

Building Successful Professional Relationships

Golf Course Superintendents Association of America

(Editor's Note: The following are excerpts from GCSAA's guidebook: Communication: The Cornerstone to Professional Relationships.)

To obtain a copy of the complete "Communication" guidebook at no charge, please contact the GCSAA career development department at (800) 472-7878, ext. 655.

Few vocations demand such a wide range of knowledge to ensure professional success as does that of the golf course superintendent. Employers take it for granted that you know the technical side of turf management. Increasingly though, employers expect you to also be proficient in communication. Communication may be the single most important contributor to employment longevity and enjoyment.

Communicating With Employers

Play golf with your employer, golfers, and other golf course managers at your facility. Point out improvements, problems and planned solutions and general turf management practices that your playing partner/s may not be aware of. Ask for and listen to their input.

Golf with your employer at other facilities; he/she usually becomes your biggest supporter after seeing other courses. If your course is better managed, you look like a star. If your course is not as well managed (you should know that before going there with your employer), use your visit to illustrate similar improvements you would like to make on your course.

Be sure your employer, green committee members and/or board receives copies of Golf Course Management magazine and Leader Board, the GCSAA newsletter targeted to golf course decision-makers.

Attend green committee and/or board meetings. Develop an agenda for green committee meetings, publish meeting minutes and distribute promptly.

Provide committee members or board members with an attractive binder. Encourage them to place long range plans, progress reports and meeting minutes in the binder. Distribute timely articles, reports, Leader Board, etc. to be inserted into the binder.

Send appropriate agronomic and golf management articles to your employer and attach a handwritten note with a few brief thoughts related to the article. Stay up-to-date on turf management research. Share what you learn with your employer and explain what the findings mean or how it could affect your course.

Hold employer meetings in the maintenance facility. Host periodic tours of the golf course and maintenance facility. Be sure to highlight turfgrass research areas and discuss the value of maintenance equipment.

Hold an annual orientation for green committee members.

Invite new board or committee members to tour the course and the maintenance facility with you. Take him/her to lunch.

Invite your employer to GCSAA related-events such as educational seminars, chapter meetings and the annual conference and show.

Write thank-you notes to your employer and other managers at your facility when appropriate. For example, send a note after attending conference and show or education seminars paid for by your employer.

If you are emotionally upset about an issue, wait 24 hours before discussing it with your employer. You will be much calmer

and more rational after a cooling-off period.

During meetings with your employer, write down all the important points discussed. It shows professionalism and serves as a reminder for later reference.

Communicating With Golfers

Learn and use the names of active golfers at your course.

Create a "Superintendent's Section" on your course's web site.

Place comment cards in the pro shop, golf cars or restaurant. Design them with your name and title clearly visible so golfers know you are asking for course-related input. Include a line for the golfer's name so you can send a letter thanking him/her for the input and addressing the concern or compliment.

Post a long-term calendar with regular maintenance activities clearly noted in a prominent spot for all golfers to see. Let golfers know what you are doing on the course, when you will be doing it and how it will affect play.

Post daily updates in a visible location to communicate current course conditions. Use photographs to better illustrate what you are describing.

Document changes on the course using before and after photos to remind people "what you've done for them lately."

Contribute to your facility's newsletter by writing a regular column. Sign it and use your photograph. Be sure to discuss what's happening on the course and why it's happening. This lets your golfer know why a green was slower, why a tree was cut down around the ninth tee box and why water was standing on the fifth fairway.

Publish monthly lawncare tips in your facility's newsletter.

Present a workshop for your golfers on home turf care.

Maintain high visibility on the golf course. Eat lunch in the clubhouse daily. Maintain a high profile in the clubhouse. Talk to golfers to get first-hand input. Post your name and title in the clubhouse or restaurant and print your name on the scorecard. Note your title on your turf utility vehicle so it's visible to golfers.

Write every new club member a welcome letter and invite each to lunch. Offer to play golf with your golfers and keep a sign-up sheet in the clubhouse.

Write a letter of congratulations to the new club champion every year.

Attend member meetings and annual meetings; present a "State of the Union" slide show at the annual meeting describing activities that have resulted in improved golf course conditions or budget reduction. Attend tournaments and other events at your course. Take your spouse (if applicable) to appropriate functions.

Conduct a seminar for your golfers or members focusing on course etiquette. The seminar could include proper repair of divots and ball marks, raking a bunker, golf car rules, a discussion of alternative and metal golf spikes and other topics.

Sponsor a golfer outing early in the season. Point out wildlife and improvements made over the winter, show how to repair a ball mark, how to rake a bunker, etc.

