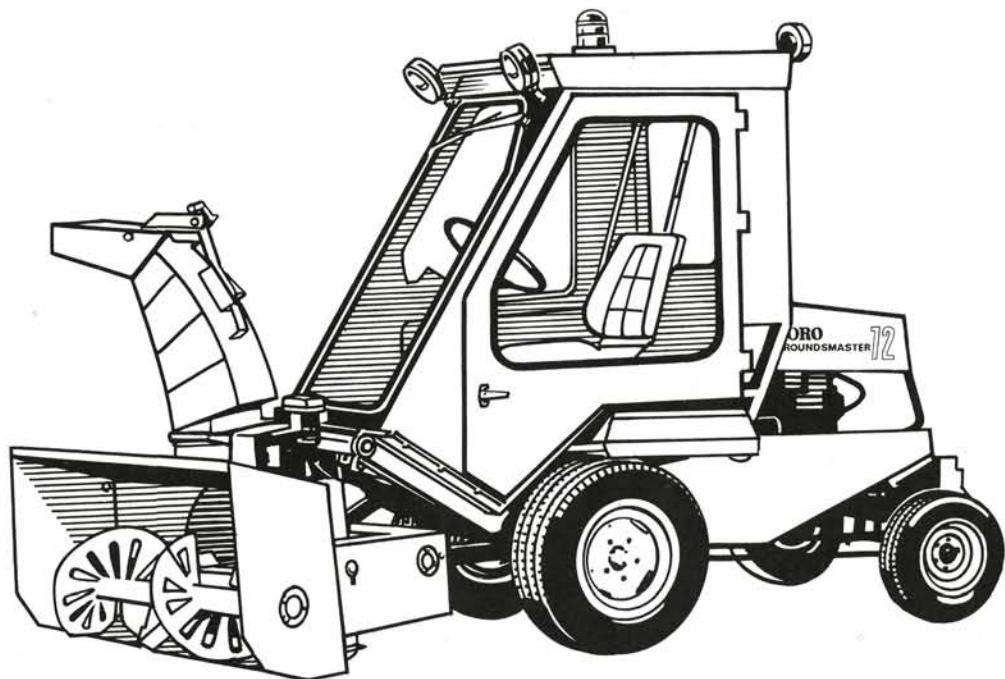
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HOW TO CURE THE CAUSE OF SOIL COMPACTION

Soil supports plant life. To support healthy plants, it must be of good "tilth", containing the correct mixture of sand, silt, and clay particles, plus the correct arrangement of these particles for good structure. Soils of good type and structure must be maintained in top condition by proper feeding, and an adequate supply of water and air are needed.

Grass plants must be supported by deep, well-developed root systems to remain healthy and resist wear, and these develop only in soils of good structure. But soils deteriorate and become poor and compacted through use and misuse. When compaction occurs, air and water movement is restricted, fertilizers cannot penetrate into the soil, and roots struggle for survival at the soil's surface. The top-growth gradually weakens; the plant becomes subject to disease. It is unable to survive periods of drought or excessive heat. It cannot stand the constant pounding of human feet and the wear and tear of maintenance machinery. Maintaining any kind of grass cover under these conditions becomes difficult and expensive.

What is soil compaction? Soil of good structure is comprised of a variety of particle sizes, with many spaces between these particles. These are called "pore spaces." The existence of these pore spaces is a key factor; roots do not grow in the soil, they grow in these "pore spaces" between the soil particles. Water, air and food travel through the soil by way of these spaces. When soil particles are pressed together into plate-like particles, the number and size of the pore spaces is reduced and the "passageways" are sealed to the movement of vital materials. Then the soil is "compacted."

Compaction indicates its presence in many ways — shallow root systems, the presence of knotweed and clover, the development of algae and black scum, puddles, dry spots, and just plain hard soil. If any, or all, of these visual symptoms are present, a profile sample of the soil should be taken.

In the soil sample look for these indications of poor soil structure — the presence of one type of soil, such as clay; or pockets of improperly mixed materials, or parallel layers of different materials.

Any of these indications of poor structure are directly related to the presence of compaction. If any of them exist, root penetration, in addition to the movement of water, is stunted. When this happens, soil particles are easily pressed together, pore space and size is reduced, and the soil compacts.

