

ones

vancement, but I believe the following list includes the most significant contributions.

1) USGA specifications for putting green construction. These greens are the best playing surfaces in sports. Transfer of the technology to sports field construction has virtually eliminated muddy football games.

2) Effective and affordable herbicides. Billions of dollars have been spent to find the right compounds to selectively reduce undesirable weeds without harming the turf.

3) Professional lawn care. These companies have the equipment and the know-how to safely fertilize, control weeds and insects and provide other lawn services homeowners need.

4) Slow-release, non-burning nitrogen fertilizers. Especially isobutyldiene diurea and thin layer polymer and sulfur-coated urea. These slow-release products reduce "chemical burn" and reduce the potential for nitrogen loss through leaching and runoff during heavy rain.

5) Better turfgrass cultivars. In the south, Tifton hybrid bermudagrasses revolutionized the golf industry and sports field business. For homelawns in the deep south, Floratam St. Augustinegrass, a chinchbug and virus-resistant cultivar was significant. In cooler regions, turf-type tall fescue cultivars provide homeowners with superior lawns. New perennial ryegrass cultivars for lawns and sports fields in the north and overseeding dormant bermudagrass golf courses and sports

fields in the south offer new options. Heat and drought tolerant seeded cultivars of creeping bentgrass are providing superior putting surfaces on golf greens.

6) Better equipment, especially hydraulically-driven reels on mowers provide better uniformity in turf.

7) Water conservation. Improved technology in sprinkler heads, controllers and variable speed pumping systems.

8) Deep tine, deep drill and water injection aerifiers. These enable turf managers to improve the rootzone of golf greens, athletic fields and other heavily-trafficked turf areas.

9) Systemic fungicides. These help turf managers prevent pythium and give them better control of many other serious diseases of turfgrass.

10) Integrated pest management (IPM). Through better methods of insect identification, mapping and more timely application of low volume, more efficacious insecticides, turf managers can obtain safer and more effective pest control.

11) Information. Through professional publications, conference, seminars, field days, trade shows and Extension turf specialists, our turf managers are the best-informed turf managers in the world.

—Dr. Coleman Ward, professor emeritus,
former turfgrass extension specialist,
Auburn University.

[TIMELINE]

77:

Senate subcommittee staff report sharply criticizes EPA's efforts to regulate pesticides. Survey says about 5 percent of the 8 million U. S. homes get lawn care. *Lawn Care Industry* begins publication in July.

1979:

O.M. Scott's *Lawn Care* publication turns 50.

Kubota introduces first compact excavator to

U.S. market. PLCAA forms to serve

lawn care operators.



1980:

PGMS begins its Certified Grounds

Manager peer review program.

ChemLawn sales hit \$100 million.

[TIMELINE]

1984:



A former lawn care company employee who balanced a murder

defense on chemical intoxication was found guilty in a Massachusetts court. John Deere builds its millionth lawn and garden tractor—an 18 hp, Model 318—on May 1.

1987:

Weeds Trees & Turf turns 25, becomes LANDSCAPE MANAGEMENT to reflect larger industry leadership role. EcoLab acquires ChemLawn for \$370 million.



**LANDSCAPE
MANAGEMENT**

Noer's work paved the way

From his beginnings as a graduating soil scientist from the Department of Soil Science, University of Wisconsin, Madison, O.J. Noer went on to become the state soil chemist in 1914, and is credited with helping to establish the first soil testing laboratory in the country.

A consultant before there were consultants

As head of the Milwaukee Sewerage commission Turf Service Bureau from 1926-1960, Noer visited and inspected perhaps 80 percent of the golf courses in North America to advise superintendents on turf maintenance problems.

Noer made many contributions to the diagnosis of turf problems, and wrote and spoke about turf at conferences almost continuously through the period.

The ABC of Turf Culture, his 1928 classic, represents one of the earliest integrated works on the subject.

A friend and advisor to all, O.J. Noer was a man "whose educational backgrounds, broad experience and intimate contact with the everyday problems of those concerned with growing turf qualify him as an outstanding authority in his field.

Noer's name was entered into the Wisconsin State Golf Association's Hall of Fame at the 1985 Wisconsin Golf Turf Symposium. Before and after his death on July 12, 1966, O.J. Noer has been considered a true pioneer in the turfgrass industry.

The O.J. Noer Research Foundation, Inc., was initiated in 1959 by associates and friends of O.J. (Oyvind Juul) Noer, to "honor North America's most widely known, respected and beloved turfgrass agronomist."

Objectives of the foundation are:

- ▶ promote scientific research in turfgrass and related fields
- ▶ train graduate students for conducting said research by offering financial assistance
- ▶ publish research findings for industry
- ▶ receive donations and endorsements

to achieve aforesaid purposes in perpetuity.

For information about the O.J. Noer Research Foundation, Inc., contact the foundation at P.O. Box 1494, Milwaukee, WI 53201-1494.

You can also search the Michigan State University Turfgrass Information Center at: www.lib.msu.edu/tgif/noer.htm

Seeded bermuda an '80s highlight

Improved seed propagated varieties of bermudagrass have been developed during the last decade, as a result of financial support and encouragement from several experiment stations and the USGA.

New varieties

The renewed interest in seeded bermudagrass got much of its spark from the release of Guymon in 1982., and NuMex SAHARA in 1987. These were the first two improved turf-type seed propagated varieties to receive commercial acceptance.

Guyman, although somewhat coarse-textured, is a very cold tolerant variety. NuMex SAHARA is not cold tolerant, but it has improved turf quality with somewhat greater density, shorter stature and darker green summer color than common bermuda.

Three more recent releases—Sultan (FMC-6); Mirage and Jackpot—have performed well in the NTEP trials. They have increased density, finer texture or overall turf quality.

These are exciting and challenging times in the bermudagrass industry. Stay in touch. maybe seeded bermudagrass has a future, back from its beginning 75 years ago.

—Dr. Arden Baltensperger, director of turfgrass research for Seeds West, Inc., and emeritus professor of agronomy at New Mexico State University.



Summer Patch on 7, 8 and 9.



Crabgrass on 6.

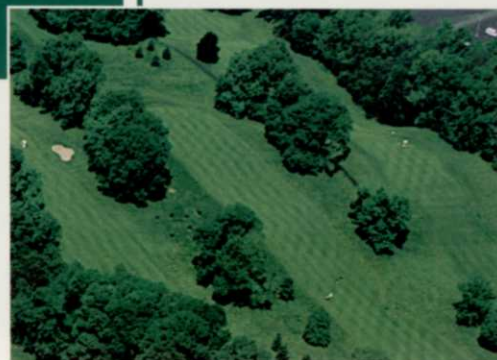


You've got Poa on 3.

**You may be
managing
your course
one problem
at a time.**



Fire Ants on 8.



Turf Stress on the back 9.



Pythium on 13, 16, 17 and 18.



And a Board Member on the first tee.

At Novartis, we're committed to continually bring you innovative products. And now we'd like to introduce an entire series of products — the Novartis Total Turf Program.

Finally, all the tools you need to manage your course from tee to green and all season long can be found in one total program.

Primo®. The ultimate foundation for turf.

The Novartis Total Turf Program begins with Primo for Pre-Stress Conditioning. That's because extensive testing has proven that treating with Primo is the best way to prepare a golf course and strengthen turf in advance to cope with extreme conditions such as drought, heat and disease, that make up a typical season.

Barricade®. Crabgrass control for the entire season, North and South.

Simply put, Barricade is the longest-lasting and best-performing preemergence herbicide for the control of Crabgrass, Goosegrass and Poa Annua. That's because Barricade has low solubility and volatility, meaning it stays where you put it in the weed germination zone.

Plus, it won't stain your golf course.

Finally, a disease management program that lasts all season long.

In a revolutionary water-based microemulsion formulation, new Subdue® MAXX® systemically and effectively combats Pythium and Yellow Tuft. Plus, Banner® MAXX®, using the same formulation technology, controls Dollar Spot, Summer Patch and Anthracnose, as well as 15 other turf diseases.

For additional protection against diseases, the

Novartis Total Turf Program also includes Sentinel®, for the longest-lasting protection against 14 major turf diseases including Brown Patch and Dollar Spot on fairways.

We combine even more protection.

Like Alamo®, a systemic fungicide for the prevention and treatment of Oak Wilt and Dutch Elm disease.

And for insecticides, there's Award®, an unstoppable insect growth regulator that controls Fire Ants.

The Novartis Total Turf Program. An entire program to help you manage the entire course.

To start your Novartis Total Turf Program, call 800-395-TURF for the name of your Novartis sales representative or your nearest Novartis distributor.

**Introducing the Novartis
Total Turf Program.**

**The first turf
program designed
to help you manage
the entire course.**

THE NOVARTIS TOTAL TURF PROGRAM. THE MOST



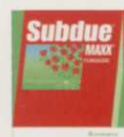
Pre-Stress Conditioning
Plant Growth Regulation
Overseeding



Crabgrass
Poa Annua
Goosegrass



Dollar Spot
Summer Patch
Anthracnose



Pythium
Yellow Tuft



THOROUGH WAY TO PROTECT YOUR COURSE.



Fairway
Brown Patch



Oak Wilt
Dutch Elm



Fire Ant Control



- Alamo®
- Award®
- Banner® MAXX®
- Barricade®
- Primo®
- Sentinel®
- Subdue® MAXX®



**Formed by the merger of
Ciba and Sandoz,
Novartis Turf and Ornamentals
is dedicated to becoming
the most innovative company
in the golf course
management industry today.**

Our commitment is to bring new skills, new technologies, and new services to the industry, providing more solutions more of the time.

Our people include 25 dedicated field sales representatives and 8 experienced R&D representatives nationwide.

Our products are new, leading-edge, environmentally sound formulations like the low-rate chemistry of Banner® MAXX® and Subdue® MAXX®, plus many new products on the way.

Our Distributor Partner System provides an industry-wide network of local technical and product support when and where you need it.

We support the goals of the Golf Course Superintendents Association of America, and are proud of our charter membership in the Platinum Tee Club, the highest level of corporate support of the GCSAA Foundation.

To learn more about Novartis, call 1-800-395-TURF.

USGA programs keep up with the times



JAMES T. SNOW
USGA Green Section

In 1962 the USGA Green Section employed seven agronomists who made about 800 visits to golf courses. Today, the service has 16 agronomists located in 12 regional offices. Collectively, they make consultations to more than 1700 golf courses each year. Each visit is followed by a written report to the club or course, detailing the agronomist's findings and recommendations.

The Construction Education Program, to educate and provide information to golf course architects, builders and developers, superintendents and others about course construction issues, helps to ensure the best long-term results from course construction and renovation dollars.

The Green Section's *Specifications for a Method of Putting Green Construction* was barely two years old in 1962, and was far from the accepted norm for green construction at the time. Nevertheless, 35 years of experience have shown that, when built and maintained properly, USGA greens have provided excellent results over a period of many years for golf courses in most regions of the United States and the world. Revisions were published in 1974 and 1989, and since 1990 several steps have improved the recommendations.

The USGA supports the largest, private, non-commercial turfgrass program in the world. In 1982 the USGA made a commitment to increase significantly its support of research to address issues that threatened to limit the growth and enjoyment of the game. Today, the USGA provides more than \$1.3 million annually in support of turfgrass and environmental research.

In 1991 the USGA began a 3-year, \$3.2 million study of golf courses and the environment. Among its objectives were to investigate what

GOLF

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GCSAA sees future in education

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ASGCA goes global

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Hurdzan on design: 'er' endings

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Golf's gotta get going

happens to pesticides and fertilizers applied to golf course turf; develop alternative (non-chemical) methods of controlling various diseases, insects and weeds; and determine the impacts and benefits of golf courses on people, wildlife and the environment.

A 3-year, \$1.5 million environmental study was started in 1995. The new studies stress:

- ▶ developing Best Management Practices (BMPs) to help golf course personnel minimize their impact on the environment,
- ▶ alternative pest control methods,
- ▶ pesticide fate studies where the initial work indicated a need, and,
- ▶ building a database to lead to the development of a good computer model that can accurately predict what happens to pesticides and fertilizers when applied to golf courses.

From 1983 to 1997 the USGA funded more than 100 turfgrass and environmental research projects at 37 different universities and institutions, at a cost to the USGA of nearly \$16 million. A success story of the 1990s is the Audubon Cooperative Sanctuary Program for golf courses. Sponsored by the USGA and administered by Audubon International, the program promotes environmentally sound land management and the conservation of natural resources on golf courses.

James T. Snow is national director of the USGA Green Section, Far Hills, NJ.

GCSAA's mission: to educate

The true measure of GCSAA's success is in the expertise, dedication and vision of its members.

By PAUL MCGINNIS, President, GCSAA

From its humble beginnings in a meeting of 60 golf course superintendents on September 13, 1926, at the Sylvania Country Club in Toledo, Ohio, the Golf Course Superintendents Association of America (GCSAA) has become a major player in the game of golf.

GCSAA's mission in those early, formative years was to inform and educate its membership and to strive for the betterment of the superintendent profession. Those basic tenets remain today, but much has changed in the 70-plus years of the Association's existence.

GCSAA celebrated its 36th year in 1962 as

membership hit the 2,000 mark, the conference and show drew 1,750 and circulation of Golf Course Management topped 10,000. Those numbers have grown appreciably in the last 35 years as membership has eclipsed 18,000, 1997 conference and show attendance was 22,227 and GCM circulation is approaching 40,000.

But the true measure of GCSAA's success is in the expertise, dedication and vision of its members. As golfer expectations for better playing conditions have risen, so too has the performance level of the profession. Mowing heights of today's fairways are the length that were found on putting greens in the

1960s. Television has also served to fuel the growth of the game, but has put demands on superintendents to provide similar conditions, despite having a fraction of the resources available to high-profile courses.

Approximately 75 percent of GCSAA members have two or four-year degrees or have attended graduate school.

Approximately 24 percent of GCSAA members who meet eligibility requirements, have advanced certification, while 49 percent have set certification as a goal.

One-half of GCSAA members control budgets in excess of half a million dollars.

Based in Lawrence, KS, GCSAA's mission is to serve to its members by advancing their profession and enriching the quality of golf and its environment. This mission is being accomplished through numerous member services and projects aimed at providing the resources to ensure successful course management operations.

Among the services and programs offered by GCSAA are:

Sponsorship of educational seminars in areas such as turfgrass, business management, water usage and chemical applications, among others.

Organizing an annual conference and show featuring the latest equipment, services and practices in golf course management, and educational opportunities.

—GCSAA President Paul S. McGinnis, CGCS, is superintendent at Moon Valley, C.C., Phoenix.

