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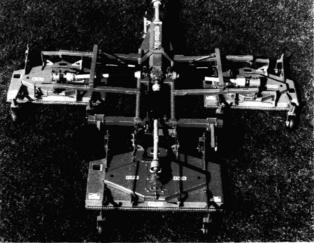
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(Vintage Equipment continued)

Old Sod Cutter - From Allegheny Country Club.

Pennsy Sweeper — Picks up cores after you aerify.

Red Baskets — Designed and made by an old Italian at Merion Golf Club and they were used instead of flags. They were called wickets so you could not see what direction the wind was blowing.

Early Bird Worm Cast Rake — It was used in the early hours of the morning to get the worms off the greens.

Original Prototype Aerifier — Designed by Tom Mascaro and made from a cider press. The auger is the part made from the cider press.

Tee Markers from Wood — Eb Steiniger made these at Pine Valley.

Vertical Mower — Made specially for Buch. First year Mascaro produced the mowers there were 12 companies who moved in on him.

Walking Aerifier - Made in Houston, Texas.

The words verticut and aerifier were invented by Tom Mascaro. "When you build a better mousetrap, some rats are going to come along and steal it." — Tom Mascaro.

Vertigroove — Cuts turf 6'' deep. Green piece of equipment against wall. Tom Mascaro invented it and has the patent on it. Old Greensmowers — First one was made by Jacobson. Steiniger will let us know who makes the "Pennsylvania" greens mower.

Plow — No information on it.

Orange-Machine — Jacobson manufactured it, 4-acre power mower, original mower probably built in 1928.

Toro Park Special - No comment.

Graham Spiker — Period would be 1930's-1940's, most popular one made by Stoner mowers, spike disc.

Root Spreader — Large green piece of equipment and says Williams on the front.

Royer-Red Machine-Soil Shredder — Developed in early 1930's. The original spiker was made in Elizabethtown, PA by Buch (Spell?) Manufacturing

Overgreen — Manufactured by Worthington out of Stroudsburg, PA in 1930's. It was the first triplex.

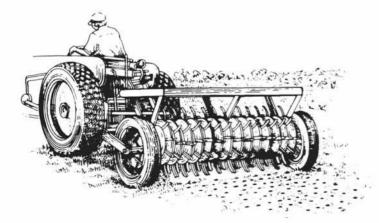
Plugger — West Point Plugger made by Tom Mascaro for Eb Steiniger and he never advertised or sold it.

Old Ford Roller - Used on Tennis Courts at Merion.

Gray Tractor — Built by Toro and it is from Pine Valley. Has spud heels and says Model A on front.

Soil Scoop - Developed by Tom Mascaro.

Lime Spreader – No comment.



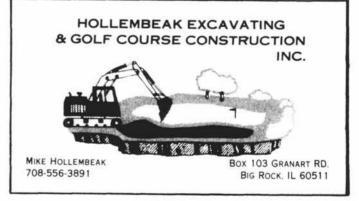


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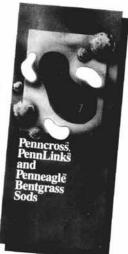
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REMEMBER TO WEAR YOUR NAME BADGES AT OUR MEETINGS.

Many Thanks to Our Host Clubs!

by Don Ferreri, Arrangements Chairman

We as an association are in the midst of another season of education and golf events. And as usual we are enjoying some of the finest golf in the Chicago area on a monthly schedule. With the golf industry pushing through the middle of another decade, so does the going fee to play a round of golf in the area. I cannot speak for the private country club, but I have heard of some very sizable guest fees. I can only speak on behalf of the public golf clubs. My club is one of nine Chicago area courses that charge at least \$70.00 per player for greens fee and cart. Many more courses are following close behind.

As chairman of the arrangements committee, I am trying to negotiate golf events for M.A.G.C.S. with the best interest of our members in mind. The reality of the situation is that golf clubs cannot afford to give away golf and their clubs anymore.

Even as the cost to our members has increased over the years, we need to understand that M.A.G.C.S. is still receiving a large discount for our golf events. There are many factors to include in the fee for a monthly event. Some of these are golf, cart, food, postage, scoring, range, and prizes. And that is only naming a few.

The golf courses we have been playing for \$55.00 to \$75.00 per player, retail from \$95.00 to \$130.00 per player in a corporate outing with the same format. Also, our commercial sponsor at \$350.00 per event have helped along with our host in keeping golf outings affordable to the members.