Host an open house at your maintenance facility. Get your employees involved. In cold weather climates, offer coffee and hot chocolate in the maintenance facility during the winter. This invites golfers into the maintenance facility to see everything you do during the winter.

New Solution



GREENSMaster® FLEX 21

Key Advantages

- Unique flexible cutting unit
- Easy to maintain
- Easy to operate

**NO INTEREST
"NO PAY 'TIL
MAY 2002"**

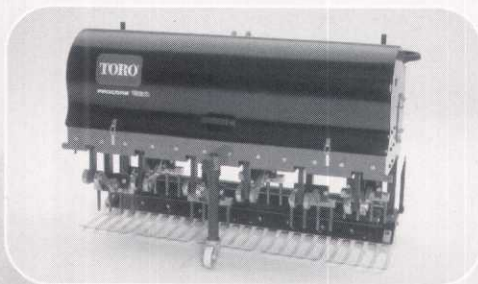
**TAKE
DELIVERY
NOW**

Key Benefits

- Conserve cash flow
- Use equipment now, pay later - no cost
- Save money - purchase at 2001 prices

**SUMMER
WILL CALL HOURS
MON.-FRI.
7:00 AM - 5:00 PM**

**PRODUCT
DEMONSTRATIONS
AVAILABLE**



PROCORE™ AERATORS

Key Advantages

- 3 models - 40", 60" and 80" aeration widths
- Excellent hole quality due to exclusive Rotalink™ centering mechanism
- Tractor mounted, 3-point hitch design for increased maneuverability



WORKMAN® 1100/2100

Mid-Duty 12 or 16 HP Utility Vehicle

- Unique Active In-Frame™ suspension creates extraordinary traction and ride
- Highest payload in class
- Dentless and corrosion resistant hood and bed

**EQUIPMENT
FINANCE
PROGRAMS**

ns From



Have you thought about Irrigation Renovation?

- Why upgrade your irrigation system?
- How to assess your current system
- How to determine the scope of the project
- How to choose the team of professionals
- Discover a creative way to pay for the system

For answers to these and many other questions about irrigation renovation call your MTI sales team today!

Irrigation System Leasing/Financing Available!

PLYMOUTH, MINNESOTA

14900 21st Avenue North

763.475.2200 • 800.362.3665

FARGO, NORTH DAKOTA

4310 Main Avenue

701.281.0775 • 800.782.1031



EQUIPMENT SERVICE

- Trouble Shooting
- Cutting Unit Rebuilding/Sharpening
- Electrical Diagnostics and Repair
- Hydraulic Diagnostics and Repair
- Engines – Motor Repair/Rebuilding
- Field Service

PLYMOUTH

Randy Mackeben, Ext. 229

FARGO

George Vogt

IRRIGATION SERVICE

- Pump Station
- Trouble Shooting
- Refurbishing/Updating
- Solid State
- Electro/Mechanical
- Field Service

Call Phil Gleason, Ext. 205

EMERGENCY AFTER HOURS IRRIGATION SERVICE

Call 763-475-2200, Ext. 167 or 1-800-362-3665, Ext. 167

(For service during regular business hours, 8:00 am – 4:30 pm, Monday – Friday, call Phil Gleason at the above numbers, but use ext. 205)

Biotech Turfgrass Destined for Market

By JOEL JOYNER
Golf Course News, July 2001

WEST KINGSTON, R.I. - Like it or not, generically engineered turfgrass is on the way. Not only that, but researchers say the possible varieties are all but endless.

"I believe there will be a continuous stream of engineered turfgrass products by various companies," said Albert Kausch, visiting associate professor here at the University of Rhode Island.

"It's possible now to clone any gene from any organism

and introduce that into turfgrasses for various traits. The technology itself is so beneficial and useful that it will go forward.

"We expect to have products available, certainly within the next four to five years," added Kausch, who is also a research scientist for the bio-technology company HybriGene, headquartered in Hubbard, Ore.

In the last few years, genetically engineered crops such as corn and soybeans have taken over the market. "About 70 percent of the U.S. corn crop is now genetically engineered, and about 55 percent in the soybean market," said Kausch.

The strategies applied to corn and soybean can also be applied to improve turfgrasses. "We can change pigment to offer more variety, provide drought- and disease-resistant grasses, and provide pest-resistant as well as salt-tolerant turfgrasses," he said.

"Not only does it introduce traits that don't exist in grass, but it does it faster than conventional breeding. It's really amazing. The wish list is extensive."

