

1995: A year to remember (one to forget)

By JIM MOORE

When USGA Green Section agronomists gathered for our fall staff meeting, all agreed 1995 was one of the most difficult in many years, particularly when it came to bringing greens through the summer.

We learned much from the difficulties Nature threw our way so we should be better prepared for the next tough summer. As German philosopher G.C. Lichtenberg stated: "It is in the gift for employing all the vicissitudes of life to one's own advantage and to that of one's craft that a large part of genius consists." In other words, there are lessons to be learned from the difficulties we faced.

Following are some of the most important lessons superintendents should take with them into the new year.

Lesson 1: Water management will make or break your greens.

No aspect of greens management is more critical. Yet on many courses, individuals charged with hand watering greens are summer hires. Most have little experience and less dedication. They learn fast. Unfortunately what they seem to learn first is that if they really pour the water to a green they may not have to come back later.

We should not expect computerized irrigation systems to achieve good water management on their own. No system can be designed that accurately. For these reasons, many top superintendents revert to manual irrigation of their most troublesome greens for the balance of the summer. Truth is three or four well-trained and dedicated hand water folks can apply water more accurately than the best computerized systems.

Lesson 2: Weak turf can be easily injured by normal practices.

This year even a tiny mistake could cause big problems. A slight miscalibration of a piece of application equipment, or just a little too much overlap often led to serious injury. In most years, these small mistakes might have caused a little streaking. This year, they resulted in dead turf. Many superintendents also suffered painful reminders regarding the application of pesticides during bright sunlight and high heat. Often the carriers in pesticides can be mildly phytotoxic. On severely weak turf, mild can turn into extreme. Although the days may already be long, it is smart to wait to apply such products until evening or early-morning hours.

Lesson 3: Nematode problems are best attacked before damage occurs.

While nematode problems vary by region, in many parts of

the country these pests are growing more troublesome. Not only have we lost the use of the most powerful and persistent pesticides, some of those we still can use have been diluted in that the amount of active ingredient that can be applied has been reduced to much less effective rates. Combine this reduced ability to control nematodes with other stresses endured this year and it is easier to understand how some damage was inevitable. On those greens where damaging nema-

tode populations exist, treatment before severe damage occurs is more effective. This may mean a spring application of a nematicide. But nematicide applications alone seldom prove successful. Other stresses must also be reduced. A green that suffers limited light and/or air movement, is too small for the play it receives, or is improperly fertilized or watered, will suffer more severely from nematode injury.

Lesson 4: Traffic management

should begin in the spring and continue through summer-before damage occurs.