On behalf of the M.A.G.C.S., I would like to thank our host clubs past and future for providing a great day of enjoyment and professionalism to our association. It is still the best price in town!!

Please try to keep this in mind when filling out your preregistration form and at year end budget preparation time. If you are interested in hosting a meeting in the future, please call me at 852-1746. Once again, many thanks to our hosts.

Turf Tip (Ropes)

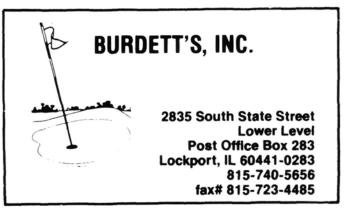
from a local superintendent

Whether you use ropes to direct cart traffic or not, you probably have coils of rope stored in your shop. How many hours have been wasted coiling rope on the original spools or coiling the rope around your arm and fighting for hours untangling the mess of knots when you want to use it later?

A simple and inexpensive solution to the problem is the use of hose caddies or hose reels. These plastic home owner helpers cost less than \$20. at your local hardware store. One caddie can handle 3,000 feet of rope. It is a good idea to use two caddies, one for your rope that has not been cut, and one for the rope with all the knots.

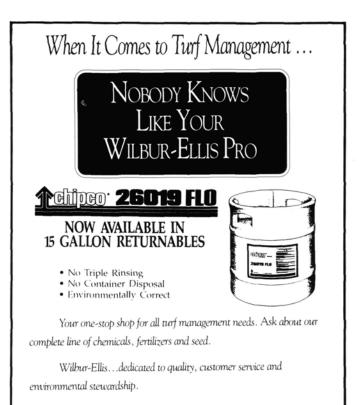
With these caddies and metal stakes with a U shape top instead of an eyelet, two workers can set out or retrieve over a mile worth of rope in a couple of hours. There are a few more tricks that you can use. If you rope off the same areas all the time, you can cut the rope to fit, and before you remove these ropes from the course, duct tape and label the ends before you rewind the rope. This will facilitate the installing next time and reduce the number of times you have to cut the rope.

Credit: Our Collaborator, 7/94





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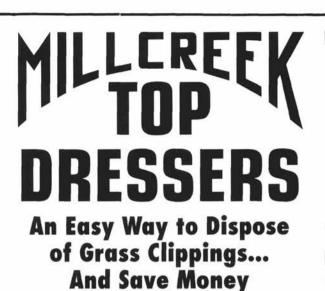
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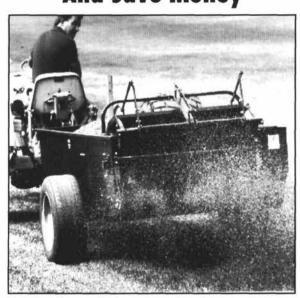
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Management & Control of Turfgrass Diseases

by Dr. Ken Diesburg, Dept. of Plant & Soil Science Southern Ill. University, Carbondale, IL

Pathogens are an integral part of all biological systems. Organisms are born, they mature, and eventually die. The influx of energy into a biological system determines how many total organisms can exist at any given time. And the relative numbers of different types of organisms are determined by their relative competitiveness. Some organisms, called parasites, prey upon or "pathogenize" live organisms. Saprophytes feed upon dead tissues, thereby conserving energy within the biological system. If this constant recycling of trapped energy does not occur the system will die from either lack of energy or congestion in the remains. It has been said that if it were not for fungi and bacteria, we would be knee-deep in our biological residues within a few years. With this in mind we must look upon turfgrass pathogens as a blessing rather than a curse. It is what we do with those pathogens that determines how severely we curse our turf.

Compare a natural perennial grass community (prairie) to a highly managed turfgrass community (lawn). (Figure 1). The undisturbed diversity of the natural community, together with limited nutrient and moisture inputs, allow the populations of different organisms to remain in balance. Birth rate equals death rate over a given period of time. The death of some organisms provide the raw materials for the birth and growth of other organisms. In the turfgrass community, however, there are sudden and dramatic inputs of nitrogen, water and pesticides. In addition the grass is in a stressful environment caused mainly by regular clipping. Any one of these provides an exaggerated advantage or disadvantage for some organisms. The results are sudden swings in population density of those organisms. Many times, the organism with an advantage is a fungus that outgrows all other organisms and feed excessively upon perennial grasses. To acerbate this imbalance, certain organisms are so sensitive to sudden changes in their environment that they die out completely. The ecological "niche" left vacant by their absence