Compaction may result from ordinary use of the area by golfers, or maintenance men. Other contributing causes of compaction may not be so readily discernible. Poor drainage is high on the list. When soil is saturated for long periods of time, air movement is retarded because it cannot pass through water. Without water, plants die, despite a plentiful supply of water. Also, water is the lubricant that assists the compacting forces.

Poor drainage will also show up in the soil sample. Look for a blue or mottled color. The blue color is caused by the chemical change in the iron content of the soil. Without oxygen, the ferrous form of the iron is changed to the ferric form, and blue color results.

If excess water is present, look for these probable causes:

- poor sub-surface drainage
- seepage
- poor surface drainage

Sub-surface drainage is an important element that should be considered when construction is planned. To rectify errors after building the course is an expensive proposition.

EVALUATING YOUR OPERATION

With the passing of summer, golf course superintendents in many parts of the country have an opportunity to sit back, take a deep breath and evaluate their operations. On many courses, heavy player traffic has slowed, seasonal employees have gone and budget time is approaching. It's time to take inventory.

Besides the problems of getting the course and equipment ready for winter and inventorying leftover supplies, it's also time to look back over the summer and take a mental inventory of your operation's strengths and weaknesses.

For example, what went wrong during the season? Was your course damaged by insects or disease? If so, what can be done to prevent a recurrence? Now is the time to figure out what should be done and when.

Were your crew members aerifying the course on the day of a club tournament? The slow seasons are the time to work out lines of communication to prevent such misunderstandings from happening next year.

What can be done to improve the course? Take an objective look at your irrigation system, your equipment and the design and condition of your course. Maybe this is the time to plan improvements.

While you are evaluating your performance over the last season, don't overlook the things that went especially well, either. Did you pick up any additional responsibilities this year, responsibilities you might like to continue? Did you try a new scheduling program that was effective? How can it be changed to work even better?

Which of your employees really came through for you? Did an assistant take over some of your responsibilities and run with them? Which employees are willing to put out a little extra effort? Which ones seem to have good ideas? Did one of your seasonal employees prove to be especially hardworking and reliable? If so, you will want to make arrangements to have him back next year.

Now take a look at those projects that were put off all summer. Now is the time to dust them off and get to work on them.

Here is where a good filing system comes in handy. By taking clear notes on problems and opportunities as they occur, and by adding to those notes when you evaluate your operation at the end of the season, you can develop a handy reference tool for use in the future.

Whatever your evaluation of the summer proves, it's important to reap whatever benefits you can. If everything went relatively well, it's just as vital to know why as it is to uncover the causes if there were any problems. By building on the past year's achievements, and avoiding its mistakes, we can face anything the future has to offer.

**G.C.S.A.A.
Credit - Forefront**

Every year a farmer complained about the weather and the crops. It was too wet or too dry, or there was too much grass, or there were too many weevils, or there was no market, or something. Never anything good. Then a year came when good crops were harvested. Prices went soaring, and bank accounts were bulging.

"Pretty good year, you'll have to admit," a neighbor said.

"Middling", the farmer allowed, "but terribly hard on the soil".

The man rushed into a barbershop and snapped:
"Cut all three, short."

"What three?"

"The head, the beard, and the conversation."

THE TRIPLEX "RING"

The advent of the triplex putting green mower in the late 1960's brought with it great expectations for reducing labor costs while at the same time improving the quality of putting green turf. For many of the golf courses that use triplex mowers, this dream has been at least partly realized; the number of hours needed to mow the greens has been greatly reduced and turf quality has not suffered significantly. For others, however, the triplex mower has been a mixed blessing. Though time spent mowing greens has been reduced, extra effort has been needed to cope with new problems associated with the use of the triplex. For example, the wear and compaction caused by turning the triplex mower off the green after each pass may demand that the collars be aerated and topdressed more frequently and hand-watered regularly. Collars are often scalped when units are lowered too quickly or raised belatedly at either end of the pass. There are also the mechanical malfunctions, when individual units on the triplex refuse to rise upon command and when hydraulic lines leak or burst, creating unsightly turf damage which may last for weeks or months.

Perhaps the most common problem associated with the use of the triplex mower is a condition which could be entitled, for lack of a better term, the "triplex ring." It is best described as the ring of weak, scalped or dead grass around the perimeter of the green, in the area where the triplex mower makes its final cleanup pass. The reasons for this problem are easy enough to appreciate. This perimeter ring is the only area to receive double traffic each day the greens are mowed, once when the mower is making its straight passes across the green and again when it makes the cleanup cut. It is also the only part of the green where the mower travels the same path every day, thereby compounding the wear and traffic problems imposed upon it as compared to the other turf areas on the green.