WORK AT RUTGERS

At Rutgers University, bio-tech work started in turfgrass by analyzing DNA to identify one strain from another and examine the variation.

"We discovered we could transform bentgrass by introducing clone genes or foreign DNA," said Peter Day, director at the university's Institute of Biomolecular Research. "We initially introduced some genes for Roundup resistance." But Roundup ready turfgrass has not been perfected.

"More recently, we have focused extensively on various constructs that confer resistance to turf diseases, particularly dollar spot," he said.

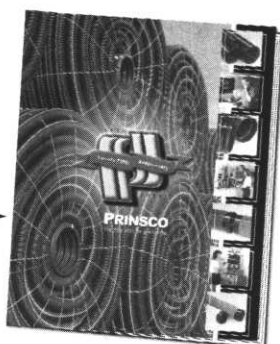
Preliminary trials look promising, according to Day. "Once an engineered variety satisfies the eagle eye of the turf breeder, it will go through performance trials," he said. "It would be very foolish to release anything prematurely.

"One concern is outcrossing and how introduced varieties are likely to be spread through pollination," he said. "The question arises: are these altered species hazardous to the environment?"

(Continued on Page 25)

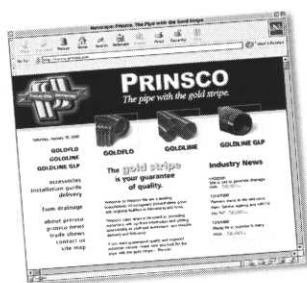
Two ways to check out the new and improved Prinsco...

Call



Call for a free catalog at (800) 992-1725, or see the distributor nearest you

or



Visit our new website at www.prinsco.com

Click

MN Corporate Headquarters
(800) 992-1725



Website & online catalog:
www.prinsco.com

PRINSCO
The pipe with the gold stripe.

Biotech Turfgrass—

(Continued from Page 24)

EXPERIMENTING WITH STERILITY

Male sterility is one option being studied as a means of controlling a released, transgenic grass variety in nature. "It's still experimental," said Day. "The technology is difficult, with limited success in some grasses. It has been done in tobacco and there's also extensive work being done on rice."

Male sterility in genetically altered turfgrass is a primary focus at Kausch's lab in Rhode Island. "It's an expensive procedure," said Kausch. "It's not something you do in your garage over the weekend or in a Dixie cup."

"Moving one gene requires a great deal of technical experience and anywhere from eight months to a year before you have a plant with an introduced gene in it," said Kausch. "We've had some positive results. We'll probably have something on the market in three to four years."

POLLEN TRAVELS 3,000 FEET

Turfgrass pollen is known to travel upwards to 3,000 feet and outcross with other grasses, said Kausch. "The industry should be concerned about companies testing with open-pollinated, engineered grasses. You don't have to worry about corn, because corn doesn't outcross with anything. Turfgrasses are capable not only of outcrossing with wild relatives, but other species of grass as well."

Transgenic turfgrass research is clearly contentious. "Critics argue that we're making superweeds," Kausch said. "Genetic modification in plants, or anything right now, is controversial."

Largely, I think the controversy is stirred by a lack of education."

SAFETY FIRST

Bio-tech will give researchers and breeders extensive tools to improve grasses.

"There will be a lot of testing, just like with any other technology, but ultimately we will have genetically engineered turfgrasses on the market, just as we have genetically engineered food crops now," said Melodee Fraser,

research director for Pure Seed Testing-East in Rolesville, N.C.

"It will also require a lot of research and evaluations to learn how to use the new turfgrasses safely and responsibly," she said, "and to make turf products that are affordable and manageable for golf course superintendents to use."

* * * *

(Editor's Note: This article was reprinted with permission from the July 2001 issue of Golf Course News.)

Our Company → **Twin City Seed Company**

gives you → **technically superior products**

such as →

- Turfgrass Seed
- Wildflowers
- Native Grasses
- Conwed Erosion Products

teamed with → **superior service and pricing**

there simply isn't a better source for the → **conservation and enhancement**

of your valuable turf. →

TWIN CITY SEED COMPANY
7265 Washington Avenue South • Minneapolis, MN 55439
1-800-545TURF • phone 952-944-7105 • Fax 952-944-7239
twincityseed@uswest.net

TURF CONFERENCES

Professional Opportunity or a Waste of Time?

By PAT GROSS
Southwest Region

Winter is the time when several educational opportunities arise for superintendents to attend turf conferences and seminars. With so many seminars and meetings to choose from, it is possible to spend a substantial amount of time away from the course. This can prompt managers and course officials to start wondering if the seminars are a legitimate educational opportunity for the superintendent or just a chance to waste the club's time and money for relaxation away from the course.