Prairie Con	nmunity
vertebrates	
invertebrates	
dicots	
monocots	
insects	
fungi	
bacteria	
viruses	

Turfgrass Community

limited invertebrates one or two monocots limited insects limited fungi bacteria viruses

Figure 1 — RANGE OF BIOLOGICAL COMPONENTS

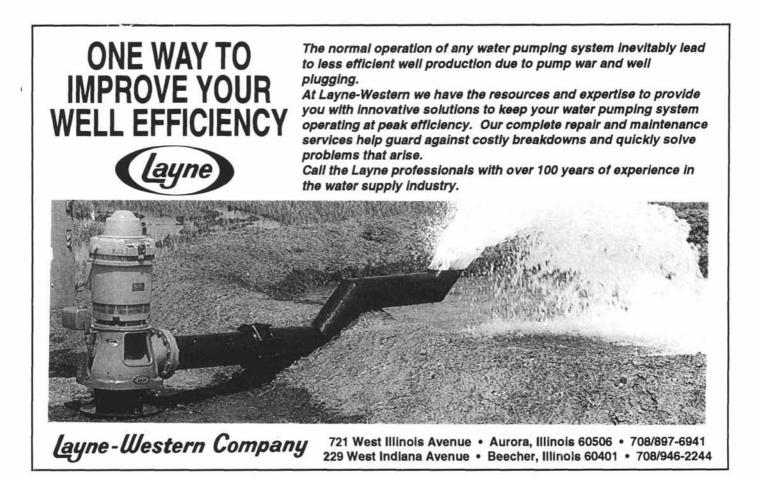
is quickly filled by other more aggressive organisms. This often adds fuel to the expansion rate of a disease. The end effect, in the absence of fungicide, is a disease epidemic in your lawn. Diversity is important to a natural biological system.

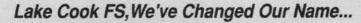
(continued page 28)





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(Management of Diseases continued)

The Virulent Pathogen component cannot be eliminated from the soil short of soil-sterilization. Even then, the soil can be recontaminated. There has been renewed interest in the idea of "biological control" of pathogens by introducing antagonists to the pathogen. Some bacteria, (e.g. *Pesudomonas*) and fungi (e.g. *Trichoderma*) are being tested for their ability to pathogenize or compete with turfgrass pathogens. Perhaps someday you will be able to purchase bottled bacteria to "cure" a disease in your lawn.

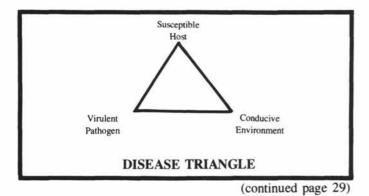
Regarding the Susceptible Host component, it is possible in some cases to establish a turfgrass species, or cultivar within a species, that is tolerant to the presence of a pathogen. Additionally, if several species or cultivars within a species are growing in a community, the chances are low of a pathogen being virulent in all of them. The advance of a pathogen within this more diverse community is thereby inhibited. Finally, maximizing turfgrass health minimizes its susceptibility to disease, just as we are more resistant to catching a cold if we maintain our health.

Turfgrass health can be maximized with a high clipping height (2-4 inches), assuring oxygen to the roots with aerification, supplying enough moisture during drought, controlling nutrient release with low-analysis, slow-release fertilizer, and optimizing Cation Exchange Capacity with enougy clay and organic matter at a netrual pH.

The Conducive Environment component can be influenced by the turfgrass manager in avoiding excessive water or nitrogen release from irrigation or fast-release fertilizer, allowing free movement of air over the turf, syringing turf during periods of excessive daytime heat, and increasing sunlight in shaded areas.

Controlling Disease Means Eliminating the Symptoms

— Remember, it is nearly impossible to eliminate the pathogen. We have at our disposal, however, an array of fungicides that are highly effective at stopping the advance of pathogens for limited periods of time. If the advance is halted, then the turfgrass has the opportunity to recover from the damage by growing new leaves and tillers. Thus the symptoms of the disease are grown over and eliminated. If a preventive approach is taken, regular applications of fungicide during periods when temperatures are conducive to disease will completely prevent disease symptoms from occurring. It is sitll a fact, today, that if you want "television turf" with perfect uniformity, fungicides and herbicides are necessary. If you can lower your standards and accept some disuniformity and species diversity, then management by the Disease Triangle approach is possible.