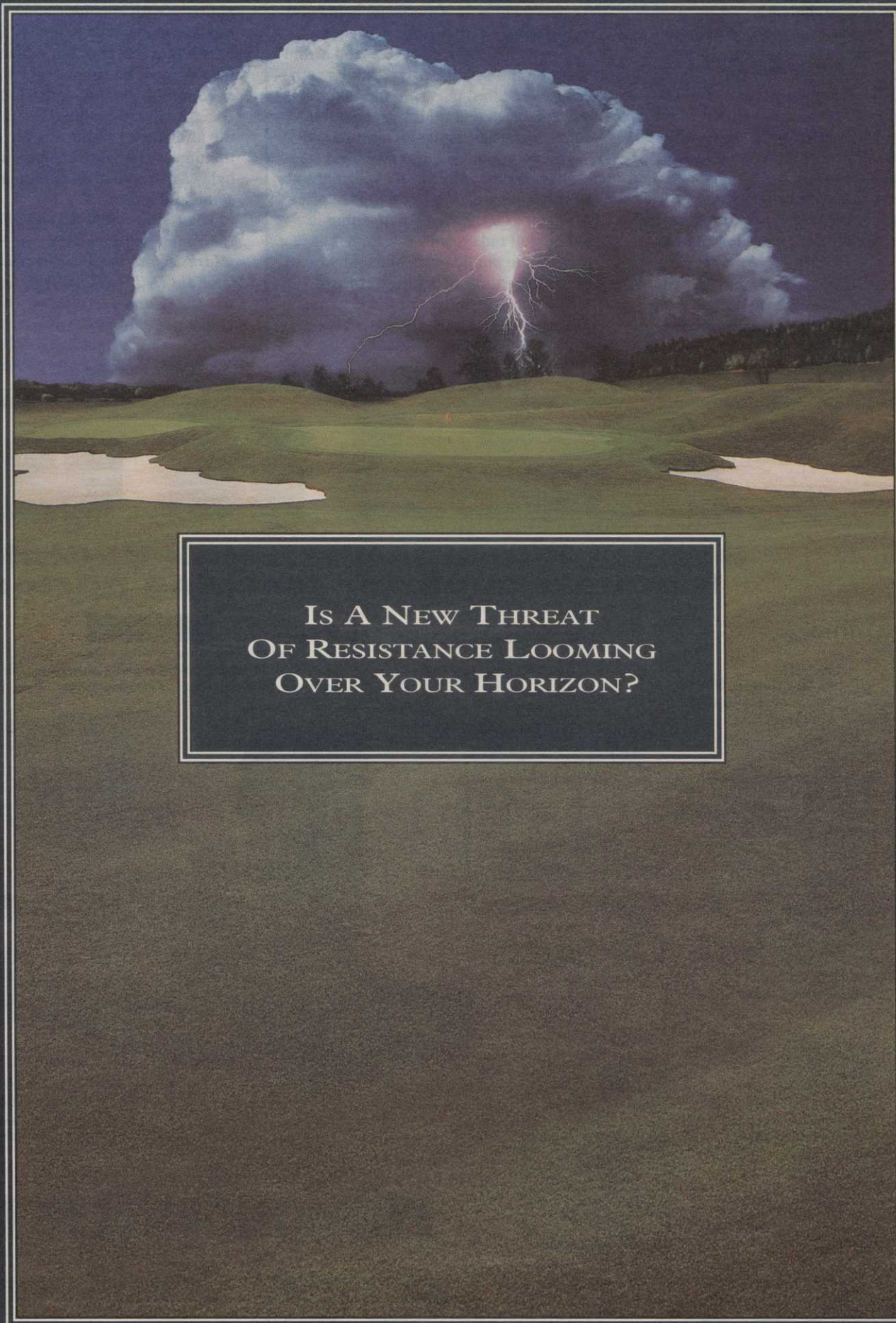
Every superintendent knows where golfers most often enter and exit greens. Every superintendent knows exactly which areas of the greens suffer the most during the summer. Not surprisingly, the two areas often coincide. What every superintendent does not do is divert traffic from concentrated areas before the turf is injured. Superintendents who instituted traffic-control measures before damage occurred fared better than those who waited until the turf was

damaged. It is very difficult to recover injured turf at the height of playing season. Take steps early in the spring to spread traffic over a larger area. There will be golfers who ignore your efforts and even some who remove ropes and signs. But if even half cooperate, you reduced traffic by the same amount.

Lesson 5: Fungicides cannot always stop a disease organism from continuing to cause injury.

One of the most dangerous misconceptions regarding fungicides to control disease is that if you just identify the organism

Continued on page 53



IS A NEW THREAT
OF RESISTANCE LOOMING
OVER YOUR HORIZON?

Jim Moore is director of the U.S. Golf Association Green Section, Mid-Continent Region.

Moore commentary

Continued from page 20

correctly, and apply the proper fungicide, disease activity will stop. Fungicides result in less-favorable growing conditions for the disease organism. It may even reduce the activity of the organism to the point that further injury is unnoticeable. However, it is also possible the fungicide will only help prevent the organism from causing as much damage as it would have without the application.

When this occurs, a superintendent might assume they diagnosed the wrong disease pathogen, or applied the wrong fungicide. Such assumptions are usually followed by shotgun applications of a variety of fungicides in the hope something will stop further injury. This can actually cause more problems, particularly with fungicides that have growth-regulation activity (see Lesson 6).

What must be realized is that, in addition to applying a fungicide, other steps must be taken to provide better turf growing conditions (resulting in a more disease-resistant turf) and less-favorable growing conditions for the pathogen. Providing additional light and air movement, reducing traffic, and better water management will make fungicide applications more effective and hasten turf recovery.