For some courses with tight budgets, it is difficult for the superintendent to justify the time and expense to attend conferences and seminars. A recent article in the New Zealand Turf Management Journal by Mr. Richard Odgers offers some great points regarding the importance of attending seminars and helping to justify such attendance to your club management.

Time off - Some may argue that attending seminars is simply time off. True, it is time off, but for the purpose of professional development to allow superintendents to do a better job. It is so easy to get tunnel vision when looking at

The point is that as superintendents, you are faced with many of the same challenges and high expectations, but you are expected to come up with new and innovative answers to solve those problems and produce even better golf course conditions.

the same golf course day after day. A seminar, conference or simply visiting another course down the road provides an opportunity to challenge your current method of operation, pick up new tips, and compare notes with other professionals.

Work

Attendance at a seminar is definitely work related and should not be considered personal time. Skeptical managers or course officials might object that you went to the same conference last year or that the expense of the seminar is just more money spent on nothing. Mr. Odgers related an old story about Albert Einstein, who asked one of his students

to hand out the weekly test paper he just finished writing. After the papers were handed out, one of the students spoke up and informed Einstein that the test contained the same questions as last week. "True" replied Einstein, "but this week, the answers are different." The point is that as superintendents, you are faced with many of the same challenges and high expectations, but you are expected to come up with new and innovative answers to solve those problems and produce even better golf course conditions. Attendance at a seminar and collaborating with colleagues can help you come up with some of these answers, and pos-

The money spent on attending a seminar is a good value to the course and your employer.

sibly help you learn from someone else's experience or mistake.

Value

The money spent on attending a seminar is a good value to the course and your employer. Many industry professionals including company representatives, consultants, featured speakers and fellow superintendents are typically in attendance, providing a great opportunity to ask questions and pick their brains either during the formal presentations or in casual conversation during the breaks or lunch. Chances are, somebody in the audience has experience with the same problems facing you. It is also important for you to report back to your committee or employer on what you learned at the conference. You may wish to make a short written report outlining the important information gathered at the seminar and how it might impact your staff and golf course maintenance operation. Also, don't forget to thank your employer for the opportunity to attend the conference and seminar and let them know what a valuable experience it was for you and your club.

When conference season is in full swing, it is important to schedule your time to make the most of the available educational opportunities. Information is changing at a rapid pace, and it is important for superintendents to tap into all the available resources at their disposal. Trade journals and the Internet are a good starting point, but these references cannot provide the valuable personal interaction, camaraderie, and enthusiasm of attending a conference in person.

MGCSA Championship

Wayzata Country Club
August 20, 2001

CHAMPIONSHIP FLIGHT (GROSS)

76	BARRY PROVO	LE SUEUR CC
77	JEFF PINT	NEW PRAGUE GC
78	TOM NOTCH	BENT CREEK GC
79	STEVE BUSCH	GREEN IMAGE
80	DEAN WOJTCZAK	RIVER FALLS GC
80	DANIEL HINTON	JACKSON GC
81	STEVE ROXBERG	WAYZATA CC
82	BRUCE LELAND	BRIDGE AMERICA
83	DAVID JOHNSON	IZATY'S GOLF & YACHT CLUB
83	MIKE HARRINGTON	WAYZATA CC
84	JOSEPH BUEGE	PEBBLE CREEK GC
84	JIM JOHNSON	RICH SPRING GC
85	SCOTT PAQUETTE	HERITAGE LINKS GC
85	JEFF BACKSTROM	CANNON GOLF CLUB
86	TED SCHIRCK	HYDROLOGIC
86	JAY MONSON	NORTH STAR TURF
86	MIKE HILLIARD	PAR AIDE PRODUCTS
86	BILL MacDONALD	E-Z-GO
88	DAN DICKINSON	SAUK CENTRE CC
89	CARY FEMRITE	NORTH STAR TURF
89	TIM JOHNSON	SPRING HILL GC
91	WALTER BRAUNIG, JR.	THOMPSON OAKS GC
91	MIKE BROWER	MINNESOTA VALLEY CC
93	ERIC UNGER	THE WILDS GC
93	RANDY ADELSMAN	EMERALD GREENS GC
94	CHRIS TRITABAUGH	ST CLOUD CC
95	TOM MEIER	WORTHINGTON CC
96	MIKE NELSON	DACOTAH RIDGE GC
98	CHARLES KORNMANN	FOX HOLLOW GC
99	JEFF BOHLER	DELLWOOD HILLS GC
105	JAMES GARDNER	THE WILDS