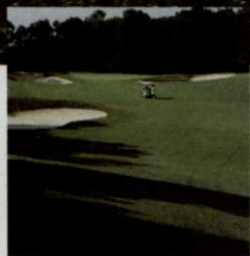


McGinnis: Members the difference as turf care advances.



GCSAA Board of Directors and dignitaries participate in dedication ceremonies of GCSAA Headquarters, Sept. 6, 1991. GCSAA will celebrate its 75th anniversary in 2001.

Your Golf Course Could Be Trying To Tell You Something.



It needs PROGRASS® Herbicide. PROGRASS is the surest way to get *Poa annua* (Annual bluegrass) out of your turf and keep it out.

By attacking *Poa annua* (and 12 other weeds) with both preemergence and postemergence control, PROGRASS lets you design a control program that fits your particular situation best:

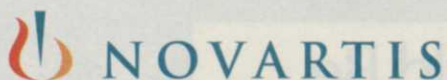
complete renovation, gradual conversion or preventive maintenance. Properly managed, PROGRASS protects ryegrass, Kentucky bluegrass, creeping bentgrass, tall fescue, and even dormant Bermudagrass overseeded with rye, from *Poa annua* infestations.

Even if *Poa* has a grip on your course, it's never too late for PROGRASS. But it's never too soon, either.

Prograss® EC
HERBICIDE



A company of Hoechst and NOR-AM



Award®

Banner® MAXX®

Barricade™

Primo®

Sentinel®

Subdue® MAXX®

Thinking of putting off weed control until spring?

Why not do it in the fall?

Barricade is the pre-emergent herbicide that you apply in the fall to control crabgrass all through the following growing season. That's because Barricade has low solubility and volatility, meaning it stays where you put it.

Barricade also works better than the competition on 29 other problem weeds, spring or fall. Tests prove it.

But in the fall, the weather conditions are more favorable, so you'll have a wider window to apply Barricade when you're a lot less busy.

Call your distributor or Novartis sales rep at 800-395-TURF for information on a Barricade Fall Application Program, and by the next growing season, your course will be less of a jungle. Who knows? With Barricade, you might even find the time to play it once in a while.





Golf course design: longer, wider, steeper

More players. Better golfers. Longer, wider courses.

Golf course design is drawn well beyond the wind-driven links look of ancient Scotland.

By DR. MICHAEL J. HURDZAN

Golf courses may have evolved more in the past 30-plus years than they did during the previous three centuries. The changes have been in response to new technology, agronomics, player patterns, golf equipment, golf carts, environmental awareness, life styles and politics. In fact, it is way beyond the scope of this article to fully discuss the consequences of each issue, but a review of the most significant ones is enlightening.

In a nutshell, golf courses have gotten longer, wider, steeper, greener, more crowded, and increasingly environmentally important.

Golf courses have gotten longer because the design and construction of golf equipment supposedly allows golfers to hit the ball farther. Many observers, including myself do not really believe that, but since perception is more important than reality, a modern golf course must stretch to more than 7,000 yards or it is considered short. This is especially true when tour pros are involved in course design. In fact, the three things golfers want to know about a new course are:

- ▶ the designer;
- ▶ how long it plays;
- ▶ the slope rating.

Thirty-five years ago, during the first golf growth boom, none of those were very

important; no one cared. They were just happy to be playing any golf course.

Just as marketing hype has led to longer golf courses, some clear reasoning has made them shorter for various groups of golfers through the adoption of multiple tees. In early 1960, the norm was one or two sets of tees with two sets of markers, one for men and one for women. Today, there are at least five sets of tees set at various distances and angles on a hole to accommodate, respectively: pros; single digit players; average golfers; senior and lady golfers; and the novice and super senior. Although 7,000 yards from the back, the course will play as short as 5,000 yards from the novice tees to correspondingly longer tees at 5,700; 6,200 and 6,700 yards.

Lawyers and lawsuits have caused the trend to wider golf courses. In the early 1960s, we were not afraid to put 18 holes and a practice range on 120 acres. To protect golfers, owners and adjacent land users from nuisance golf balls, designers have been forced to make golf courses wider, to try to spread out play and provide better safety buffers. Today, about 160 acres is considered minimum acreage for a full-size



Hurdzan: cultural practices more meticulous.

course.

Modern earth moving and turfgrass mowing equipment have allowed designers to make golf course features steeper. The vertical face look of dramatic modern architecture was beyond imagination 35 years ago. My colleague and

friend, Pete Dye, broke the mold first at TPC Jacksonville and buried the pieces at PGA West. Today, there are no limits to how high, deep or steep we can make golf course features. How to maintain them may be resolved in the next 35 years.

The turf is greener

Turf science and technology have made incredible strides that allow today's golf course superintendents to keep golf courses greener than ever could be imagined when I was young. Cultural practices on fairways are more meticulous than greens of the early 60s. New turfgrass varieties are more drought tolerant, disease and insect resistant, and are cared for with encapsulated fertilizers, improved pesticides and application equipment, and modern irrigation systems.

—*Golf course architect Hurdzan is an authority on golf course environmental issues. He and partner Dana Fry run Hurdzan/Fry Golf Course Design, Columbus, Ohio.*

QUELANT™-Ca

Calcium & Amino Acids

CALCIUM DEFICIENCY CORRECTOR

Addition of calcium to the soil by traditional means is not usually efficient or effective in treating the calcium deficiency of turfgrass. Once applied, the common forms of liming materials can rapidly change to compounds that are insoluble in water and not readily available to the plant. Continuous applications over long time periods are necessary to effect even modest improvements in calcium uptake.

Quelant™-Ca is a newly available amino acid chelated calcium product that corrects calcium deficiencies in turfgrass upon application. Quelant™-Ca provides readily available calcium chelated with amino acids so that it is easily absorbed by the leaves and/or the roots of the plant regardless of most soil and water conditions. The unique formulation of amino acids used for chelation was



developed not only to facilitate absorption by the leaves and roots, but to increase mobility of the calcium within the plant as well.

Quelant™-Ca is normally applied as a foliar spray and may also be applied through fertigation. Either way, it is tank-mix compatible with herbicides, soluble fertilizers, insecticides, fungicides and plant growth regulators. It will even help improve the efficiency of most of these treatments by increasing their absorption and translocation within the plant.

Best of all, Quelant™-Ca is economical to use and it protects the environment.

Quelant™-Ca — a true systemic. It's new...it's unique... and nothing else works quite like it!

For more information about Quelant™-Ca call
Nutramax Laboratories' at: 800-925-5187



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AGRICULTURE DIVISION
Baltimore, Maryland



Golf's

There is a widespread perception that the game of golf in the United States is continuing to grow as it did in the 1980s. It is not.

gotta get going...

At The Country Club, Pepper Pike, Ohio, members' children are given golf lessons, as a way to spark their interest.

By JOSEPH F. BEDITZ, President/CEO, National Golf Foundation

Although the game of golf continues to flourish, it has, in fact, been standing still for the past six years with regard to two important measures of growth:

- 1) the number of golfers and 2) course visits.

On the other hand, new facilities are being developed at a record rate and golfers are spending more than ever each year for equipment and playing fees.

Golf facility supply

In the U.S., over the past five years, growth in golf facility supply has significantly outstripped demand for golf as measured by course visits, or "rounds of golf." However, in the five-year period prior to that, the reverse was true.

The number of golf courses in the U.S. stands at 15,703, an increase of 2,350 courses over the past 10 years. While this sounds like a lot, it actually represents only a 1.6 percent compound annual growth rate in supply. Nonetheless, this is a large number of golf courses and conservatively represents an investment of about \$10 billion over the 10-year period.

And the outlook for this segment remains bright. There are 850 new courses under construction, and another 800 new courses far enough along in the planning process to be considered "likely to go forward."

Golfer demand

Over the past 10 years the number of golfers and course visits have both increased. The number of golfers has increased from about 20 million to 25 million, and the number of course visits from about 400 million to 500 million. All of this growth occurred between 1985 and 1990. Since 1990 the number of both golfers and rounds played have remained essentially level.

Prospects for growth

The single most important trend affecting golf's future is not related to the game itself, but rather with America's changing demographics. Our population is aging at an unprecedented rate.

Research shows that golfers play more and spend more as they age. All things being equal, we expect golf demand to increase steadily as a direct result of the aging of the baby boomers.

To ensure golf's future, we must see to it that the full spectrum of cost alternatives remains available so that golf can justify its claim that it's not a game for the privileged few, but rather a game for all.

—Excerpted from remarks by Mr. Beditz at the 1997 International Golf Conference, St. Andrews, Scotland. Used by permission.

The 'Weeder' brought industry builders back to life



Ron Hall
RON HALL
 Managing Editor

“We have talked to some operators who, far from expanding, are contracting the size and scope of their businesses, and others who seem on the verge of giving up.

“Their reasons are usually the same regardless of their field: stiff competition and a shortage of trained labor. The squeeze is on and most informed prognosticators say it will get worse before it gets better.”

The above comments aren't mine.

They belong to the late James Nelson. He wrote them in 1966 during his stint as editor of WEEDS, TREES & TURF which, of course, eventually became LANDSCAPE MANAGEMENT.

Nelson's editorial comments still ring true to many of us. Competition has hardly decreased in the intervening 31 years. The shortage of trained labor may, in fact, be worse today than it was then.

In 1970 Gene Ingelsbe was WT&T's editor. In an editorial he predicted more attacks on chemicals and increased legislation surrounding their use. In the 27 years since then, nobody in the lawn/landscape industry has suggested otherwise, although criticism aimed at pesticide-users has quieted the past several years.

I came across these observations while skipping through about 100 back issues of WEEDS, TREES & TURF. I was a bit surprised to learn how many of yesterday's challenges remain with us today. Who can say if they'll be with us 35 years from today.

The back issues of WT&T (some of us affectionately referred to the magazine as “The Weeder”) made fascinating reading partly because of my involvement with it and its successor LM—13 years, with a break in the middle of that stretch.

[LANDSCAPE/GROUNDS]

PAGE 2 L ▶
 Quality: the client makes the call

PAGE 12 L ▶
 We reported on birth of lawn care

PAGE 15 L ▶
 PGMS knows its mission

PAGE 16 L ▶
 PLCAA met a growing need

PAGE 19 L ▶
 ALCA changed with industry

PAGE 22 L ▶
 STMA still gaining yardage

As I began reading the back issues of WT&T, I spent more and more time lingering over the photographs of the people that helped build today's lawn/landscape industry. It brought yesterday's industry leaders back to life. Their ideas. Their plans. Their dreams.

Some I have met and I know. Many, many others I had never met. Each offered something to the industry. Amazingly, most contributed for no personal gain whatsoever. They shared their experiences and knowledge on the pages of WT&T to friends and competitors alike.

Thirty five years from now, when LANDSCAPE MANAGEMENT (in whatever name or form it takes then) celebrates 70 years in the green industry, some of you may still be in the industry. Most of you likely won't. Hopefully somebody will take the time to remember you and your contributions.

Quality: the client makes the call

Landscape service and quality have improved greatly over the past 35 years, but the customer still knows what he wants.

By JOHN B. CALSIN, JR.



Educated guesses are often wrong, especially when they're made about an industry that changes as rapidly as the landscape business. The Associated Landscape Contractors of America (ALCA) admits as much, which is why its "Crystal Ball Report" of 1989 ran a section called "Hits and Misses," with notable misses such as the mistaken prediction that mobile homes would proliferate; landscaping would help provide a natural energy source; and "Environment Contractor" would be a new industry specialty.

As LANDSCAPE MANAGEMENT—through the eyes of a few of the industry's most visible leaders—takes a look at quality and service improvements over the past 35 years, and somewhere into the future, a line from ALCA's 1992 *Crystal Ball Report XII*, seems appropriate:

"We tend to believe that we know quality. We believe that if I provide quality as I understand it, then

Clients were expected to accept technical quality as presented by the contractor. Today, they just want to like what they see.

my client will be pleased. Unfortunately, we rarely ask our clients if they are pleased or what we could do to please them more."

Depending upon whom one talks with, this view is either generally accepted in some form, or it is not accepted. Both those who do and do not hold this view are successful.

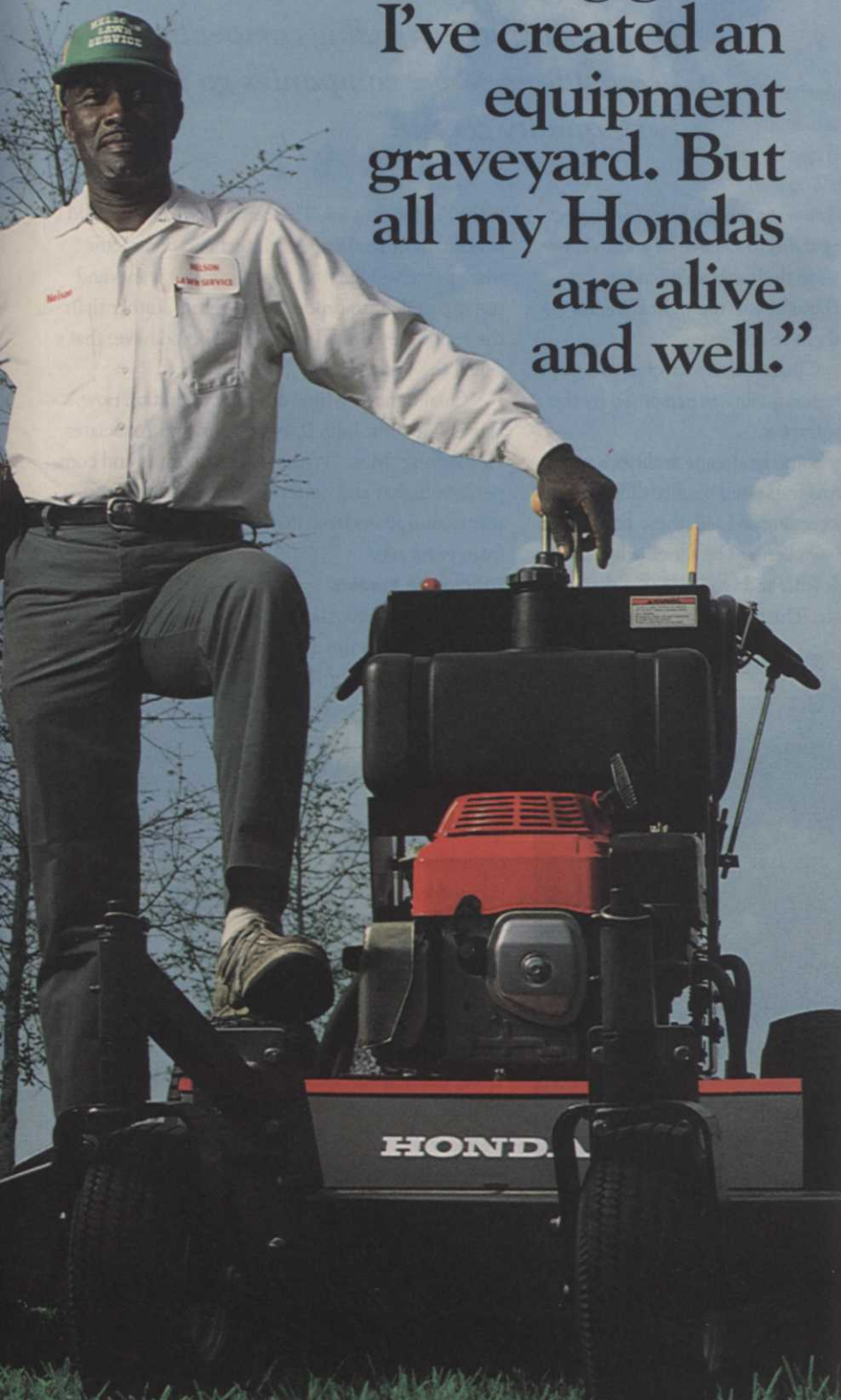
So what has happened with quality and service through the years? And, will anything new be happening as we move into the new millennium?

