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ECH CENTER

MICRO from page 20

phosphorus, zinc, manganese and copper, can also limit the plants' ability to take up and use the iron.

Manganese—Likewise, the amount of manganese available to plants is not reflected in the amount of manganese available in the soil. Soil pH, cation exchange capacity, organic matter content, drainage, temperature, soil compaction and microbial activity all limit availability of manganese. Even fertilizer packages of iron with sulfur and nitrogen were found to induce manganese deficiency. They caused growth without necessary additional manganese to fuel such processes as hydrolysis, metabolism of organic acids and oxidation reduction that produced spindly, yellow plants.

Occasionally, too much manganese can be as bad as too little. In acid or poorlydrained soils, manganese becomes extremely available and blocks out the uptake of other vital nutrients.

Zinc—Zinc deficiency can be determined through soil and tissue tests. Muck soils and some western, Florida and Michigan soils are naturally deficient in zinc. High soil pH and removing topsoil can also cause zinc deficiency. Unbalanced applications of phosphorus can intensify zinc deficiencies. Uptake of zinc can be more limited when soils are cold and wet during the early part of the growing season.

Others—Other micronutrient deficiencies are less spectacular in their symptoms and are not as often corrected.

Symptoms of boron deficiency can be

SYMPTOMS OF SOME NUTRIENT DEFICIENCIES

NutrientSymptomIRON......Yellowing of the interveinal area of young leaves. On
turf, the chlorosis is not uniform, but often appears in
irregular patches.MANGANESE.......First signalled by interveinal chlorosis. As deficiency
becomes more severe, leaves get brown spots and
developing leaves often drop off.ZINC......Interveinal chlorotic striping, a thin purple margin
around leaf edge. For ornamentals, narrowed or
reduced leaf size and internodal spacing, giving the
plant a "witch's broom" appearance.COPPER.......Can cause newer leaves to die before unrolling. Older
leaves may appear limp or turn gray.

confused with other deficiencies and can be more difficult to correct. Researchers have documented boron scarcity in most of the East and Midwest and in some parts of the Northwest. This lack often shows up as reduced plant quality rather than lack of growth.

Organic and very sandy soils are most likely to have copper deficiencies. Problems are fairly localized and can often be diagnosed by soil tests.

Only a small amount of molybdenum is needed for nitrogen fixation and nitrate reduction in plants. Availability may be limited primarily in acid soils; therefore, pH can be a good indicator of a potential problem. Tissue analysis can also diagnose a scarcity. Although turfgrass scientists recognize the element's importance, little else is known about its effects.

Recent research indicates very few cases where overapplication of micronutrients can pose a problem. Balance is most important. Look for a micronutrient package that contains not only iron and manganese, but also magnesium and—depending on soil tests—zinc, copper, boron and molybdenum.

Treating soils for dangerous contamination

Pesticide spills, battery acid, oil and gasoline leaks can be cleaned up with specially-treated rocks.

by James E. Guyette Contributing Editor

A new technology may allow landscape managers, golf course superintendents and institutional groundskeepers to treat leadcontaminated soils more cost-effectively.

The discovery involves covering the affected soil with finely ground phosphate rocks. Research indicates that the phos-

phate rocks reduce the amount of watersoluble lead in contaminated soil by 57 percent to 100 percent.

For the landscape industry, this could drastically reduce the costs faced by business managers being forced to purify soils tainted by pesticide spills or previous power equipment maintenance activities that resulted in petroleum products soaking into the ground or leaking gasoline storage tanks. The process also will work on battery acid leaks.

In addition to cleaning their own company headquarters' yards, landscape managers may also find economic opportunities in helping other business owners clean polluted grounds. "A combination of leaded paint and gasoline has caused soils in some urban areas to be very high in lead," explains Dr. Terry Logan, professor of natural resources and director of the Environmental Science Graduate Program at Ohio State University. The U.S. Environmental Protection Agency and the University of Florida are also participating in the project.