FIRST FLIGHT (NET-GROSS)

75-88	JACK MACKENZIE	NORTH OAKS GC
76-86	LUKE KILGARD	PRESTWICK GC
76-86	TOM STOUT	DEEP TINE
78-89	BRAD DEYAK	KORONIS HILLS GC
78-89	WES STONEBACK	THE WILDS GC
79-90	THOMAS SCHMIDT	HILLCREST GC
79-90	TOM PROSHEK	BRACKETT'S CROSSING
79-94	TERRY NEGEN	BENSON GC
80-93	JEFF McDOWELL	BONESTROO AND ASSOCIATES
80-93	KEVIN NORBY	HERFOT NORBY GOLF ARCHITECTS
80-93	DAVE KZAMIERCZAK	PRESTWICK GC
80-95	DONNACHA O'CONNOR	ALEXANDRIA GC
81-91	CHUCK TUTHILL	THIEF RIVER GC
82-92	DAN BROWN	PAR AIDE PRODUCTS
82-94	SCOTT WELTZIN, CGCS	PHEASANT ACRES GC
82-98	TOM BJORNBERG	HYDROLOGIC
83-93	SCOTT EISENPETER	PHEASANT ACRES GC
84-98	TOM MUNDY	E-Z-GO
87-105	ERIC PETERS	SOUTHBROOK GC
88-106	BRENT BERKOVITZ	WAYZATA CC
88-107	ROBERT STERN	PEBBLE CREEK GC
88-99	BOB ANNEN	ALEXANDRIA GC
89-100	TODD FOLIE	HYDROLOGIC
90-100	JIM RIEKENA	DWAN GC
90-107	ROB ADAMS	RACKETT'S CROSSING CC
91-101	DAN HANSON	ST CLOUD CC
93-103	DAVID KIRSCHT	DAVID KIRSCHT ASSOCIATES
93-105	JOEL METZ	INVER WOOD GC
93-108	MATT SCHMID	PHEASANT ACRES GC
94-104	JOHN AHRENS II	DWAN GC

SECOND FLIGHT (NET-GROSS)

79-101	BOB ATOL	BRAEMAR GC
79-110	KURT KNOX	HILLCREST GC
79-99	CHRIS BACH	HILLCREST GC
80-100	JOHN GLATTLY	TWIN CITY SEED
83-105	CLAYTON HOYT	THIEF RIVER GC
84-108	MARK GOETTIG	MN GOLF CARS
89-109	STEVE MANN	TWIN CITY SEED
95-120	BRUCE SPEIRS	E-Z-GO

CALLAWAY FLIGHT (NET-GROSS)

74-83	JOHN STAPP	KATE HAVEN GC
74-97	DONOVAN PETERSEN	WAYZATA CC
75-111	LARRY THORNTON	SUPERIOR TURF PRODUCTS
76-100	JOE DINNEBIER	IZATY'S GOLF & YACHT CLUB
76-102	DAVID OBERLE	DTN WEATHER SERVICES
76-126	SCOTT MELBY	IZATY'S GOLF & YACHT CLUB
77-107	TIM BERQUAM	BERGERSON CASWELL
78-103	BOB DISTEL	WAYZATA CC
78-114	BILL GULLICKS	BELLWOOD OAKS
78-116	JEFF ISCHE	SPRING HILL GC
79-104	TOM LUNDGREN	KATE HAVEN GC

SENIOR FLIGHT (NET-GROSS)

75-85	LEIF ERICKSON	SIMPLIT PARTNERS
80-96	JOHN BETCHWARS	CREEKS BEND GC
81-97	STEVE GARSKE	PAR AIDE PRODUCTS
82-92	MIKE KLATTE, CGCS	ELM CREEK GL
83-93	MIKE REDMOND	THE ANDERSONS
85-104	THOMAS KIENZLE	BIRCH BAY GC
89-98	JOHN NYLUND	BRAEMAR GC
91-107	BILL FERIANCEK	ALEXANDRIA CC
95-110	DENNIS SALWEI	UHS