Tom Lied, former past president of ALCA and the chairman of the Crystal Ball Committee, begins with a look back from about 30 years ago.

Technical standards

"In the early part of landscape contracting as I know it," recalls Lied, "technical soundness had to

“After 40 years
of cutting grass,
I’ve created an
equipment
graveyard. But
all my Hondas
are alive
and well.”



Don Nelson
Nelson's Lawn Service
Ocala, Florida

When you make your living by cutting grass, dependable equipment is your lifeblood. Nobody knows that better than Don Nelson.

He started mowing lawns when he was eight years old and is still going strong. That's more than he can say for all the mowers he's used—and worn out—during that time. Except when it comes to Honda.

“Hondas not only give me a clean cut and even discharge, they'll run all day long...which is why I plan to stick with Honda from now on.”

Honda's legendary 4-stroke OHV engines (ranging from 5 to 20 hp) are second-to-none for quick starts and years of smooth, quiet, fuel-efficient service. And twin hydrostatic drive pumps and motors on our mid-sized walk-behinds—combined with Honda's patented twin control levers—ensure easy handling and straight tracking even on steep slopes and wet grass.

Everything about a Honda is designed for productivity, reliability, and simplicity. They're even easy to buy. Attractive financing and leasing programs are available, along with an outstanding 2-year limited warranty.

But the advantages don't stop there. See for yourself why Honda is a cut above. Call 1-800-426-7701 for more information or see your Honda Power Equipment dealer today.



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Circle No. 111 on Reader Inquiry Card

Due in part to increasing competition and acquisitions, some companies go for cost first, quality second.

do with the concept that we as landscape contractors knew and understood quality and were telling our



Lied: Portray what your client seeks.

clients what quality was, and expecting them to believe us and to allow us to do for them what we thought was the right thing for them to do."

Clients were expected to accept technical quality as presented by the contractor.

Some landscape architectural firms measured quality differently.

According to Lied, these firms took the time to interview clients. They took what the clients had to work with and worked out a design to suit the client's taste. The process included negotiat-

is they're looking for. The contractor, design/build contractor or landscape architect and contractor must perceive what it is that the client wants and use their talent to produce that result. Rather than the result they think [the client] should have; that's called the 'requirement'."

"Quality has a whole different definition now," agrees Drew St. John II, of St. John and Associates, Hattiesburg, Miss. "With real estate prices and competition higher and better than ever, I think landscape contractors have had to make great strides from years ago."

Follow the leaders

St. John believes landscapers are following the quality lead of major, national service organizations.

"In the last 10 years we have identified ourselves, finally, as being a quality and service delivery organization. I think other companies like Federal Express and UPS...have helped let some of their quality and customer service trickle down to industries like ours."

"Quality, when we started, was pretty low," says Mike Rorie of Groundmaster, Inc., Cincinnati, Ohio. He helped co-found a small, residential maintenance business in 1980. By early 1982, they recognized the need for a large, suburban, commercial groundskeeping company. At that point, the company shifted gears.

"There were very few quality standards in the industry. The standards were minimal," remembers Rorie.

Twenty years ago, a factory business paid an employee to do the work. The image of a well-manicured property was not something widely shared or understood by the average business.

"If you go back 20-some years, landscape maintenance was 'a lawnmower guy.' You almost wouldn't tell anybody you were in the business," recalls Gary



St. John: Greater strides required.



Quality of plant material and customer interaction are major success factors on the design/build side.

ing or letting a bid to accomplish the work. Then, the contractor did what the architect prescribed and did it in a technically sound manner.

"Quality as it is defined now is quite a different animal, and not easy for many people to accept," says Lied. "The issue now is that quality cannot be determined by the contractor or the purveyor.

Quality can only be measured by the client or the recipient. The client has to be able to portray what it

People are talking about ALCA!

Don Jarratt

"It's the best educational opportunity that exists in this industry. At every ALCA event, I go one-on-one with other business leaders. I'm exposed to firms that are doing things the way we hope to be doing them in the future. And I take back new methods and techniques that can improve our company."

*Don Jarratt, Ruppert Landscape Co., Ashton, Maryland
ALCA member, 12 years*



Connie Balint

"There's a good sharing of information. Through ALCA I've met some great friends from all across the country who truly love this industry. The really professional companies are here. Seeing others who achieve a higher level of success helps me strive harder to become better."

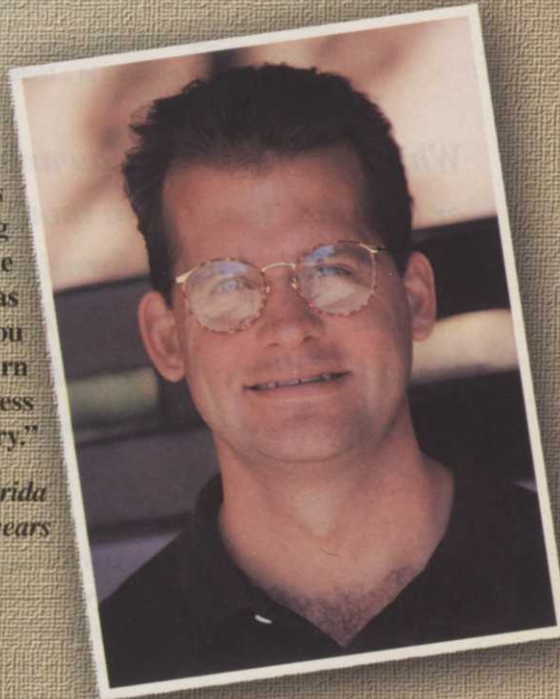
*Connie Balint, Buckingham Greenery, Inc., Buckingham, Virginia
ALCA member, 10 years*



Craig Klingensmith

"The camaraderie between different companies is fantastic. The great thing about ALCA is it's nationwide so you can share a lot of ideas with other companies that you aren't competing against directly. We can learn from other companies and we can share what we've done. The process elevates the whole industry."

*Craig Klingensmith, Smallwood Design Group, Naples, Florida
ALCA member, 10 years*



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ASSOCIATED LANDSCAPE CONTRACTORS OF AMERICA



Thornton: Sees a skyrocketing service business.

Thornton, president of Thornton Gardens, Inc., Maineville, Ohio. His firm is a design/build, maintenance firm that does both maintenance and contracting.

"Now, a lot of people are proud to say they are in the landscape maintenance business," says Thornton. "It's grown to be a profession on its own and there are lots of people making money doing it."

But Thornton believes quality has not changed as a standard. "Most of the industry today is probably still based upon their own definition of quality or the vendor/industry definition of quality."

Technical expertise

There are two sides to the question of service improvements, as Lied sees it.

"Are we meeting the needs of our clients, and are we providing the service in a way that meets their expectations? The other side of it is, are we servicing our product in a technically sound manner? And I

would say that we are getting better in all of those precepts. But fewer firms are doing this."

Thornton thinks the sky's the limit for service improvements. He believes that most of the money spent in maintenance is spent on cutting grass, and "I

think things will change dramatically in the next decade. You won't have to mow once a week. That will either be done through chemicals (plant growth regulators) or new varieties of [dwarf] turfgrasses."

Rorie sees the primary difference in service between competing companies is that some are able to provide the full range of services a customer needs, rather than sharing with two to five other vendors.

Today, a company is required to do virtually all of the routing landscape maintenance services, anything relative to maintaining the site.

"That has really raised the high bar on who can compete," he said. "'Total Quality' came and went. People in all industries adapted to parts of the process and have since abandoned that process. You don't hear anything about TQM anymore. That is dead."

Rorie believes the groundskeeping business—and service industries in general—will remain labor intensive.

"The reality is you are going to have to have a worker who is low paid, provide a relatively high level of service in order to compete and grow...I would tell you you're going to have to do it faster, better, cheaper, like everything else."

"To me, quality was more defined by the service provider, namely the landscape contractor," says Steven Glover, CEO of L&L Landscape Services, Sunnyvale, Calif.

"I think we had the opinion and mindset that we knew what was best, and we knew what was right, and we'd go out and perform fast service to our level expectations. What we gave them, that's quality."

Local view not far off

Debbie Cole, owner of Greater Texas Landscape, Austin, points out that her view of quality is a local perspective, based on what has happened in Austin.

"Over the past 15-18 years, the landscape industry has really been born here. It's not all that old."

Cole says that prior to 1981, there were fewer than three landscape companies that did commercial work. In the residential segment, people either did it themselves, or had a nursery plant a tree. There were also fewer than five landscape architects in Austin, and the unskilled laborers were directed by the architect.

Shortly thereafter, says Cole, In 1982, Austin and Central Texas went through a boom. A city landscape ordinance required commercial landscaping on sites. And, many companies began to relocate to Austin. Cole believes it was not good work, but



Glover: Service as defined by the customer.

Why can't we take a lawnmower out and 'teach it' to mow grass? They do it in farming. Global Position Satellite has the capability of getting down to inches." — Gary Thornton

bad work, that got people to realize the need for quality. "Then, as bad work started to happen, people began to differentiate, they realized what bad work was, and the discussion of quality began." Cole says quality standards are "definitely customer driven now," and include responsiveness and timeliness on the maintenance side, and timeliness, quality of plant material and customer interaction on the design/build side.

Every market, says Cole, has its own perception of quality, and even clients within each market have differing perceptions.

"In Austin, they do not consciously say 'TQM'. They're doing it, but not thinking it, discussing it. It's sort of, if you want to stay in business, that's what you have to do."

Cole doesn't see any great changes in quality standards in the future, "because the clients set the parameters for quality, and that will happen for the next 10, 20 years."

"A company should find out what the customer wants and then, to the best of our ability, provide that for them," adds Glover.

"I don't think any of us are following a 'Total Quality' system by the book. I think we are creating our own systems. I think we are focused on committed to providing service and quality as it is defined by the customer."

Smarter customers

But landscaping will change, thinks Cole.

"Resources are becoming more limited, whether

it's money or water. Our clients are becoming much more educated about horticulture."

Cole says that as customers become more astute about horticulture, they are becoming more interested in managing their property correctly.

"People are willing to do what's right, as long as they understand it. I think there will be more of that."

Cole predicts the industry will have quieter equipment, equipment that is used less, and more use of growth regulators and low-maintenance grasses, or none at all.

Full...fuller...fullest service

"We don't just delve into landscaping," explains Ron Kujawa, president of Kujawa Enterprises, Inc., Kudahy, Wisc. "We will delve into anything which the customer thinks we can help them with: snowplowing; curb repair after a hard winter of snowplowing; filling cracked asphalt, sealing, striping asphalt...it could be just about anything customers ask his company to do that falls under the heading of outside maintenance."

About 20 years ago, Kujawa says, quality was something you could anticipate.

"There are often many contractors working for a client. The one that suggests and the one that anticipates client needs is in a better position than the



Kujawa: Some clients see only dollars jobs cost.

It's meeting the client's requirements and exceeding their expectations."

This takes the judgement of quality off of the contractor and puts it squarely in the hands of the client. It's a transition that is happening in the industry, but not yet totally.

"I think [Total Quality] is practiced by a quarter of the industry," suggests Lied. "I think it is recognized as a goal by another third to half of the industry; and ignored, unknown or consciously declined by the remaining quarter."

"There are a group of contractors that consider their clients the enemy."

JC

Expectations

"They're pure emotions," says Tom Lied of client expectations. They deal with:

- ▶ how is this process delivered to me?
- ▶ are my time lines met?
- ▶ is it fun to review the designs with you?
- ▶ is it fun to have the project unroll and have your employees at my place of business?
- ▶ is it an enjoyable experience, in which I can participate as much or as little as I choose?

Requirement and expectation round out the concept of the Total Quality philosophy. "The combination of those two things is what Total Quality is.

"You don't build a long term relationship by trying to put something over on people."

—Ron Kujawa

Kujawa links the service industry to the intangibles of quality.

"What's unfortunate in the service industry, is that all you sell are promises, you don't sell anything else. You promise to do this, you promise to do that."

Often, since dollars are the only common denominator, Kujawa says it is hard for a customer to judge true quality.

"Unless he's had the experience of working with people, the person who's buying it cannot measure the contractor's responsiveness, flexibility, punctuality," Kujawa said.

"All those intangible things are very difficult to measure. They only see one thing...dollars."

Long term relationships

Kujawa says the longer he successfully serves a customer and develops a relationship, the more the customer has confidence in him.

"They know we're going to look out for them. They don't have to continually look out for the bottom dollar."

He also sees quality from the standpoint of how it functions within the company.

"We have employees who have worked here since the '70s," says Kujawa. "I've got a number of 25-year people here."

—Writer John B. Calsin has contributed many articles to LM. He is based in West Chester, Pa.

one who waits to be asked." "The customer doesn't have to be right," says Kujawa, "the customer has to be satisfied. That's all."

Service for 'boomers'

There is one thing we need to understand about the Boomer Phenomenon. Boomers are splitting into two groups: the "rich boomers" and the "poor boomers." The rich boomers were born between 1950 and 1960. They got into their houses when you could afford them and into careers when jobs were plentiful. The rich boomers inflated the prices of goods and got a head start on their careers, leaving the poor boomers—born between 1960 and 1970—in their wake.