"We envision using our treatment and then covering the surface with a couple inches of clean soil and then planting vegetation," Logan predicts.

Combats heavy metals—The technology, which has been patented by OSU continued on page 26 "ALCA is the best landscape business resource in the country."

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TECH CENTER

LEAD from page 22

and the EPA, can also be used to treat soil contaminated by other heavy metals, such as zinc, aluminum, cadmium and possibly uranium. Lead is viewed as the primary health risk because it is especially harmful to young children.

With the process, lead-contaminated soil is covered with ground phosphate rocks on a ratio of two parts phosphate to one part lead. (To be most effective, the lead content has to be measured ahead of time.) In most cases, the phosphate can be applied to the surface just like fertilizer.

One application is likely to do the job, according to Logan, unless the soil has an extremely high concentration of lead.

For alkaline soils, like those found in the West, an application of liquid phosphate, such as the type found at landscape supply centers, may be the best technique, says Logan.

Using phosphate rocks to treat leadcontaminated soil is different from conventional technologies because it focuses on managing the lead where it is. Other treatments seek to remove the lead from

The technology could drastically reduce the costs faced by business managers who are being forced to purify soils.

the soil, which can rob it of important nutrients, Logan points out.

"We took a different approach and focused on managing the lead where it is, which is much more cost-effective and eliminates the need to store the contaminated soil in a landfill or to incinerate it," Logan explains.

"Using this technology will cost hundreds of dollars to treat an acre of contaminated soil compared to thousands or tens of thousands of dollars to treat with any other technology," he reports. The project began five years ago, and now trials are on tap for urban and rural sites, according to Logan. "Since phosphorous is a fertilizer, we were concerned that crops growing in the soil would take out the phosphorous, and the lead would be soluble and able to move into the groundwater and be absorbed by the crops," he recalls. "But as long as there is an excess of phosphorous, that shouldn't be a problem," Logan adds.

"Another important thing we found was that it worked regardless of what the source of the lead was, including soluble forms of lead, mineral forms, or even leaky batteries."

Phosphate is abundant and easy to mine. "The key to this technology is that it doesn't use another synthetic, man-made chemical," Logan says. "It uses a natural product that we know and understand well to treat a very serious problem in a costeffective manner."

These herbaceous plants are best for shady spots

Much of the gardening world hungers for the cooling pleasures of shade trees in their landscape. The rest of the world regrets they cannot plant many of the sunloving plants which will not thrive in their shady landscapes.

Here are a few favorite plants for various levels of shade.

Ajuga

- A spreading member of the mint family; can be showy when bright blue flowers appear;
- has many uses as a background groundcover.

Astilbe

Feathery flower spikes rise above the dark green dissected foliage. Astilbes give an airy look to garden borders. If flowers are deadheaded, the blooming period will be lengthened.

Begonia

These plants range from the widely popular wax begonia bedding plant to an exotic range of fancy hybrid tuberous begonias.

Climbing hydrangea

A wonderful climbing vine for along garden walls. This vine with glossy green foliage and fine, fragrant blooms takes years to develop, but it's well worth the wait.

Coleus

- This edging and window-box plant has a wild range of foliar colors and patters, which seem almost incongruous with its preference for shade;
- blue flowers are not a key characteristic.
 Columbine
- Airy blossoms which come in many colors have attractive spurs as a feature;
- excellent for naturalized areas;
- may bring the columbine leaf miner insect.

Daylilly

- More and more varieties are available each year;
- will bush out if they are cut back somewhat at transplanting. New Guinea impatiens can tolerate less shade than the standard impatiens varieties.

Lily of the Valley

- Very aromatic, white bell-like flowers;
- multiply and spread over large areas quickly.

Lilyturf (Liriope)

 Grasslike leaves make this an excellent border plant or groundcover for small areas.