ASSURED PERFORMANCE

Banner^{MAXX}
FUNGICIDE

Barricade
HERBICIDE

Daconil
Fungicide

FUSILADE[®] II
Turf & Ornamental Herbicide

Heritage
FUNGICIDE

Primo^{MAXX}
PLANT GROWTH REGULATOR

REWARD
Landscape and Aquatic Herbicide

Scimitar GC
INSECTICIDE

Subdue^{MAXX}
FUNGICIDE

syngenta

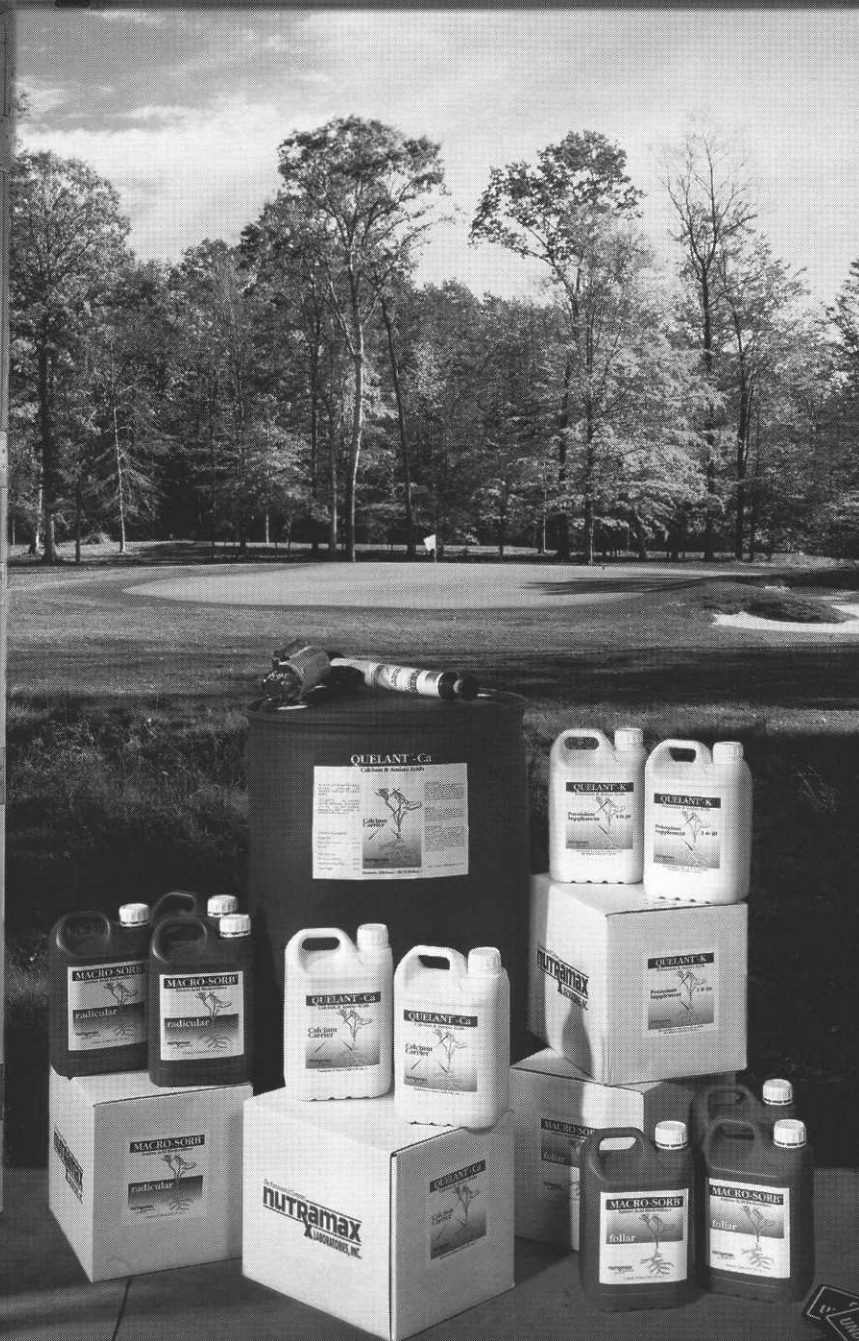
SYNGENTA PROFESSIONAL PRODUCTS

PO Box 18300, Greensboro, NC 27419-8300

Important: Always read and follow label instructions before buying or using these products.

Banner MAXX®, Barricade®, Daconil®, Fusilade®, Heritage®, Primo MAXX®, Reward®, Scimitar®, Subdue MAXX®, and the Syngenta logo are trademarks of Syngenta.

Tools of the Trade



MAXIMUM PROTECTION FROM STRESS WITH AMINO ACID BIOFERTILIZERS



Use MACRO-SORB® *radicular* throughout the growing season to increase nutrient absorption and enhance root growth and development.