The rich boomers have built their houses and are in them. They are not going to be out building things but they will have the most money to spend of any age group in the country. What will they spend their money on? Service. They will not want to mow their lawns, trim their shrubs or pull their weeds. They will not want to plant a few trees and shrubs to upgrade their landscape.

One of the fastest growing segments of this business is, and will be, maintenance. All across the country I have heard and seen the same things: contractors talking about how maintenance has paid the bills, how it is the only part of their business that is growing. Companies who never even considered maintenance three years ago are now scrambling to get into it.

Maintenance billing in this nation will exceed billing for new construction someday.

From "The Complete Business Manual for Landscape Irrigation and Maintenance Contractors," by Charles Vander Kooi, a Green Industry contractor and business consultant based in Littleton, Colo. He has been in the Green Industry for more than 30 years, and has done more than \$100 million in landscape projects. To receive a copy of the book, contact Vander Kooi & Assoc., Inc., at 303/697-

6467.

Maintenance billing in the U.S. will someday exceed billing for new construction.

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Dayton, Ohio- Are you frustrated by advertising that never makes the phone ring? By being beat out of good jobs by cheap bidders? Feeling like you're starting your business all over again every season? Stuck at a certain level?

A million dollar per year "entrepreneur of the year" says that most of his peers' and competitors' marketing is anemic, me-too-istic, dull, full of costly waste, and ineffective. Arrogant? Egotistical? Marty Grunder says: "React to me any way you like—but one thing is for sure, if you are in the landscaping business or maintenance business, whether you are small or large, my marketing methods can easily double or triple your business in just one year, provide better customers, help you target and get exactly the kind of business you want, increase profitability and stability, and absolutely mystify and trump your competitors."

Big talk? Yes, it is, but this Grunder wisecracker has been showing off—and blowing sceptics away—his entire life. As a freckle-faced, red headed Dennis-the-Menace type kid, he started his business with nothing more than a "push" lawn mower and chutzpah. That little business went to 75 regular customers almost overnight. As a full-time student at the University of Dayton, while his buddies drove to school in old "beater" cars and flipped burgers for pocket money, Marty arrived in his Grunder Landscaping Company truck and, at age 21, did over \$300,000.00 in business. Last year he was named Young Entrepreneur of the Year by the Small Business Administration's Midwest Region, in the 1 to 25 employees category. Currently, Marty oversees a staff of 30, 18 trucks, a backhoe, an assortment of other equipment, and a diversified business doing everything from basic residential lawn maintenance to complicated commercial landscaping projects—and, this year, breaking \$1.5 million in annual sales. He's also investing in land, lecturing from time to time, and working with other landscapers as their "marketing coach."

Million Dollar Marketing Secrets Revealed In A Free Report—If You Qualify!

Grunder DOES have "secrets" for building these types of businesses, too. Here are just a few examples:

1. How to **spark referrals**... how to turn "small accounts" into big business.
2. How to **increase Val-Pak Coupon, direct-mail and Yellow Pages advertising results by 10% to 30%**...make your advertising much more productive and be able to accurately measure its value.

3. The 5 biggest mistakes 95% of the people in this business make when advertising and how to avoid them.
4. **How to stop the "price shopper" in his tracks. How to get good business without being the lowest bidder or offering cheapest price.**



Here's the smart-aleck kid standing next to his first truck. Who'd have guessed he'd quickly create the biggest and best company in southern Ohio, confound established, entrenched competitors, and exceed \$1.5 million in annual sales? Betcha he has a marketing secret or two in his pocket that you'd love to steal, if you could!

5. How to avoid the **fatal mistake** of confusing 'marketing' with 'selling'.
6. **Forget wasteful "name recognition" or "getting your name out there"**—learn to "target," create and deliver a "market-matched" message, and **attract exactly the type and size of clients you really want.**
7. Why your "service" should never be the #1 focus of your marketing.
8. Powerful but simple letters and things to say to existent customers to cause demand for a variety of additional, highly profitable services.
9. **The "secret" borrowed from the fad-diet business that sells high-priced, high-profit landscaping work like crazy.**
10. How to get people working for you and with you to really contribute like a championship team!
11. How to use "automated, autopilot marketing" to bring in new business without you or anyone else even talking with prospects on the phone!
12. Even "poor boy" **dirty cheap marketing** strategies, like what to write on a simple postcard to bring in a flood of new customers.

13. The "4-Page" marketing tool used 6 to 10x a year that is guaranteed to increase your business by at least 30% year after year...automatically!
14. How to position yourself as a "famous expert" in your area, get a ton of free advertising and "fray" the competition.

And there's a whole lot more. At the urging of a big-time, nationally respected direct marketing consultant and professional speaker who discovered and was "blown away" by everything Marty was doing, Marty prepared an easy-to-read but very complete, provocative Special Report—"How To Re-Invent Your Lawn-Garden/Landscaping Business With Million Dollar Marketing Secrets"—and you may be able to obtain a copy at absolutely no cost whatsoever.

Who Should Get Marty Grunder's Special Report?

Marty asks that you call for his free Report ONLY if: (1) you own your own business or are the President, CEO, manager or marketing manager for the business; (2) you make the decisions about advertising, marketing, and customer service investments; (3) you are currently unhappy with some aspect(s) of your business; (4) you recognize that in today's competitive environment, just "doing a great job" isn't enough to sustain a business; and (5) you are willing to make progressive innovative changes in your business if convinced, even reasonably assured that doing so will dramatically improve sales, profits, customer satisfaction, referrals, growth, and community prominence. (Please do NOT waste your time or Marty's money getting this Special Report if you are close-minded, change resistance, fully satisfied with your income, or just a curiosity-seeker without sincere interest in changing your business for the better.)

How To Get Your Free Report:

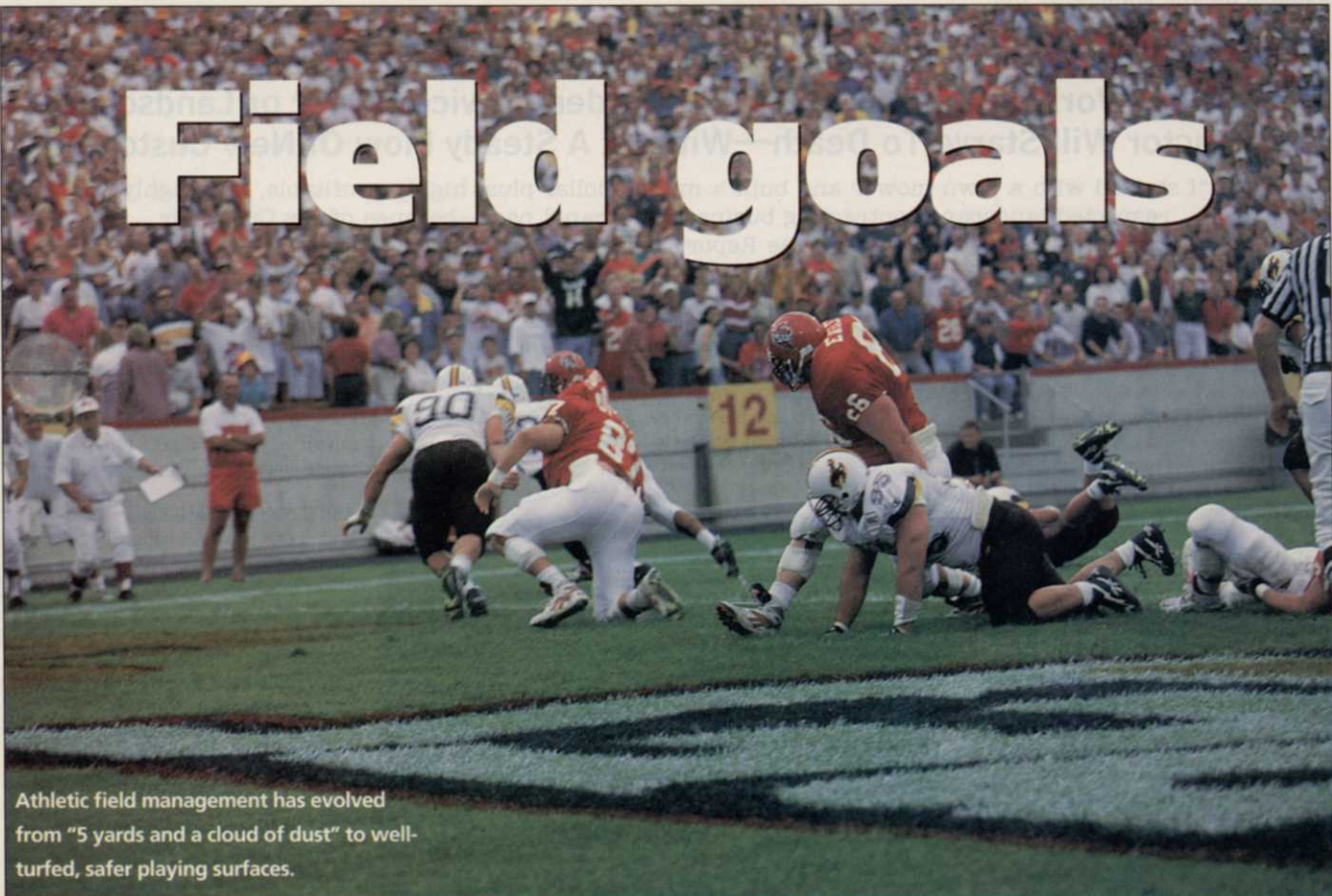
Simply write "Report" on your business card or a sheet of your letterhead and FAX it to 937-847-8067 or, for even more information and to get your Report, call 1-800-399-7135, listen to a brief free recorded message, then leave your name, company name, and address as instructed. You can FAX or call anytime, 24 hours a day, 7 days a week. If you prefer having your report sent confidentially to your home address, just let us know. Incidentally, requesting your free Report does not obligate you in any way; no salesperson will call to follow-up, nothing of the sort. However, this is a limited free offer, so please take care of it right now, while it's fresh in your mind.

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Circle No. 131 on Reader Inquiry Card

Field goals



Athletic field management has evolved from "5 yards and a cloud of dust" to well-turfed, safer playing surfaces.

PHOTO COURTESY MIKE ANDRESEN, IOWA STATE UNIVERSITY

Great strides have been made in sports turf, but we are still in our infancy. We look forward to more change in methods of construction, renovation and management of sports turf.

By Dr. KENT W. KURTZ,
CAL POLY POMONA

The turfgrass industry was a sleeping giant prior to and shortly after WW II as there was no grass seed, fertilizer, herbicides or equipment available, and fields were "dirt" and mud, with a smattering of grasses and weeds.

The "Renaissance", or awakening, occurred just after the war, with the introduction of 2,4-D, urea formaldehyde and natural organic fertilizers. Most of the advancements in the sports turf industry are the direct result of the golf course industry which funded research and product development.

Great strides have been made in sports turf, but we are still in our infancy, and look ahead to more change in the methods of the construction, renovation and management of sports turf. Changes such as better fund-

ing, elimination of the low-budget, low-bid contractor, more pride in the quality and safety of the field as well as a movement for additional education and stronger recognition for those directly responsible for caring for and maintaining athletic fields.

► Many significant contributions have been made in the past few years in the research and development of new and improved warm-season and cool-season grasses, that are adapted to the heavy use of and rigors of sports turf.

These new grasses have burst upon the scene and are continually arriving from plant breeders.

► Mowers have been adapted to cut wider swaths of turf with better quality of cut.

► Improvements in reel, rotary and flail mowers have been possible with the advent



Kurtz: Quality fields, winning attitudes, successful programs.

of the hydraulic motor-driven cutting blades, which no longer require ground speed to improve the cut.

► Advances in aerifiers equipped with hollow or solid tines and machines that reach deeper into the soil and pull cores are a great improvement.

► Topdressers that apply measurable quantities of material onto the turf surface and ones that can handle less than a cubic yard of material to several yards are now available.

No need for phony turf

Synthetic turf came along in the 1960s because we lacked the necessary technology in soils and playing surfaces. These artificial surfaces are now being replaced by sophisticated, sand-based soil profiles that use clean, uniform sands, soil warming technology and moisture sensors.

Prescription Athletic Turf—The PAT System—was developed at Purdue University and the first field to use the system was built by the late William Daniel in 1974. The system is still being installed, with the patent now held by The Motz Group of Cincinnati, Ohio.

Next plateau: turf under glass

We are about to reach another plateau with the development of grasses and environmental systems for growing turf in domed stadiums. Improvements in soil amendments to stabilize sand fields using mesh elements, various types of fibers and improvements in water infiltration, drainage and surface resiliency with soil additives, such as crumb rubber and other products have been quite successful. New materials for topdressing turf to protect the grass plant's crown and growing parts under heavy use, like finely ground crumb rubber, have shown success in the 1990s.

Other advancements include:

► more diversified fertilizers, weed, disease and insect control products.

► new, improved drainage equipment from Europe and Canada. We must recognize the drainage factor, and better utilize physical soil analysis as a means to develop a good base for sports fields.

Further, we must use this information to design the best facility within budget constraints and develop sound and functional specifications for the construction and/or renovation. Poor design, old specifications and resistance to change continue to

We must recognize the drainage factor, and make better use of physical soil analysis as a way to develop a good base for sports fields.

contribute to failed projects within our industry.

Share information

We must continue to learn, try new products and equipment, gain more pride in the workplace, work together as a team and network with other professionals. Probably the greatest advancement in the sports turf industry has been the establishment and successful participation by sports turf managers in their own national association, the Sports Turf Managers Association, founded in 1981. State chapters are being formed throughout the country.

Membership and participation in STMA is critical for self-improvement through education, fellowship, networking and the goal of making fields safer and more aesthetically pleasing. A quality athletic field results in a winning attitude and successful program for sports teams and sports turf managers.

—*Dr. Kent Kurtz is a sports turf advisor and professor of turfgrass science at California State Polytechnic University at Pomona, Calif.; a founding member of the STMA; and a past member of the LANDSCAPE MANAGEMENT editorial advisory board.*

'Back to grass' begins

Artificial turf is hurting athletes, say an overwhelming number of college athletic directors. The athletic directors, from schools in the National Collegiate Athletic Association (NCAA), cited increased injuries to knees, ankles and elbows as the main reason they preferred natural fields.

Fifty-three percent see a trend back to natural fields.

Comments from respondents characterized artificial surfaces as "too hard, abrasive, and no give."

Besides knee, ankle and elbow injuries, burns and contusions also topped the list.

Several coaches favored synthetic turf. A service academy official said, "The main problem is footwear, not the turf."

LANDSCAPE MANAGEMENT, February, 1988



We were there at birth of lawn care

WT&T and LCI first to recognize the 'new' lawn application industry.