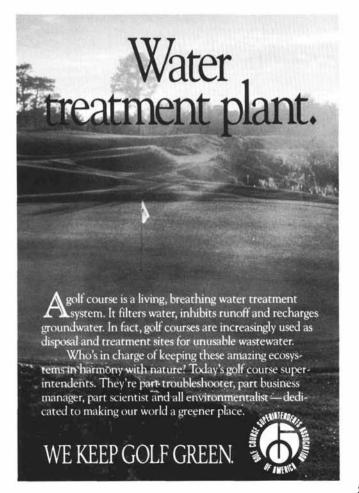


It increases the probability of some organism checking the proliferation of another organism. It must be remembered, therefore, that in the turfgrass community, there is forced uniformity with the elimination of weeds and insects and partial elimination of fungi by pesticides and inputs of fertilizer, water and mowing. Populations that would normally be in balance are being constantly disturbed. The buffering capacity, i.e., the ability of a system to maintain its species population stability with some components checking or encouraging the proliferation of other components, becomes limited. There is a lack of genetic variability in combination with lots of nutrients, lots of moisture, and succulent host plants. When the temperatures are ideal for the growth of a particular pathogen of turf without the proper fungicide applied ... bingo! You have a turfgrass disease.

When the temperatures are ideal for the growth of a particular pathogen of turf without the proper fungicide applied ... bingo! You have a turfgrass disease.

Managing Disease Means Managing the Pathogen -

A classic concept in pathology is the Disease Triangle. There are three components necessary for the occurrence of disease; a Susceptible Host, a Virulent Pathogen, and a Conducive Environment. All three components have to be present in order for a disease to occur. The presence of a virulent pathogen together with a susceptible host does not automatically mean there will be visual damage to the turf. An environment conducive to pathogen proliferation must be present.



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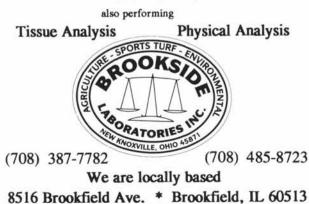


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Buggy Trees Might Have More Than Pest Problems

by Rex A. Bastian, Ph.D. Hendricksen the Care of Trees

It's still summer, but you've noticed your favorite tree already turning yellow. Appropriately alarmed, you wonder why. Upon close examination, you notice that some of the leaves appear eaten. You figure the tree has a pest problem and that eliminating the bugs will result in a healthy tree. You might be right. But you might not be.

Pest infestations or poor color could be a sign that a tree has more serious problems. Just as people are more likely to become ill if they are stressed, a tree is more susceptible to certain insects and disease when it is stressed. And there are a host of possible tree stressors; anything from too much or too little water, to soil compaction, to improper nutrient balance can diminish tree health.

That means the quick and obvious solution of spraying your tree to eliminate bugs might not solve the core problem. The situation is similar to treating a person who has high blood pressure, is overweight, smokes cigarettes, never exercises and eats fatty foods. Medication for the high blood pressure could help, but the person needs to address all the other factors to improve his or her overall health.

To further complicate matters of tree health, often what appears to be a pest problem is not. For most of the calls Hendricksen gets from people saying something is eating their trees, the real cause is something below ground or environmental.

A major change that is evident over the entire tree, such as a change in color or onset of leaf scorching, is a clue that your tree could have a below-ground problem. The change might seem to appear overnight, since once the root system begins to malfunction, the rest of the tree can quickly suffer the effects.

Whether it's a pest problem, a root problem or a combination of several factors, the remedy — just like with people often involves more than a quick fix. It takes a "lifestyle" change. Whereas people need to exercise, eat right, get enough rest and so on, trees need mulch, adequate water and nutrients, proper soil conditions and room to grow.

Although people often respond quickly to medical treatment, trees might take years. How committed a superintendent is to saving a tree is also a factor. For instance, the remedy might require removing turf from under the tree canopy and replacing it with mulch. If the superintendent does not want to comply, the effectiveness of the overall treatment will decrease. Also, sometimes a tree is simply "over the hill". In this case, appropriate care might prolong its life somewhat, but the superintendent would need to consider if the effort would be worth the cost.

Early diagnosis with trees is just as important as with humans — and more difficult, since an arborist can't administer a battery of tests like a physician can. So if you suspect a tree has a problem, don't procrastinate. Call a professional consulting arborist as soon as possible.

Even more important, use a preventive approach: Begin a total tree care program before your trees develop problems.