Finally, the cleanup pass is the only time that the mower is actually turning on the green itself, a situation similar to turning mowers at the ends of fairways and tees. In each case, the mower creates downward and lateral pressures during the turn which combine to produce greater wear and soil compaction than if the machine were traveling in a straight line. The sudden turning of a golf cart on wet fairway turf is a more dramatic illustration of this principle.

There seems to be no single solution to the triplex ring situation, in many instances, but there are a number of practices which when combined can help to alleviate the problem.

If you have a wood burning stove or fireplace, this should interest you:

Beechwood fires are bright and clear

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Chestnut's only good, they say

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Birch and Fir logs burn too fast.

Blaze up bright and do not last.

Elm wood burns like churchyard mold,

Even the very flames are cold!

Poplar gives a bitter smoke,

Fills your eyes and makes you choke.

Applewood will scent your room

With an incense like perfume.

Oak and Maple, if dry and old,

Will keep away from winter cold.

But ash wood wet and ash wood dry

A king can warm his slippers by!

Cultivation and Cultural Management

Getting back to the basics of turfgrass management, the development of a strong, healthy grass is the best way to resist triplex ring damage. Avoid overwatering and overfertilizing at all costs. Too much water and nitrogen can create a weak, lush turf which is more susceptible to wear injury. Wet soils also compact much more readily, inhibiting root development and resulting in a weakened turf.

To overcome the effects of compaction and wear in the perimeter ring, aerate the soil more frequently. If the greens are already aerified once or twice during the season, then aerate the perimeter ring area by itself several other times. Aerating (coring) achieves positive results even when done in the middle of a stress period, so don't hesitate to aerify if triplex ring symptoms began to appear. If chronic soil compaction problems are related to the texture of the soil in the greens as well as to the use of the triplex mower, then begin modifying the soil in the greens by topdressing with a compaction-resistant material, one containing a high percentage of sand. Have the topdressing material tested by a soils laboratory in order to insure proper infiltration rate, pore space and bulk density.

Design and Environmental Factors

Most of the time the symptoms of triplex ring will not appear uniformly around the perimeters of all the greens. Weakness or injury is most likely to develop in areas of the perimeter ring where other stress factors also come into play. Sharply contoured greens often develop this malady, especially where the mower makes its sharpest turns during the cleanup pass. Sometimes this problem can be resolved by recontouring the green so that sharp turns are eliminated.

Triplex ring symptoms often manifest themselves on greens only in entrance and walk-off zones, especially when traffic is restricted to narrow passageways by steep banks, sand bunkers or other obstacles. If the area around the green can be redesigned to provide several different entrance and exit channels, very often the triplex ring will disappear.

The presence of trees near a green may create enough extra turf stress to produce visual symptoms in the area of the perimeter cut. Too much shade, poor air circulation and tree root competition all weaken the resistance of the turf to the additional wear of the triplex mower. Removing or thinning some of the nearby trees in order to improve sunlight penetration and air circulation will usually help alleviate the problem. The trees should be root-pruned by digging a trench between the trees and green, placing tarpaper or some other heavy-duty material in the trench and backfilling.

There are many types of stresses which may have a detrimental effect on the health and vigor of putting green turf. By carefully investigating the causes of this stress, adjusting mowing and cultural programs accordingly, and creating a favorable environment for plant growth, some of the problems associated with the use of the triplex putting green mower can be eliminated.

James T. Snow, Agronomist

A crew of repairmen drove out to the country to fix a road before they discovered that they had left their shovels back in town. They phoned the county engineer to report their plight.

"I'll send the shovels out right away," said the engineer. "Meanwhile, just lean on each other."

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Mrs. Ruth Burdett has been recently visiting friends in the Chicago area. Many of you will remember several years ago a monthly article in the **Bull Sheet** called The Mole. Very few people knew who the author was. It was Mrs. Burdett's dedicated husband Paul. This editor has been looking for another mole. So far, no luck. Mrs. Burdett is making her home in Green Valley, Arizona. If any of you are in the Tucson or Green Valley area stop in or give Ruth a ring and say hello.

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