BY JIM GUYETTE and RON HALL

Professional lawn applicators proved that they could apply fertilizer products more efficiently than most homeowners—and with better results.

The chemical lawn care industry emerged and grew since publication of the first issue of *LANDSCAPE MANAGEMENT* (then called *WEEDS AND TURF*) in 1962.

There were some lawn care companies then, most in the Northeast and a few in the Midwest and in Florida, but no recognizable industry.

Most homeowners fertilized their own lawns, about once or twice a year.

Only a few entrepreneurial individuals worked to develop products and systems to treat many lawns in a day. They thought that if they could substantially improve those lawns, that they could build a profitable business. Even so, few could foresee the demand for professional lawn care. Once

homeowners learned that they could hire "professionals" to improve their lawns, at an affordable price, they embraced the service.

Within a decade, the few applicator companies grew into many.

The 10 to 15 years following *WT&T*'s first issue saw the birth of many of the companies that later became so familiar—Lawn Doctor, ChemLawn, Davey, The Weed Man, and Barefoot Lawn among others. Some opted for company-owned branches. Others offered franchises.

Meanwhile, many other smaller, local application companies began shortly thereafter, in the mid to late 1970s. Those that haven't been bought by larger companies remain some

of today's strongest local and regional companies, and they're still family-operated.

"It was a very heady time. It was really exciting," recalls Bob Earley, former editor and publisher of *LAWN CARE INDUSTRY* (LCI) and *LANDSCAPE MANAGEMENT* magazines. (LCI published its first issue in July 1977 and continued until 1991.)

"The industry was full of entrepreneurs and guys with farming backgrounds," says Earley, who lives near Chicago and remains in publishing.

"The guys were all 28 to 32 years old and they were ready to branch out. They said, 'hey, I can do that.'" And, they did.

Duke an inspiration

Many of these young entrepreneurs were inspired by the success of the charismatic

Richard Duke who, in the early 1960s started experimenting with systems to deliver homeowner lawn service. In the winter of 1968 Richard and his father Paul closed their garden center in Troy, Ohio, and started a chemical lawn service. By the end of the season they'd attracted 400 customers.

They called their company ChemLawn and it became, within a decade, the most recognizable name in lawn care. But, it wasn't the first successful lawn care company—not by a longshot.

Early innovators

Millard C. Dailey offered contract spraying of liquid fertilizer onto home lawns in the early 1950s. His business, known as Liqui-Green, took off

after he consulted with an engineer to build a truck with agitator tank, pump and 300 feet of 3/4-inch hose.

In 1961 Daniel Dorfman founded Lawn-A-Mat on Long Island. He developed a multi-purpose Lawn-A-Mat machine to make the service affordable for homeowners. Towed by a small tractor, it aerated and rolled a lawn as it dispensed several dry materials. You could even use it to make spot treatments of liquid material.

Even so, Dorfman said that he still had to market his service.

"It is no longer enough to pass out a few leaflets in a neighborhood which is often all that is necessary to obtain customers for mowing, clean-ups and hedge and shrub trim-

ming," he wrote in WT&T. "A many-pronged advertising and promotional program must be undertaken, and this costs money too."

Floridians active too

Meanwhile in Florida, Ron Collins, was working with his uncle Bruce in Fort Lauderdale, delivering liquid pest control to homeowners' lawns. The uncle came up with the idea of delivering the service in clean trucks with technicians in white uniforms and red hats, recalled Ron Collins in an interview with LCI in the mid 1980s. Ron founded R.W. Collins Inc. in Satellite Beach on Feb. 20, 1962.

The services were sold as "power spraying," and the first spray guns, designed for use in

orange groves, delivered 60 gallons a minute under 800 pounds of pressure. When Collins deemed that the old iron 1,000-gallon red tanks were too heavy, he had a fiberglass tank made.

Other early lawn care companies sprang from fuel oil delivery companies in the Northwest seeking ways to generate income from their trucks in the growing season. Or from tree companies that already had tanks and spray equipment, and were familiar with professional application.

But it was ChemLawn that popularized lawn care nationwide. CL opened markets at an amazing pace. In 1970 CL had expanded to Louisville, Indianapolis, Cincinnati and

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Toledo, and passed the \$1 million mark. Just over a decade later, there were ChemLawn locations nationwide as it recorded sales of \$180 million.

Tragically, founder "Dick" Duke never saw how successful CL eventually became. He died suddenly of a heart attack at the age of 48 on August 23, 1977. He left behind a valuable legacy—dozens of highly trained, highly motivated and still relatively young lawn experts. Many remain active in the industry.

Media hysterics

The lawn care industry's growth hasn't been without problems. The most persistent has been the assertion by some critics that lawn care chemicals pose risks either

more responsive to customers through such practices as posting and pre-notification.

Positive thinking

In January of 1987, Jerry Faulring, founder of Hydro Lawn Inc., wrote to LCI telling his colleagues to ease off with the "hyper emotionalism." Posting laws were actually a plus for the industry, he pointed out. Generally the public accepted the idea without fuss. Any way, it's free advertising. "Tens of thousands of flags got planted," wrote Faulring. "And guess what? The birds are still singing and the pets and children are okay."

The mid 1980s were a watershed in another way. The number of million dollar lawn care companies (those with annual revenues exceeding \$1 million) leveled off, and began to shrink due to buy-outs and consolidations. The trend has continued with TruGreen/ChemLawn, now industry's powerhouse.

"Their production can outnumber anyone else's," says Neal DeAngelo, president of Lawn Specialties in Hazelton, PA.

"Don Karnes and those guys did a real nice job of consolidating," Erbaugh points out, marveling at TruGreen's rise in the industry.

As a division of ServiceMaster, TruGreen acquired long-time competitors ChemLawn and Barefoot Grass, and gobbled up dozens of regional and local companies too in the 1990s. Not bad for a company with humble beginnings as a small application company in cen-



Lawn Doctor co-founder Tony Giordano, right, presents a 10-year Service Award to Service Manager George MacDonald.



Erbaugh: lawn care industry became an easy target.

to humans or their pets, and/or the environment.

"In July of 1986 Dan Rather of CBS brought us into the environmental battle," recalls James Brooks, former executive vice president of PLCAA.

"A few politicians realized that there was hay to be made by attacking lawn care," adds J. Martin Erbaugh, who got his start working at the Davey Tree, then built up his own large regional company, Lawnmark.

While incidents arising from chemical misuse by LCOs have been rare, public concern helped push the industry to be

tral Michigan in the early 1970s.

Karnes, who started out as an applicator with TG in western Michigan about 20 years ago, is now group president for lawn care and pest control at TruGreen/ChemLawn/Terminex.

Burning up the phone lines

Karnes says there several reasons why TruGreen succeeds, not the least of which is its success in selling over the telephone. "Telemarketing has had a huge impact on our industry," he says.

As TG/CL grows, the

Karnes:
TruGreen knew how to sell over the phone.



industry itself grows. Karnes credits better training for technicians and more efficient equipment. Regulations have also helped move the industry "in the right direction," he says.

Russ Frith, president of Lawn Doctor, Inc., the largest lawn care franchise operation in the U.S., believes consumers have a greater understanding of lawn care today, and that he has faith in the industry.

"The marketplace is expanding. There are more housing starts now." Also he points out that 15 years ago, about 45 percent of American households had dual incomes. Now the figure approaches 85 percent. And what American adult doesn't want more leisure time, he asks?

PGMS knows its mission

Professional Grounds Management Society seeks to unite and serve Green Industry professionals and others through education and environmental awareness.

by JOHN GILLAN, PGMS

Although the Professional Grounds Management Society is now in its 86th year, what has happened since 1962—the year of the Society's 50 anniversary—has been the most progressive period in its history.

PGMS began as the National Association of Gardeners in suburban New York and New Jersey in 1905. Those original members were then known as "estate gardeners".

In 1911, it was realized that it just made sense to include all institutional grounds managers in the mix. Since then, the broadening of the Society has continued—although under two influences:

- ▶ the unique core of the Society would be the institutional grounds professional generalist, and
- ▶ the organization would remain a professional society for the individual.

Reasons to join

Since 1962, what has happened is that more turf specialists, horticulturists, irrigation specialists, independent contractors and even some arborists have seen fit to join the ranks, especially if their daily work involves them in work for institutions.

The types of institutions include colleges and universities, municipalities, park and recreation facilities, office parks, apartment complexes, hotels/motels, cemeteries, theme parks and other areas needing professional landscape care. The colleges and universities are the largest single membership category.

Some of the changes within the PGMS since 1962 include:

- ▶ changing the Society's fiscal year.
- ▶ changing the working relationship with the

Society's local branches to bring the groups into greater commonality.

- ▶ adding a significant marketing capability to Society headquarters.
- ▶ originating the Certified Grounds Manager peer review program (1980), the first such program of its type in the service portion of the Green Industry.
- ▶ offering the Certified Groundskeeper program in 1996.

The greatest changes, however, have been those relating to things outside the organization:

- ▶ one of the earliest scholarship programs in the industry.
- ▶ more active participation in allied industry events and associations, and partnering with ALCA



PGMS President Tom Smith, center, cuts the ribbon at a GIE show with PLCAA's Executive vice president Ann McClure and ALCA member Ron Kujawa.

and PLCAA in the Green Industry Expo.

PGMS will continue to help the individual manager develop techniques and management skills to assure an outstanding grounds management program for his/her organization, agency, department, firm or employers, and upgrade the level of professionalism.

—John Gillan is executive director of The Professional Grounds Management Society, based in Hunt Valley, Md.

CERTIFICATION

PGMS
A voluntary, peer review
program for
grounds professionals

An early PLCAA board meets, circa 1980.



PLCAA

met a growing need

PLCAA was formed by a band of eager industry professionals to meet the needs of a growing number of lawn care operators.

On June 14, 1979 a small gathering of lawn care businessmen met at the Cincinnati-South Holiday Inn, and decided to form an association, and agreed on "Professional Lawn Care Association" as a working name for the group. They raised nearly \$15,000, appointed pro-tem officers and hired a management company to put it all together.

First show in 1980

The first PLCAA convention and trade show was held November 12-14, 1980, at the Commonwealth Convention Center in Louisville, Ky. Attendance was about 700 lawn care businessmen, which told the board members that their decision to emphasize business management topics at the show had been a good one.

From 1979 to 1989, PLCAA jumped out front with education programs, an annual conference and show, and legislative activities. PLCAA quickly established itself as the "voice of the lawn care industry."

The Association stabilized its finances and created a surplus budget under Ann McClure's management as executive vice president. Membership grew from 978 companies in 1990 to 1,200 by 1997 when she left PLCAA to join another association.

Green Industry Expo

The Green Industry Expo, a first-time venture based on the cooperation of PLCAA, Professional Grounds Management Society and Associated Landscape Contractors of America. In its 1990 debut, GIE attendance topped 2,000, attracted more than 250 exhibitors and sold 54,200 square feet of exhibit space. 3,000 attended in

From its inception in 1990, PLCAA has managed the trade show and in 1994 hired Eleanor Ellison as its trade show manager.

Government affairs

In the early 1990s the lawn care industry was the focus of intense media and congressional scrutiny. The future of the industry was at stake as Congress investigated the use, regulation and potential health risks of lawn chemicals, and the advertising and safety claims made by the lawn care industry. Government affairs director Tom Delaney and Ann McClure testified in two Senate Subcommittee lawn

care hearings in 1990 and 1991.

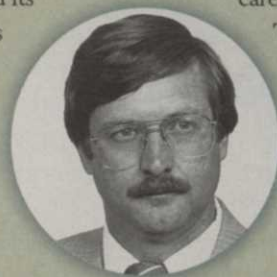
The Association stressed the environmental importance of a well-maintained turf and the necessary role played by lawn care professionals.

Delaney continues to monitor national, state and local laws, regulations and ordinances. Through PLCAA, he's always available to advise members battling unfair pesticide and business regulations in their communities.

PLCAA continues to grow and educate the industry about professional practices, issues management and environmental stewardship, as well as inform the public, media, government agencies and political leaders about the benefits of turf.

"As we approach the millennium," says Delaney, "PLCAA will play a vital role in continuing to educate a maturing industry about new products and technologies, and the importance of environmentally sound lawn and landscape practices. Industry professionals are ambassadors. They must be active members practicing grassroots politics and using the information PLCAA provides to inform their customers and communities about the benefits of turf and professional practices."

—From "PLCAA: Yesterday, Today & Tomorrow," additional history by Karen Weber, PLCAA director of communications.



Delaney: monitors legislation for fairness.



RISE: the D.C. connection

by ALLEN JAMES, RISE

The specialty pesticide supplier industry needs an effective association to address its needs and concerns, and to serve as its representative and voice at the national, state and local level.

To fill that need, RISE (Responsible Industry for a Sound Environment) was established seven years ago in Washington, DC by a small group of company representatives.

RISE membership now totals more than 125 active and associate members and continues to grow. Members represent not only manufacturers and formulators, but distributors and other industry leaders involved with pest control products used in turf, ornamental, aquatic and terrestrial vegetation management and other non-food/fiber applications. Companies and associations with related interests form the group's associate membership.

Positive influence on opinion

The association was created to provide a strong, unified industry voice; to be a positive influence on public opinion; to promote use of industry products as valuable pest management tools that enhance the quality of life and the environment; to promote the safe and responsible use of all industry products; and to protect the specialty industry from unwarranted regulation.

Over the past several months RISE has:

- ▶ Helped organize and participate in EPA's advisory group on improved consumer labeling of specialty pesticides;
- ▶ Worked with EPA on implementation of the Food Quality Protection Act and other regulatory concerns;
- ▶ Advised on drafting and helped distribute the EPA initiative on Integrated Pest Management for public school superintendents;
- ▶ Developed an awards-winning CD-ROM on specialty pesticides and its industry which was distributed widely to key news media, garden writers

and environmental journalists;

- ▶ Responded to numerous editorials, articles and news media contacts on issues concerning industry, pesticide uses, and consumer concerns;
- ▶ Established the *Formulators Work Group* to address issues important to this industry segment;
- ▶ Conducted regional seminars for specialty products industry members and end users, addressing concerns about idiopathic environmental intolerance (multiple chemical sensitivity—MCS.);
- ▶ Worked with allies to address a number of state and local legislative and regulatory issues related to specialty pesticides and their use;



James: control products are useful tools.

- ▶ Worked with Golf Course Superintendents Association of America, and the Professional Lawn Care Association of America to establish an Ambassador speakers program in a number of states.

Along with PLCAA and TruGreen/ChemLawn, and in cooperation with the National Association of County Agricultural Agents, established an annual study tour and workshop on pest management for

urban agents; and continued sponsorship of NACAA's awards program promoting responsible urban pesticide use.