Use MACRO-SORB® *foliar* to increase photosynthetic activity, especially during periods of stress, and throughout the year to enhance your foliar spray program.



Use QUELANT®-Ca to correct a calcium deficiency within the plant or once a month to keep calcium levels sufficient throughout the year.



Use QUELANT®-K to enhance synthesis of carbohydrates and increase turfgrass tolerance to heat, drought, cold, traffic, disease, and other adverse conditions.



PRECISION TURF & CHEMICAL, INC.

7728 Commerce Circle • Greenfield, MN 55373

Phone: (763) 477-5885 • (800) 925-TURF (8873)

E-mail: email@precisionturf.com

Fax: (763) 477-6511 • www.precisionturf.com

Are There Any Benefits To Tree Topping?

By KIM D. CODER
and BERT L. LATRON, JR.

*Dr. Kim D. Coder
Associate Professor
University of Georgia, Athens, Ga.*

Do you know what tree topping is? If not, are you the problem? Would you allow an old maintenance practice that decreases tree asset values, destroys future value appreciation and increases liability risks? Would you allow a structurally and biologically abusive practice to damage trees for life?

Are you tree-illiterate? Would you clearly demonstrate to other landscape managers-and the public alike-that you have failed to comply with national tree-pruning standards (ANSI-A300) and with professional tree-pruning guidelines (International Society of Arboriculture pruning guidelines)?

Can you afford to show people how professionally ignorant and antiquated you and your landscape-management program are? Can you afford to pay tripled, quadrupled or more maintenance costs to recover from reactions and injuries you have initiated-year after year?

Tree topping is a plague on the landscape that damages trees, tree owners and landscape professionals (both literally and figuratively). For decades, many have fought to educate the uninformed, to protect tree resources and to chastise the guilty. And yet our landscapes abound with permanently, seriously injured trees standing as tall banners to "management-by-myth" ways.

How many generations must endure these aesthetic abominations, safety risks and maintenance nightmares before we actually change how we do our jobs-both as professional practitioners and as advocates for modern tree care? If you think this is about you, maybe it is!

Bert L. Latran, Jr.
*Bert's Prettywork Trimming Services
Oberlin, Ohio*

Yes, there are benefits to tree topping if done by a skilled professional. In most cases that I have experienced, customers would rather not lose a living tree if it has a problem that you can remedy. Simply stated, most trees grow too slowly for the average homeowner to be able to enjoy the replacement tree.

The most frequent reason for topping a tree is to reduce the potential for storm damage. The overall height of the tree and length of the limbs equate to leverage that (mixed with flaws in the tree that are frequently unnoticed) strong winds can bend with disastrous result. Skillful topping (I

employ the drop-crotch method in most instances) removes most of the potential for such an occurrence.

Another common reason for topping a tree is to reduce interference with something else (for example, power lines or a larger tree) without losing the tree. Surprisingly, it is this kind of trimming (especially under power lines) that can require the most skill on the part of arborists. It can be difficult to accomplish the objective without detracting too much from the natural aesthetics of the tree.

A third category of topping (although rare) has to do with changing the center of gravity of a tree to correct a leaning condition. Basically, you are trying to reduce the overall height of the tree (via leverage and selectively removing limbs from the downhill side of the tree) to coax the tree to achieve nearly perpendicular status again, thereby helping to assure its longevity and the safety of residents and the property underneath.

Taking off a lot of the tree, which it needs to maintain its health, opens the tree up to a lot of wounds and makes it susceptible to disease. You're setting yourself up for failure, and you're opening up the tree to death. Plus, aesthetically, it looks bad. People [perform tree topping], and then they wonder why so many trees die.-Leah S. Burow, owner, Blackhawk Lawn Care Co. (Fort Atkinson, Wis.)

I call this technique arbor-icide. Tree topping is the brutalization of a tree. There are no benefits to it. But, if a tree is damaged, you may have to top it if you want to save it. There are occasions when it has to be done, but that's only to repair damage. It doesn't make it safer, although many people cite that as a reason for performing it. Tree topping actually makes the tree more dangerous.-Lew Bloch, consulting arborist/landscape architect (Potomac, Md.)

I can't think of any benefits. If you have to top trees to accommodate power lines, then I guess we have to. But the artistic side of me says there's got to be a better way. The only benefit may be to the tree companies that are receiving higher revenues from performing this practice. But when I drive around in the winter and see topped trees, it just makes me feel sick.-Martin J. Grunder Jr., founder and president, Grunder Landscaping Co. (Miamisburg, Ohio)

My working definition of pruning is, "The removal of plant parts to benefit the remaining parts." The practice of topping just does not fulfill this goal. Topping actually promotes decay or death of remaining branch stubs and production of weakly attached water sprouts. Most importantly, topping destroys the individual tree's natural shape and beauty.-Larry Stouse, president, Horticulture Solutions, Consulting & Seminars (Shawnee, Kan.)