Primrose

- Easy spring flowers provide the promise of summer warmth with heady aroma;
- will bloom in chilly spring temperatures.

Vinca minor

- Also known as creeping myrtle;
- a standby groundcover with lavender flowers;
- remains evenly green throughout the year.

Violet

- An attractive range of plants with mostly heart-shaped leaves;
- attractive in clumps, but can be cultivated to serve as a groundcover.

-Source: Jim Chatfield, writing in the Northeast Ohio Forum of the Professional Grounds Management Society.

Plants best adapted for specific conditions



Fern leaf yarrow, Achilea Flipendulina

Though it's now too late to do anything about plants lost to drought this summer, it's not too late to start planning for the 1996 growing season.

According to various growers and marketers, bermudagrass and buffalograss has excellent drought tolerance in warm-season locales. Among the cool-season grasses, perennial ryegrass and tall fescue both offer very good drought tolerance.

Dr. Balakrishna Rao of the Davey Tree Company also suggests some trees and shrubs that can be planted in droughty sites without as much danger of damage than normal plants (see accompanying chart).

"Remember, though, that these plants can survive if the dry conditions are not very severe," Dr. Rao observes. "Proper mulching and fertilizing will also help during drought conditions."

(Paspalum notatum)

(Festuca arundinacea)

(Robinia pseudoacacia)

(Zoysia japonica)

(Acer ginnala)

(Cynodon sp.) (Buchloe dactyloides)

Good drought tolerance:

TURFGRASS

bahiagrass bermudagrass buffalograss perennial ryegrass (Lolium perenne) tall fescue zoysiagrass

TREES

black locust amur maple



Light pink, Dianthus Plumarus

(Quercus velutina)

black oak

bur oak	(Quercus macrocarpa)
hardy rubber tree	(Eucommia ulmoides)
Scotch pine	(Pinus sylvestris)
Eastern white pine	(Pinus strobus)
bristlecone pine	(Pinus aristata)
hedge maple	(Acer campestre)
tatarian maple	(Acer tataricum)
Japanese pagoda tro	ee
	(Sophora japonica)
Austrian pine	(Pinus nigra)
Kentucky coffeetree	e
	(Cymnocladus dioicus)
goldenrain tree	(Koelreuteria
	paniculata)
amur corktree	(Phellodendron
	amurense)
callery pear	(Pyrus calleryana)
SHRUBS	
flowering quince	(Chaenomeles sp.)
purple smokebush	(Cotinus coggygria
	'Royal Purple')
cotoneaster	(Cotoneaster sp.)
Northern bayberry	(Myrica pennsylvanica)
mugo pine	(Pinus mugo var.
	mugo)
fragrant sumac	(Rhus aromatic 'Gro-
	Low')
spirea	(Spirea sp.)
barberry	(Berberis sp.)
meserve blue holly	(Ilex x meserveae 'Blue
	Prince' & 'Blue
	Princess')



Spoonleaf yucca, Yucca Filamentosa

meserve holly	(Ilex x meserveae
	'China Boy' & 'China
	Girl')
sweet mockorange	(Philadelphus
	coronarius)
prostrate juniper	(Juniperus horizontalis)

PERENNIALS

I EITEITIALS	1242 1247				
tulip, most species	(Tulipa sp.)				
crocus	(Crocus sp.)				
lavender	(Lavandula officinalis)				
Basket of Gold	(Aurinia saxatilis)				
lilyturf	(Liriope muscari &				
	L. spicata)				
Some Pinks	(Dianthus sp.)				
thyme	(Thymus vulgaris, T.				
	x citriodorus)				
seathrift pink	(Armeria sp.)				
	(Dictamnus albus)				
	(Salvia officinalis and				
	cultivars)				
wall flower	(Cheiranthus cheiri)				
yarrow	(Achillea filipendulina)				
artemisia—wormw	vood				
	(Artemisia sp.)				
coreopsis	(Coreopsis sp.)				
sedum	(Sedum spectabile)				
stachys	(Stachys sp.)				
vucca 'Bright Edge	<u>.</u>				
	(Yucca filamentosa sp.)				
gaillardia 'Goblin'	(Gaillardia aristata)				
	tulip, most species crocus lavender Basket of Gold lilyturf Some Pinks thyme seathrift pink gasplant hardy sage wall flower yarrow artemisia—wormw coreopsis sedum stachys yucca 'Bright Edge 'Gold Sword,' 'Adams Needle'				