A major challenge

All of us within the green industry have a challenge: Sustain and improve upon the benefits to home and community markets with the products and services that enhance quality of life, protection of health and preservation of environment. RISE, and its members, is committed to being an active partner in meeting that challenge.

—Allen James is executive director of *Responsible Industry for a Sound Environment*.

TPI optimistic

In the early 1960s, landscape contractors, golf course superintendents and other grounds professionals had few grass establishment options. If they wanted to seed or sprig, the number of improved varieties was limited. If they wanted sod, high labor demand was the only certainty, as producers were widely scattered and product quality varied.

A cycle that builds on success is very strong within today's turfgrass production industry, with an expanding number of options being a key element.

Variety in turf

Standard rolls and slabs of consistently high-quality sod are widely available, in an ever-expanding array of mixtures and blends. Big rolls, washed sod,

thin-cut, thick-cut, custom-grown and unique harvesting, delivery and installation options all create and support a greater and greater use of turfgrass sod. Golf courses, sports fields and erosion control projects are all turning to sod because of its instant and certain result, with a known cost for quality. The use of sod on residential sites continues to increase for the same reasons. Concerns and increased awareness of potential environmental impacts are also contributing to the increased use as well because it does not require the large amounts of water,

fertilizer or pesticides associated with seeding.

Turfgrass Producers International (formed in 1967 as the American Sod Producers Association) is more the catalyst than the cause of these improvements. By offering a forum where producers and manufacturers can exchange ideas and information on a regular basis at meetings or through committees and publications, TPI members are better able to anticipate or react to new needs and requirements.

Today's ideas, tomorrow's reality

Yesterday's methods quickly become historical curiosities because the competitive nature of the turfgrass sod production industry requires that the producer must not only compete with fellow growers, but every other type of grass establishment as well. What's more, they have to do it on a cost and labor competitive basis, knowing that given sufficient time, their professional customers could grow high quality grass on their own and not require sod.

With nearly 1,000 members in 36 countries, TPI has become the preeminent source for information about the turfgrass sod industry, but its volunteer leaders and professional staff are already discussing how to further improve the industry.

One of the key components to this continued improvement will be a concerted and organized effort to better understand the needs of their customers, especially the professional segment. Asking questions, listening carefully to the answers and developing new solutions will be an on-going effort for TPI and all of its members. TPI and its members should individually and collectively be wise enough to recognize these new opportunities and brave enough to advance exciting new solutions.

—Fender is executive director of TPI, a position he has held since 1983.



Fender: industry improvements help make sod installation easier.

Sod. A little word that offers big advantages for turf managers. This association thinks positively in an age of environmental unrest.

By DOUG FENDER, Turfgrass Producers International

Fourteen past presidents of ASPA/TPI entertain during the group's 25th anniversary celebration in Chicago in 1992.





ALCA's first meeting. From left: Ken Jenner; Ed Stafford; first president Julian Graham; Warren Purdy; Walter Diestch; Tom Lied; Tom Rich; Ernest Berthe; Don Sawyer; Ken Schmidt; Ed Reinecke; Jim Omura; Grant Tigwell; Bob Hoffman; John Lindsay; Don Groth; F.J. MacDonald; Harris Grand.

ALCA

changed with industry

By RUTH E. THALER-CARTER

What began 35 years ago as a small group of concerned business owners is now a leading trade association for the landscape industry.

The Associated Landscape Contractors of America (ALCA) serves exterior and interior landscape contractors, with a wide range of programs, services and vision.

By expanding services and smoothly adapting to the changing nature of its industry, ALCA has evolved from a small group of dedicated founders to a network of professional-level services and activities.

As recalled by Tom Lied, CCLP, chief executive officer of Lied's Landscape Design and Development, Sussex, Wisc.; ALCA president in 1968-1969, and the last active contractor who was a charter member, ALCA began through the efforts of magazine publisher Jim Garland of the California Landscape Contractors Association.

California model moves across nation

"Jim felt that the state association was working well and had developed a dynamic value in California, but that there was a need for a national association representing landscape contractors," Lied recalls. "He felt

we could use the California model as impetus but that we needed a national voice."

Garland used his magazine to announce plans for an exploratory meeting in Chicago, inviting both landscape contractors and their suppliers to attend. That led to a decision to form a national entity, along with "the usual mix of short-sighted and long-term goals," says Lied. "One person wanted a vehicle for group purchasing and discounts on training publications. Another wanted leverage and limits on competition and regulating prices. Another wanted the national group to be politically active. Others wanted social and business visibility to improve the industry's image. Some wanted a focus on increasing profits through education. There was a strong interest in growing together and sharing ideas, being educational, which has survived through the years."



Bailey: Define our role as professionals.

The charter members agreed to form an association, drafted a constitution and by-laws, and elected Julian Graham as the first president. "He was the most interesting, funny, pleasing individual - a real role model," says Lied.

The group set a date for its first conference in New Orleans. It was "Dutch treat," and everyone paid their own expenses.

"One reason that ALCA originally formed as a national organization was to fill a need for members of the industry to be both better business people and better landscape contractors," said Rodney L. Bailey, CCLP, president of Evergreen Services Corp., Bellevue, Wash., and ALCA president in 1985, as well as a member and/or chair of every major ALCA committee since joining the association in 1974.

We are professionals!

"ALCA was the first national group that recognized that we deserved to exist as professionals. The founding role was in education and that has been its guiding role ever since." In its early years, ALCA developed programs to reflect all aspects of running a landscape contracting company. A December 1977 issue of its newsletter reflects this commitment to educating members, with coverage of a two-day Maintenance Symposium (now the four-day Landscape and Grounds Maintenance Conference) and announcements of an annual meeting, Intiorscape Symposium (now the Interior Plantscape Conference), Management Seminar, Capitol Hill update and new members.

"ALCA's principal contribution to individual members and the industry has been to provide a forum for interacting and exchanging ideas and philosophies that are aimed at making us all better contractors,

which makes the industry better all around," Bailey says. "We feel free to share information because competition is not an issue. Any changes over time, such as how the association is organized, have been in response to changes in the industry and often have driven the industry. The most healthy change I've seen over the years is in focusing more on what we do rather than our geographic identities."

"The hallmark of ALCA has been benchmarking, networking, sharing ideas and education," Lied says. "The focus on education evolved through programming that serves the special interests of various segments of the industry." Among ALCA's earliest and most ingrained values has been its commitment not only to professional education, but to "acquainting young people with established contractors and improving the industry's image by building confidence among members," says Lied. "In the early days, every time you called yourself a 'landscaper' instead of a 'landscape contractor,' it cost you a buck! ALCA was the catalyst for converting the mentality of landscape contractors from 'this is a fun business' to 'landscape contracting is a good venue for earning a living' - from being a tradesperson to being a professional business person."

Business basics first

ALCA formed "when people were less concerned about building and expanding their markets and more concerned about how to do the work of running a business, because the market was so great at that time," says Lied. "Now that we're in the second and third generation of business owners, we've gotten more professional and more astute. ALCA and its various teaching institutions have led to better-quality members when other industries have been declining."

Shows with other groups

A hallmark of ALCA's growth and



Lied: Better quality members fill ranks.

success over the years has been its productive partnerships with other organizations in the industry. For example, joining forces with the Professional Lawn Care Association of America (PLCAA) and Professional Grounds Maintenance Society (PGMS) led to the annual Green Industry Expo trade show, now part of the

ALCA Landscape and Grounds Maintenance Conference every fall. The ALCA Interior Plantscape Division Conference will be held with the Tropical Plant Industry Exhibition (TPIE), starting in January 1998. ALCA demonstrates the benefits of plants in the workplace and promotes using professional landscape contractors to colleagues in many fields by participating in World Workplace every year.

ALCA's growth over time has been steady. The association today has approximately 1,500 member firms and a staff of 13, with an operating budget of \$2 million a year. Current services include:

- ▶ two premiere industry conferences and trade shows, for the interior landscape industry and exterior and maintenance specialists;
- ▶ a wide range of specialized programs for company leaders, sales staffs and other industry members, including: the annual Executive Forum for company leaders, Masters in Management for the Landscape Industry Seminars and more;
- ▶ a full-scale certification program;
- ▶ extensive training and publication services;
- ▶ collaborative links with other associations in research, environmental issues, horticulture, arboriculture, nursery services and others, including a Capitol Hill presence;

▶ a wide-ranging public relations program to promote the value of landscape contracting services to the public and help members enhance their own grassroots PR activities;

- ▶ several awards programs, recognizing excellence in the profession;
- ▶ a strong Safety Program that promotes safe workplace practices in individual companies and throughout the industry;
- ▶ member benefits, including access to tailored business insurance, long-distance discounts and other business programs;
- ▶ high-technology access through electronic mail and an Internet website.

Long-range plans

One important ongoing aspect of ALCA has been its commitment to long-range planning and incorporating Total Quality Principles into the management philosophy of both the association and its member companies. Lied has championed that process for the past 25 years as chair of ALCA's Crystal Ball Committee.

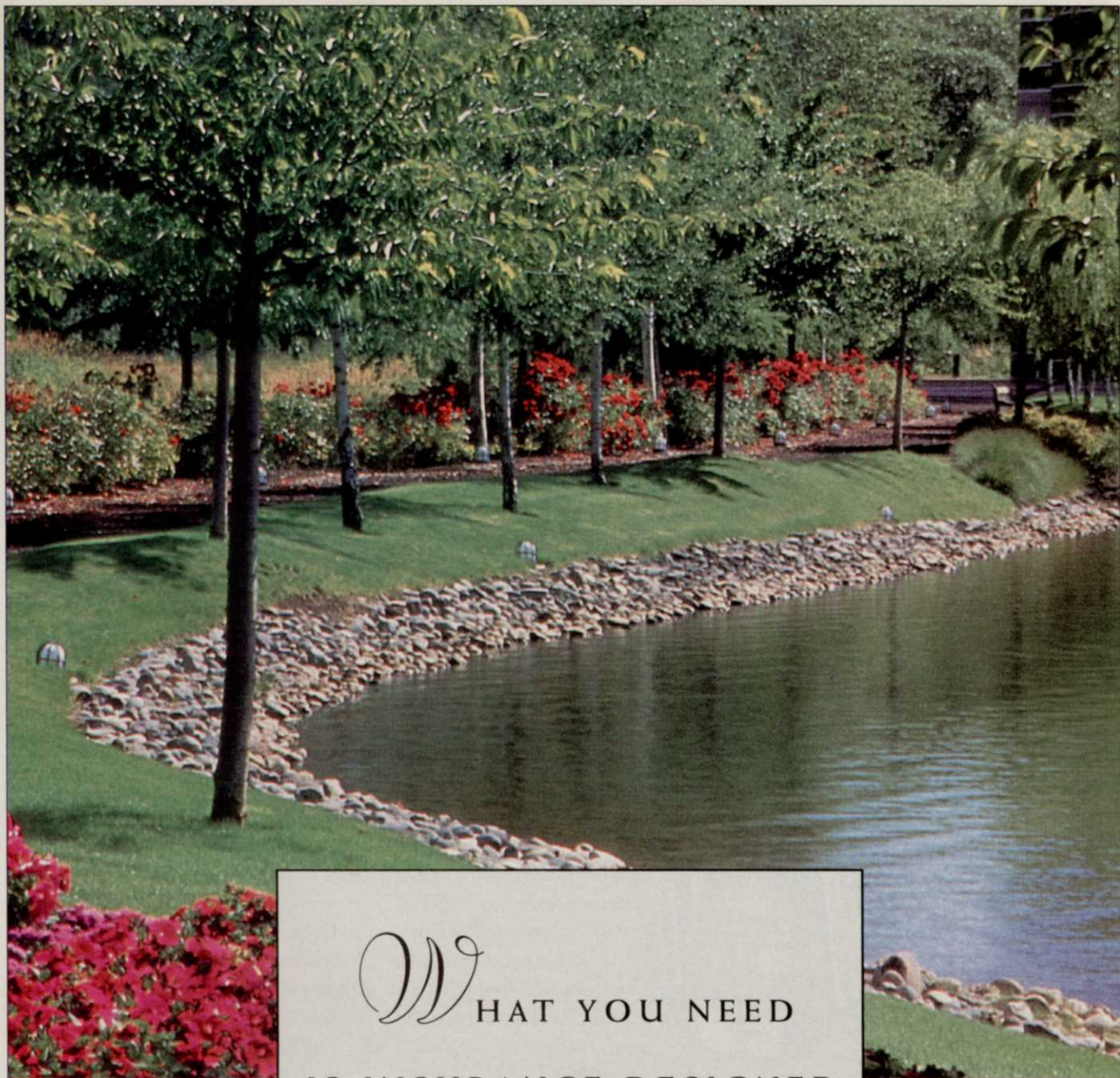
The first Crystal Ball Report to come out of that vital process gave a clear portrait of

the industry, noting that:

"The (landscape contracting) industry needs to understand itself and to be able to clearly describe its function to interested parties ... The landscape contractor is a service contractor ... Landscape contracting began as an agricultural-oriented industry with its roots stemming from the nursery industry ... The work of the landscape contractor is more diversified and more complicated ... [becoming] more closely aligned with the general contracting industry."

—Ruth E. Thaler-Carter is a freelance writer and editor who has produced the ALCA newsletter for several years. She is based in Maryland.

The work of the landscape contractor is more diversified, more complicated, more closely aligned with the general contracting industry.



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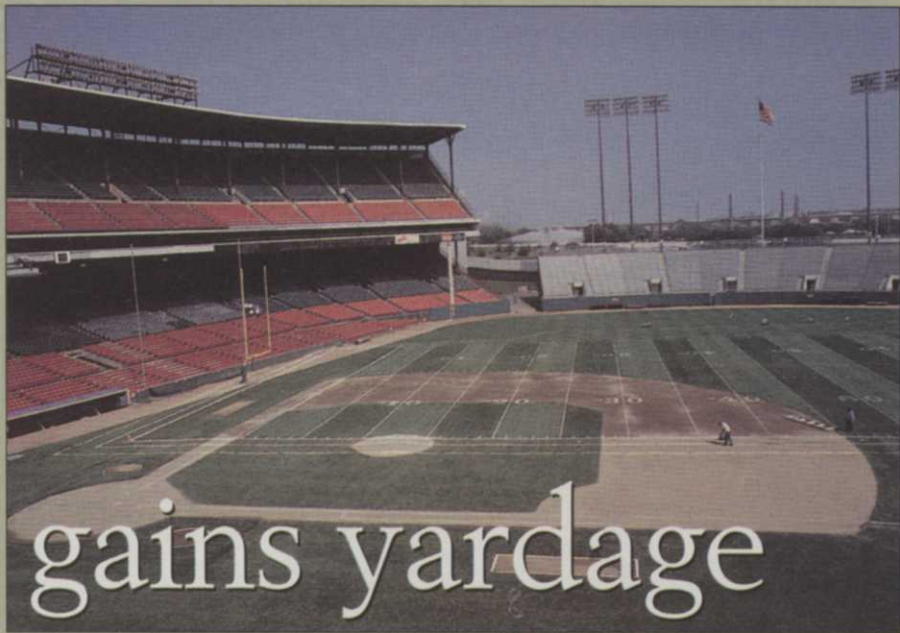


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Circle No. 106 on Reader Inquiry Card

The Sports Turf Managers Association was formed because industry leaders believed sports turf could be improved through the sharing of knowledge and ideas.