Effortless Beauty

By SUSAN J. WIEGREFE
Grounds Maintenance Magazine

A key to growing low-maintenance trees is performing the critical preplanting work of assessing the site's limitations and selecting plant material accordingly. Matching a tree species' strengths and tolerances to the site conditions, especially on sites with extreme conditions, can mean the difference between the plants' languishing and flourishing. While some species can adapt to a variety of growing conditions, it often is necessary to search out a "specialist" to fill the position when extreme growing conditions or multiple plant-stress factors exist. This especially is true if you expect strong branch patterns and aesthetic appeal, in addition to mere survival.

Some trees are generally adaptable, while others specialize in some extreme condition, such as high or low pH or soil moisture. In many instances, breeders select cultivars for specific combinations of traits, often aesthetic and tolerance to stresses. Because of their superior performance, these cultivars generally are worth the slight additional cost and effort to locate them.

Trees may possess other qualities, independent of their suitability for a specific site, which qualify them as low-maintenance species. Five criteria dictate, to a large extent, the level of maintenance you'll need to perform to produce a healthy, attractive specimen over the course of many years.

1. Most importantly, the tree should be free of disease or insect pests that can endanger or disfigure the tree if you leave them untreated.

2. The tree must not require annual pruning such as the removal of water- or basal-sprouts to maintain the desired form.

3. It should not produce excessive fruits. Recognizing that trees, like most plants, require flowering and fruiting for perpetuation of their kind, we must accept some litter. However, excessive litter is offensive and may increase maintenance costs. Thus, a list of low-maintenance trees should only include species with which this "problem" is minimal.

4. The tree should be strong-wooded and have strong branching patterns so that it does not require cabling or substantial pruning to remain solid even when mature.

5. Lastly, it should tolerate climatic conditions sufficiently that it does not depend on neighboring vegetation or structures to provide acceptable growing conditions, such as wind protection, shade or any other microenvironment.

Every recommended-tree list should apply to a specific geographic region and its general climatic and soil conditions. In this case, my recommendations apply to the North Central states. In this region, erratic rainfall and alkaline

soils combine with cold winters and hot summers to make life difficult for woody plants. Wherever you're located, the efforts you make (proper planting and care through the tree's establishment period) to moderate the challenging conditions existing on the site will reward you with healthy young trees that require minimal long-term maintenance.

Below are some excellent tree species that fit the criteria of "low maintenance" and possess excellent ornamental value as well. The table on page 17 summarizes characteristics of these species.

Minimum-maintenance tree species * The three-flowered maple is an excellent choice if you are looking for a smaller tree with outstanding fall color and tolerance of drier sites. Its rounded canopy ultimately reaches to 30 feet with equal spread. Its leaves reliably turn orange, often with a blush of red or maroon. In the upper Midwest, this Manchurian species outperforms its close relative, the lacebark maple (*Acer griseum*), which originated in central China. The three-flowered maple is hardier (to USDA Zone 4) and tolerates heavier and slightly more alkaline soil than its kin. Another common name for this species, shaggy-bark maple, describes yet another of its attractions: The grayish-tan bark exfoliates on branches 3 years old or older.

This species has been difficult to find in the trade. Its scarcity is due, in part, to the difficulties of propagating it. As domestic seed orchards begin to bear, this problem should ease. However, its slower growth rate relative to the more common maples and ashes will continue to make it somewhat more expensive to produce. Although mass plantings of this species may not be feasible, its many strengths and charms will undoubtedly earn it a place in many locations as it becomes better known.

* The Freeman maple fills a key role at the other end of the moisture gradient. The hybrid between the red and silver maple is one of the best choices for sites that periodically flood or drain poorly. The Freeman maple is a good example of interspecific hybrids that exhibit the complementary strengths of their parents. Tolerance of flooding and alkaline soil are attributes contributed by silver maple. The red-maple component improves fall color and moderates the rank growth of limbs and roots usually associated with silver maple.

A number of selected cultivars are dioecious (individual trees are male or female, but not both—a red-maple trait), thus allowing for the selection of seedless, male clones. Consistently brilliant fall color has been the primary selection criterion for most cultivars, but they also differ in growth habit.

(Continued on Page 31)