Lesson 6: Too many chemicals can cause as much damage as too many pests.

During a bad summer, disease pressure may be so high fungicides do not provide needed control. This can lead to shotgun-like applications of everything in the storage building. When making multiple applications, great care must be taken to avoid unwanted interaction between products. Many top fungicides have growth-regulation activity. This does not mean they are bad. It does mean if multiple applications of different products with growth-regulation characteristics are made, there is a strong possibility excessive growth-regulation will occur. On healthy greens, this would cause little if any problem. However, on already-troubled greens, excessive growth regulation could easily slow recovery and even cause greater injury.

Lesson 7: Air movement and light must be provided.

I have long said the best fungicides on the market are Homelite, Stihl, and McCollough. Regardless of how well built a green may be, unless good growing conditions are provided, the putting surface will suffer during climatic extremes. Ever notice that when a club decides to rebuild a green or two, it picks the lousiest greens on the course to plow under? Invariably they spend a lot of money on drainage and root-zone mixture, but do nothing to correct other stresses that caused the old greens to fail. Good drainage and a permeable root zone do nothing to provide light and air movement.

Lesson 8: Lines of communication with course leaders must be established before problems occur.

I have heard many superinten-

dents say the best green chairman is one who leaves them alone. Such a management style might work well during an easy year, but in bad years lines of communication better already be open and functional. There was a lot of explaining going on this season as greens passed away. On some courses, the management team functioned well and golfers made aware problems were unavoidable. At others the superintendents' explanations were viewed as excuses and the problems seen as failures.

Lesson 9: Greens nurseries are not luxury items.

I doubt anyone underestimates

the value of a source of good sod after last summer. It is next to impossible to find sod that is maintained at green height, and more difficult to find sod that perfectly matches your greens. Every course should have a minimum of 5,000 square feet maintained on a daily basis and more if the greens have a history of failure.

Lesson 10: Tenure in the superintendent's position is a tremendous advantage.

There is a trend in the superintendent's profession to change positions every few years (either voluntarily or by necessity). There also seems to be a trend toward younger superinten-

dents. It seems once superintendents hit their late 30s they start looking at a change of professions. While there are probably benefits to frequent changeover, they are outweighed by the lack of detailed knowledge about a piece of property one only gains through experience.

Lesson 11: Superintendents cannot afford to get too far from the greens.

Today's superintendents have many responsibilities, all of which place additional demands on their time. Many of these duties cause the superintendent to spend less time on the course. Superintendents are more dependent on their

staff than ever before to notice problems early. But as limited as the superintendent's tenure may be, that of assistant superintendents is even less.

Administrative duties must not further limit a superintendent's time on the course. Most office work can be accomplished by a full- or part-time secretary. Thus, a good secretary may be the best investment a course makes.

In spite of the progress we have made, we still have no control over Nature. There will be times turf suffers in spite of the best of programs. It is important not to lose confidence in sound programs or yourself because of a tough year.



To all those
superintendents who
ask for nothing but a
consistent cut from their
greens mower, who are
intensely passionate
about perfection, we offer
the Greens Super 55.

Ransomes®

Greens Super 55.

The results of your turf management program are most obvious on the greens. Here, your success is measured in micro inches. For a mower that meets your need for a flawless cut, put the Greens Super 55 to work. The GS55 is a masterpiece of balance. It automatically hugs the ground without relying on the operator's ability to read the green. The result is an even, consistent cut for ultimate playability.

The Greens Super 55 is the only machine that can meet the productivity and performance expectations of perfectionists like you. It is so well engineered it performs as if you designed it yourself. For a free demo, call 1-800-228-4444.



**RANSOMES
CUSHMAN
RYAN**

For The Best Results

4368 Ransomes Corporation, 900 North 21st Street, P.O. Box 82409, Lincoln, NE 68501-2409
© Ransomes Corporation 1996. All rights reserved. Reproduced by permission of Pebble Beach Company.
Pebble Beach, its images and course designs are trademarks and service marks of Pebble Beach Company, all rights reserved.

CIRCLE #138/GCSAA BOOTH #1242