STMA gains yardage



COURTESY DAVID MELLOR, MILWAUKEE BREWERS

The mission statement of STMA is: To be the leader in the sports turf industry, to enhance, promote and improve professionalism through excellence in communication, training, research, education and services.

STMA members work to combine the science of growing grass and the art of maintaining both natural and artificial sports turf to produce safe and aesthetically pleasing playing surfaces. STMA represents all segments of the sports turf industry with those involved in management of school, municipal, university, and professional sports facilities among its membership. Members also include educators and researchers, commercial affiliates, landscape contractors and full-time students.

Info for members

STMA holds an annual conference and exhibition in January each year. STMA also provides members with a monthly magazine, a bi-monthly newsletter, a membership roster and resource guide, and an annual compendium of articles written by and for sports turf managers. Sharing information is a strong part of STMA.

Headquarters now serves as a conduit to speed the process of connecting members with each other and to supply information to potential members, facilities in need of assistance, industry-related companies and associations, and the media.

Recognizes best work

To further encourage professionalism at all levels, STMA has an independent "Field of the Year" program for football, soccer and softball fields and joins with Beam Clay and *sportsTURF* magazine in a "Diamond of the Year" program for baseball.



Harry Gill, a co-founder.

STMA made several strategic moves in 1996, establishing: a committee for Category I members (those managing professional sports facilities) headed by Steve Wightman; a Historical Committee headed by Dr. Kent Kurtz and Mark Hodnick; a Past Presidents-Long Range Planning Committee headed by Greg Petry; and a Certification Committee headed by Dr. Henry Indyk. STMA's Certification Program introduction is scheduled for January, 1998.

Sports turf management has made great

The transition: one of the challenges STMA members face, and can perform better through education programs.

strides since 1981 in gaining recognition of the role the field plays in sports from facility owners, athletic directors, field user groups, athletes and the public. Sports turf managers have become increasingly educated and ever more skilled in making the most of available resources. Industry and researchers have introduced new products and techniques to enhance field care. Dedication and commitment, what George Toma calls the "and then some" factor, continue to play a major role.

Still, the education process has just begun both internally, within the green industry, and externally, as sports turf managers face shrinking resources on one hand and increased sports participation and demands for field use on the other.



Co-founder Toma: Super Bowl field manager.

Mike Schiller, STMA President, says, "We're young; we're growing; we're improving and we are making a difference. STMA will continue in promoting better and safer sports turf areas so that every athlete, at every level of play, will have the opportunity to play the game to the best of their abilities."

Know the issues

Our industry, which has been historically weak in planning, is being challenged to become more strategically focused in order to be agents of change.

By BRUCE K. WILSON, President, Environmental Care, Inc.

To lead you must know where you're going. In this industry, like most others, competition is very keen. To stay ahead of the competition many companies develop complex plans which guide their futures.

Unfortunately, many of the key action steps are aimed at closing gaps that exist between where you think your company should be and where it really is. While this type of planning is often successful in determining goals, it is not visionary leadership planning that results in "strategic leap-frogging."

I believe that positioning your company for 21st century success is a three-step visioning process:

- 1) Define today's reality of the industry and where you are in relationship to it.
- 2) Define what trends and issues are evolving that will impact the future of this industry and again define where you are in relationship to them.
- 3) Predict those issues which may be less obvious—that haven't started to evolve—that will define the future.

Here are some of the changes taking place that I believe will impact our futures.

There is an ongoing concern for the environment. Environmental responsibility is changing the way landscape contractors do business. Customers and employees are both beginning to understand that reality. First, our customers are concerned that they do their part to be responsible citizens: to save our dwindling natural resources and create more environmentally

responsible landscapes. They are also concerned that the landscapes be maintained in environmentally responsible ways. So what I'm seeing are an increase in legitimate concerns about water consumption requirements vis a vis water efficient landscapes, waste disposal issues, grasscycling, management of green resources and

byproducts, and noise and pollution issues surrounding equipment. Much of this has been driven by government regulation in the past, but what I see happening is a more proactive movement ahead of regulation. This, it seems, is evolving as a good business issue. And one that will continue to shape the way we think about our work.

Safety, ergonomics

On the employee side today's employee is much more educated and aware of 'healthy planet' environmental issues and expects their company to walk the talk. This has resulted in a movement by companies to be at the leading edge of change. There are new concerns for the employees' personal working environment. Production rates, reliability, cost and safety had previously driven equipment decisions, but now manufacturers are designing ergonomic features that affect the users' personal comfort and physical health.

Technology and communications

Another evolving issue for our industry is evident in the growing use of technology between our customers and ourselves as contractors. It is clear that our customers will require compatible communication technology. Some customers now request e-mail correspondence and electronic



Water quality will be a leading issue in the years ahead, especially as needs increase and supply evaporates.

transactions such as direct deposit of payments. Technology has fundamentally altered the way we do business today.

Today's college graduates are often more knowledgeable about technology than the companies that hire them; they will be the generation that forces our industry to integrate computer technology into every element of the landscape business. The big challenge for the industry is converting the older employees to a technology-based business environment. It is one of our biggest training issues.

Vision, intuition and luck are all important to success. Vision to see, intuition to sense what is important, and being lucky enough to be right.

Another obvious trend that will have a profound affect on this business is "national accounts" — regional and national buyers of services doing business with regional and national providers of services. This will result in larger landscape companies controlling a significantly larger share of the landscape market. This will also force organizations to grow and expand faster than they might otherwise want to, or be capable of. Financing this growth will become an industry problem.

The big picture here is that our industry, which has been historically weak in planning, is being challenged to become more strategically focused in order to be agents of change. Industry experience by itself was once an important criteria to being successful. But industry experience will prove to be of very little value in dealing with the high-speed culture changes that are evolving today. In this technology and information age, those individuals limited by experience alone, may never be able to close the critical technology gap.

If you are at all like me, it's easy to become consumed with "future issues" that

are derived from the more obvious indicators. This to me is the "Step 2" part of visioning. There are many more obvious things that will affect our businesses that I did not mention, but for most of us we prioritize around the most important things. Think back for a minute and try to imagine how if you had been able to forecast these changes and issues before they became obvious, what a position of leadership you could be in today. Instead of just closing the gap with your planning, you would be competitively way ahead.

Vision in leadership

It is only when I reflect on the past that I realize how important a role vision plays in understanding leadership. Vision, intuition and luck are all important to success. Vision to see, intuition to sense what is important, and being lucky enough to be right. Many times we are successful because we do something that turns out to be right but for a different reason than we envisioned.

What do you fear most in business? My biggest fear is that we will not be able to an-

ticipate change and shift gears fast enough. Change is happening at such a high speed today that "Step 3" visioning becomes the most important step. It also is the one that is easier to do if you think in general terms. And, if you vision regularly, you can continually apply new information which can either confirm or deny your thinking.

In a general way I think companies not in our industry circle today will become major players and competitors tomorrow. They may even come from outside this country. The outsourcing movement will go too far and insourcing will surface with a new face. The industry will find a way to automate more of the tasks that are done by labor, possibly with robotics. And don't underestimate the effect of genetically engineering the maintainable, sustainable landscape.

The challenge, of course, is taking action to assure success in a new business environment. Environmental Care is passionate about being in a position of industry leadership. Alignment at all levels around that basic value drives our employees to be thinking and visioning all the time. We are constantly challenging ourselves and each other to think about positioning for success. That could be even harder because you have to be right. And lucky.

—The author is president of Environmental Care, Inc., Calabasas, Calif. A graduate in ornamental horticulture from Cornell University, Wilson joined ECI in 1971 and was named vice president and branch manager in 1977. He has served as president of ECI for 17 years.



Below the surface of the finished landscape lie a series of issues that share company time; from safety, to regulations, to waste disposal to water-efficient design challenges.



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[TIMELINE]

1981:

National Park Service suspends use of herbicide 2,4-D in its 325 parks and recreation areas. Purdue's Dr.

Bill Daniel (shown) leads athletic

turf professionals through organizational meeting of Sports Turf Managers Association.

Wisconsin Turfgrass Association forms.



Oscar T. Jacobsen dies, co-founder of Jacobsen Manufacturing Co. in Racine, WI, in 1920. Also credited with developing the first power greens mower in 1924.

1983:

Turf-Seed, Inc. and Pure Seed Testing, Inc. host their first "Field Day" in Oregon's Willamette Valley, home of turfgrass seed production. Event sets a precedent for other seed companies to emulate.

1988:

Diazinon banned from use on golf courses and sod farms. Golf course management industry worth an estimated \$3.54 billion.

More variety in tree care

Tree care is evolving into a multi-faceted industry with increased opportunities in both the commercial and residential markets.

As times change, businesses change. The tree care business is no exception. From the 1960s when brush chippers were a luxury to the 1990s where an emphasis on technical know-how has leveled the playing field, tree care has evolved into a multi-faceted industry.

Gradual growth

In the 1960s, residential tree care was a relatively easy sell for the upscale market. Most companies could maintain a solid base of regular customers and benefited greatly from high retention rates. Regular pruning, spraying, fertilizing and removal provided enough work for the burgeoning market. And the growing popularity of moving large trees to a landscape for immediate effect—as opposed to planting saplings—kept crews occupied during the off season.

Growth was gradual. Over the years, demographic changes have increased residential tree care opportunities. By adding services like landscape development and lawn care, many tree care companies have taken advantage of the growing number of families with two working parents, more disposable income and a desire for a better looking landscape.

In the '60s, dry tree food was the product of choice.

Commercial market expands

This desire for a more appealing landscape also has affected the commercial market.

In the 1960s, tree care companies mostly limited commercial work to basic services. Over time, as commercial properties recognized the importance of a well-maintained



By adding services, like landscape development and lawn care, tree care companies have taken advantage of the growing number of families with two working parents.

landscape for attracting business and high quality employees, many tree care companies have widened their service offerings to earn a position in this lucrative market.

By adding mowing, floral and shrub maintenance, snow plowing and other services, tree care companies have more to offer a market that is consolidating.

Technology has gradually improved to make tree care more efficient. Power saws, once weighing 100 pounds and requiring two workers, have lightened to 15 pounds. Reduced noise levels make them safer, and increased reliability adds practicality.

Brush chippers have become a necessity. Cranes make large tree moving and tree removal much more efficient.

New fertilizer technology

In the 1960s, crew members fertilized trees with dry tree food. They drilled holes in the ground and poured in the material. Progressive advancements in research and development have improved fertilization techniques and today, subsurface liquid injection is a common practice for tree fertilization. Improved materials make plants much less susceptible to leaching, providing longer lasting benefits.

While only a select few tree care companies offered a structured technical training program in the 1960s, time has evened the platform. Technical know-how and work quality have steadily improved across the board since the '60s to the point where competition once hardly a factor, has increased dramatically.

Safety always vital

Safe work practices, always an important part of the business, have evolved from a common sense approach to a sophisticated format. Departments dedicated to safety, instructional videos, weekly meetings and improved gear have helped improve employee well-being. The industry remains dedicated to an accident-free

workplace, both for employee well-being as well as cost-of-claims control.

As the industry moves forward, training and development and increased investment are key elements for growth.

Customers desire and respect high quality service and reliability. Companies with knowledgeable employees and superior customer relations can differentiate themselves from competitors.

—The Davey Tree Expert Company

Davey: service for the century

Jack Joy recently retired as chairman of the board of The Davey Tree Expert Company. Joy began his career in the tree care industry in 1946 as a field employee for the company.

In a 1969 interview with *Weeds, Trees & Turf*, Joy, then vp in charge of sales, noted that "practically, every man working in the field has gone through our school, or else works directly under a man who has."

He described "a Davey man" as being a consulting arborist first and salesman second. This focus on technical expertise has served the company well.

The Davey Tree Expert Company, Kent, Ohio, (incorporated by John Davey in 1909) approaches 2000 committed to providing the most scientifically based, safest and practical tree care services possible. For the past several decades Davey has also provided extensive lawn/landscape services (along with commercial and residential tree services) in selected markets nationwide.

1990:

April is first national "Lawn Care Month." *Lawn Care Industry* magazine survey finds industry serves 10 million. PLCAA "Grasscycling" campaign picks up on Dr. Bill Knoop's 10-year old "Don't Bag It" program for recycling lawn waste. ServiceMaster joins with Waste Management, Inc. Ann McClure named PLCAA executive director. Turfgrass expert Dr. Fred Grau dies in December at age 88. ServiceMaster buys Waste Management's TruGreen.



1991:

PLCAA representatives appear before a Senate panel investigating pesticide notification regulations. Allen James named executive director of RISE, a new organization. U.S. Supreme Court rules that local governments can enact pesticide laws in case *Mortior vs. Town of Casey, WI*.

1992:

ServiceMaster acquires ChemLawn and merges it with TruGreen.

35th

ANNIVERSARY

Industry grows through sense and science

TURFGRASS BENEFITS A CONSTANT OVER THE YEARS

- ▶ *Roadside turf areas provide a stabilized zone for emergency stopping for vehicles that lose control or are in trouble. —Beard 1973*
- ▶ *Working with plants has helped people hospitalized for severe depression, so this type of activity can be of use in combatting everyday blues. —McDonald 1976*
- ▶ *Grasses, as well as other ornamentals, reduce undesirable noise levels by 20-30 percent. —Robey 1977*
- ▶ *Grasses trap much of estimated 12 million tons of dust and dirt released annually into the atmosphere. —Daniel and Freeborg 1979*
- ▶ *Plants absorb gaseous pollutants [toxic emissions] from vehicles, such as carbon dioxide, into their leaves and assimilate them so they help clean the air. —Turgeon 1985*
- ▶ *On a block of eight average houses, front lawns have the cooling effect of about 70 tons of air conditioning. The average home-size central air unit has a three- to four-ton capacity. —Baker 1987*
- ▶ *High quality turf will buffer loss of nutrients in runoff water or in the leachate. —Roberts 1987*
- ▶ *Thick lawns are found to limit pesticide runoff. —Watschke et al 1988*

Improved plant and turfgrass varieties and a better understanding of the Green Industry's duty to society have led to industry growth.

by DR. ELIOT C. ROBERTS

There have been many major advances in the green industry since WEEDS, TREES & TURF magazine began publishing in 1962.

And what fantastic change it has been!

My start was at the University of Massachusetts in 1954. In the years that followed, I have seen six key breakthroughs that have been responsible, in a major way, for the advancement of the Green Industry we know today.

Maturation within the industry

Growing pains can often be uncomfortable. Some of these pains have involved moving on from individual trade secrets to the increasing availability of information of a technical, business and scientific nature to practitioners. Trade journals, such as LANDSCAPE MANAGEMENT and trade associations, like The Lawn Institute, and professional organizations such as the Golf Course Superintendents Association have extended commercial and university-generated scientific and business knowledge to the landscape industry across the board.

Among the most exciting achievements has been the sound concepts for safe use of pesticides on ornamental plants.

Continued stewardship

This must continue on into the next century, with emphasis on responsible use of all chemicals. Responsible Industry for a Sound Environment (RISE), along with The Lawn Institute, have through the years provided leadership for this type of public education. A misinformed public is easily intimidated by a wide range of environmental activists.

A second example might include the "Don't Bag It" program developed in Texas by Dr. Bill Knoop. This concept swept the country because of the sound nature of returning grass clippings to the soil, and the need for the Green Industry to be more concerned about dwindling space in sanitary landfills. This concern is a good indication of maturity.

Ornamental plant improvement

We lived in a different world immediately following World War II. Turfgrass improvement continues to this day as new cultivars join those released by Drs. Jess DeFrance and Dick Skogley of Rhode Island, Professor Bert Musser and Dr. Joe Duich of Pennsylvania State University, Dr. Reed Funk of Rutgers, Dr. Glen Burton of Georgia, and others.

Foliage plants, flowers and woody plant material have also been improved in ways that made possible their better use in the enhancement of the environment.

This advancement must continue into the 21st Century for the Green Industry to meet future challenges.

Soil biology

As a soil chemist by training, the biochemistry of soil systems has been of spe-

'Blades of Grass' was Eliot and Beverly Roberts' whimsical look at benefits of turfgrass, published by The Lawn Institute.



cial interest to me from the start. The root zone, although out of sight, is of basic or fundamental importance to the growth of all plants. The closer plants are crowded together in the landscape, the more this system is placed under stress. Interrelationships between macro- and microorganisms influence plant health and persistence. Soil organic matter as the raw material for humus formation has an important function in the rootzone. And the whole field of growth regulation as influenced by small amounts of bioactivators within the tissue is related to the mineral and organic nutrition of the plant. These advances have opened up prospects for improved ornamental plant cultural practices.

Plant ecology

We hear more and more about the importance of the relationship between plant and animal ecology and the environment. A clear understanding of the principles is required. In the latter instance, "it's the dose that makes the poison." In the former instance, it's the nature of competition between grasses and other herbaceous plants with trees, shrubs and weeds. Many politically correct concepts are based on bad science and false teaching. The underlying basis for ecology—that is, competition—is sound. Advances in the understanding of this have been and will continue to be essential in the further maturing of the Green Industry.

Stress physiology

We've all experienced the relative ease of production and culture of ornamental

plants under ideal conditions. But, more often than not, these give way to too much heat or too much cold, or too wet or too dry, or unreasonable use requirements in the landscape. Professor Lawrence Dickinson, who founded the first school for turf managers back in 1927, lectured on limits of tolerance. That is, limits before stress would cause the plant to be intolerant of existing conditions, and perhaps, even perish. Research has provided data on how much or how little the physiology of the plant can adjust to bring about continued vigorous growth. Dr. James Beard has become an authority and spokesman in this area.

These areas of specialization have provided what I feel were key building blocks needed for the green industry to grow during my 10 years with The Lawn Institute.

These in no way, however, have diminished the importance of product development, testing and competitive evaluation. New concepts in landscape maintenance tools and equipment, in irrigation design and water conservation, pest control and plant fertilization have been of great benefit to Green Industry practitioners during the past 35 years. It's difficult to picture the progress we've made to this point without the help of such pioneers as O.J. Noer, Fred Grau, Tom Mascaro, Jim Watson, Bob Moore and many more.

—Dr. Eliot Roberts served as executive director of The Lawn Institute. He and his wife Beverly run Rosehall Associates, a Green Industry consulting service, from their farm in Sparta, Tenn.

—Dr. Eliot Roberts served as executive director of The Lawn Institute. He and his wife Beverly run Rosehall Associates, a Green Industry consulting service, from their farm in Sparta, Tenn.

1994:

World Cup soccer games played on real grass inside the Pontiac (MI) Silverdome.

1996:

TruGreen/ChemLawn buys Barefoot Grass.

97:

Jacobsen Green King Electric greens mower debuts. New bents from Tee-2-Green tolerant of lowest cuts.

Tom Mascaro (shown), inventor of turf aerator, dies at 81. Ciba, Sandoz form Novartis. B.J. Johnson, Univ. of Georgia, retires.

First fungicide to control all four major classes of fungi marketed by Zeneca as Heritage.



Events

OCTOBER

15-18: Interstate Professional Applicators Association Convention,

Resort at the Mountain, Welches, OR; (503) 363-7205.

15-18: American Society of Consulting Arborists Conference, Walt Disney World's Coronado Resort, Orlando, FL; (301) 947-0483.

19-24: Second International Congress of Vector Ecology, Holiday Inn International Drive Resort, Orlando, FL; (714) 971-2421.

21: Addressing Idiopathic

Environmental Intolerances: A Concerned Approach, Radisson Hotel, Santa Fe, NM; (sponsored by RISE and NPCA), call RISE at (202) 872-3860.

22-25: Southern Crop Protection Assc. Convention, Hyatt Regency on the Riverwalk, San Antonio, TX; (912) 995-2125.

22-23: Western Nursery & Garden Expo, Sands Expo Center, Las Vegas; (800) 517-0391.

23-24: Western Ornamental Horticulture Research Conference, Harrahs, Las Vegas; Calif. Assoc. of Nurserymen (800) 748-6214.

24-26: NJ Shade Tree Federation Meeting/Expo, Sheraton Atlantic City West Hotel, Pleasantville, NJ; (908) 246-3210.

27: Deer Management Conference, University of Maryland Inn and Conference Center, College Park, MD; U. of MD Cooperative Extension, (301) 405-0057 or (301) 405-4569.

NOVEMBER

2-5: National Institute on Park and Grounds Management Conference, Houston, TX; National Institute on Park and Grounds Management, (414) 733-2301.

4-6: Penn State Golf Turf Conference, Nittany Lion Inn, State College, PA; Peter Landschoot, Agronomy

Dept., (814) 863-1017 or PTC, (814) 863-3475.

6-8: Tree Care Industry Expo '97, Greater Columbus Convention Center, Ohio; The National Arborist Assoc., (800) 733-2622.

8: "The Right Plant in the Right Place" Seminar, Cotton Tree Inn, Mt. Vernon, VA; Wash. Assoc. of Landscape Professionals, (800) 833-2186.

14: Oregon Landscape Contractors' Assoc. Field Day Canby, OR; (800) 505-8105.

15-18: Green Industry Expo ALCA, PLCAA, PGMS Annual Conferences, Charlotte Convention Center; ALCA (800) 395-2522, PLCAA (800) 458-3466 and PGMS (410) 584-9754.

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**The National
Arbor Day Foundation**

LESCO, Inc., acquired Tri Delta Fertilizer, Inc., Stockton, CA. Tri Delta has been in business since 1980, and makes and sells granular and liquid fertilizer and combination products to the turf and ag markets. The acquisition gives LESCO a presence on the West Coast. Tri Delta will also allow LESCO to serve its Pacific Rim customers more efficiently.

Turf managers can help support turfgrass research when they use natural organic **Milorganite** fertilizer this fall, announced Larry Lennert, manager of research and product development at Milorganite. For each ton purchased and delivered between Aug. 1 and Nov. 30, 1997, Milorganite

will donate \$10 to the turf manager's favorite research organization. This is the third year that Milorganite sponsored the Turfgrass Research Donation Program.

Toro will market its Hardie brand irrigation products under the brand name **Irritrol Systems**. "The Irritrol brand maintains an emphasis on contractor-installed systems for residential and commercial landscapes previously associated with the Hardie brand," says Rick Parod, vice president of Toro Irrigation.

Rod Tyler, author of "Winning the Organics Game: The Compost Marketer's Handbook", offers a 1 1/2-day work-

shop explaining the production, testing and selling of quality compost. Tyler covers compost uses and guidelines in various markets, including landscape, nurseries, retail, sports turf and agriculture. The workshop was created by the American Society for Horticultural Science (ASHS), with the USDA, University of Hawaii and the Composting Council. Contact Lisa Preston at 703/836-4606 (ext. 309) or via e-mail at ashspres@ashs.org. Contact Rod Tyler at 330/239-0129 or e-mail at rodndon@GTE.net.

The Toro Company named Stephen P. Wolfe to become vice president finance, treasurer and chief financial offi-

cer. Wolfe, 48, replaced Gerald T. Knight, now senior vice president and chief financial officer of Fingerhut Companies, Inc. Wolfe came to Toro as part of the buy of Wheel Horse Products, Inc., in 1986, where he was vice president of finance and treasurer.

SUNY-Cobleskill and the **John Deere** Worldwide Commercial & Consumer Equipment Division have developed a new degree program to prepare students to become lawn and grounds care technicians. The curriculum is adapted from the college's *Turf and Grounds Care Equipment* sequence to include unique courses that will prepare graduates to work as a John Deere retailer. The two-year study includes required classes such as "Basic Hydraulics" and "Advanced Small Engine Diagnostics" and electives in areas such as turfgrass management and equipment retailing.

Irrigation Consulting & Engineering, Inc., based in Pepperell, MA, with offices in Cleveland, Ohio, acquired Fox River Irrigation Consultants, Inc., Elgin, IL. Company President Brian Vinchesi said the acquisition gives his firm a presence in the Chicago golf course/commercial markets.

Plant Health Care, Inc., announced that Biopak and Biopak FE brand biostimulant products for turf and horticulture markets will only be available from Plant Health Care, Inc., (800-421-9051). **LM**

Info center

VIDEOS AND LITERATURE FOR THE GREEN INDUSTRY

LIGHTNING RISK EVALUATION GUIDE FOR GOLF COURSES...This guide includes evaluating lightning risk and vulnerability to golf shelters, rest area structures, trees critical to course topography or fairway design, secondary lighting surge protection for underground sprinkling systems, computers and sensitive electronic equipment. Also warning systems to encourage golfers and personnel to exit the course as a thunderstorm is developing. Contact Independent Protection Company, Goshen, IN, 219/533-4116; e-mail ipc@netbahn.net.

LANDSCAPE BUSINESS FORMS...Forms for all areas of the landscape business—advertising and marketing, estimates and proposals, contracts and warranties, project management, accounting and billing, operations management, job descriptions. Nursery and Landscape Association, 202/789-2900.

DRAINAGE HANDBOOK...Hancor, Inc., manufacturer of corrugated polyethylene drainage pipe, offers its Drainage Handbook on CD-ROM at no charge. It is compatible with all Windows 95 and NT-based systems as well as Macintosh computers. It contains information on how to specify and install drainage pipe for stormwater, highway or other construction applications. All information can be copied and saved on user's hard drives. Call 800/848-3546 (ext. 258); fax 419/424-8302.

VIDEO ON NATURAL/ORGANIC FERTILIZER...Nature Safe Natural & Organic Fertilizers says golf course superintendents will learn from this video. It includes experiences of other superintendents. For a free copy, call 800/252-4727.

Next day shipping for Millcreek turf aerators

Millcreek Manufacturing Co. announces a "Quick-Ship" program for turf aerators which guarantees next day shipping of any Millcreek core aerator when phone orders are received by 1 p.m. on any business day. Buyers pay no freight charges if Millcreek fails to meet the dead-



line. Millcreek also provides a free "Aeration for Profit" Kit, containing basic "how-to" booklet offering knowledge on aeration benefits plus marketing tips, a professionally prepared newspaper ad slick, and a reproducible sales flyer which landscapers can customize for their own promotional purposes.

To learn more about the "Quick-Ship" program, profit kit or any of the company's 13 turf aerator models (sizes from 42" to 105" wide), contact Millcreek at (800) 879-6507, or

Circle No. 250

Bayleton in new, convenient packaging

Bayleton Fungicide is available in a new formulation that offers the same broad-spectrum disease control in new, convenient packaging. Bayleton 50 Turf and Ornamental Fungicide offers the convenience of mini-drum packaging with 88, 5.5 ounce PVA pouches per drum.

The new formulation provides the same consistent performance as Bayleton 25 at reduced application rates. Bayleton 50 controls, as well as prevents, many turf fungal diseases including dollar spot, brown patch, summer patch and other diseases on turf, flowers, foliage plants, shrubs and shade trees. Its systemic action offers lasting residual control of up to 30 days or more.

Circle No. 251

Plows designed for medium/heavy-duty trucks

Henderson Manufacturing Company's new line of SNOWfoe snow plows includes reversible, one-way, patrol wing and mid-mount wing

plows for medium and heavy-duty trucks.

"An exhaustive study was conducted to determine the shortcomings of other makes and the needs of customers before pencil was put to paper," said Marty Ward, director of sales and marketing for Henderson.

"We've been

marketing spreaders and pre-wetting equipment for some time now and we are comfortable that we have addressed the needs of the market with some unique solutions."

For more information about the SNOWfoe plows contact Henderson Manufacturing at their Manchester, Iowa, headquarters at 319/927-2828, or

Circle No. 252

Landscape lighting comparison charts

California Landscape Lighting has updated its much requested landscape lighting fixture comparison charts. The charts are free to landscape lighting trade professionals.

There are four separate comparison charts, which make non-biased specification comparisons on fixtures by several different manufacturers. They are titled: "Deck, Gazebo & Patio Lighting", "Step & Niche Lighting", "Mercury Vapor", and "Well Lights".

The information supplied includes everything needed to know to make a fixture selection, such as fixture size and dimension, construction material, finishes, lamp requirements, mount type, and more.

To get your free copies, call California Landscape Lighting Customer Service at 800/457-0710, or

Circle No. 253