Ground covers beat weeds, prevent soil erosion

Ground covers tend to be lower-growing, usually evergreen plants used in place of grass, mulching materials or stone, to beautify areas inhospitable to turf. As a living mulch, they prevent mechanical damage to trees and shrubs.

Ground covers can be used under trees where low branches prevent mowing, or to hide exposed tree roots.

Ground covers can

trail close to the ground or grow as high as three feet tall. The Garden Council reports a wide variety of ground covers which prevent weed growth and soil erosion while decorating large garden areas.

The best ground covers are free of insect and disease problems; semi-evergreen to fully evergreen; widely adaptable; easily propogated, and vigorous.

Of course, the most commonly used ground cover is grass, but there are many others which come complete with flowers, berries, textures and colors.

Some ground covers flourish in shady areas, rocky slopes or hot, arid spots. When they're done blooming, they decompose to provide a permanent mulch which encourages further growth.

How to choose—The choice of ground cover depends on a variety of siterelated factors:

 the design characteristics you seek, such as color, texture, form, shape, size, growth habit and rate of growth;

 the site—sun or shade, wet or dry, acid or alkaline, salt exposure and wind flow;

 how will they function in the landscape—as a transition zone or as area of visual interest;

 the hardiness and adaptability of the plant to the area;

 maintenance needs of the plant and the ability to care for it as needed;

• availability.

Sources: Russell Balge, Free State Nursery News; The Garden Council



Periwinkle, Vinca Minor

Ground covers for shade winter creeper (Euonymus fortunei & cvs.) English ivy (Hedera helix & cvs.) creeping lily turf (Liriope spicata) periwinkle (Vinca minor)

Ground covers for sun

winter creeper (Euonymus fortunei & cvs.) edging candytuft (Iberis sempervirens) three-toothed cinquefoil (Potentilla

tridentata)

Ground covers for acid soils European wild ginger (Asarum europaeum) heather (Calluna spp.) lily-of-the-valley (Convallaria majalis) barrenwort (Epimedium spp.) wintercreeper (Euonyumus fortunei cvs.) sweet woodruff (Galium odoratum)

wintergreen (Gaultheria procumbuens) English livy (Hedera helix) hosta (Hosta spp. & cvs.) edging candytuft (Iberis sempervirens) partridgeberry (Mitchella repens) Japanese spurge (Pachysandra terminalis)

canby pachistima (Paxistima canbyi)

Ground covers for moist soils bugleweed (Ajuga spp. & cvs.) European wild ginger (Asarum canadense) heather (Calluna vulgaris)

Advantages of ground covers

 can be used on steep slopes or rocky areas where mowing is not possible

 usually do not require much maintenance

· will function as living mulch

 assist and enhance soil structure by virtue of their greater root penetration that turf grasses; this improves soil aeration and water percolation;

 they may enrich the soil by adding organic matter to the soil;

 generally more resistant to insects and diseases.

Disadvantages

 must usually be transplanted from vegetative starts;

 can not usually be weeded with selective herbicides; the exception is the elimination of grassy weeds in broadleaved ground covers with Fusilade (*fluazifop-P-butyl*) or Poast (*sethoxydim*);

 usually more susceptible to damage by pedestrians;

 the tender varieties are sometimes killed by harsh winters;

 they can sometimes be smothered by leaves;

 they may have to be treated for a wider range of insects and diseases than lawns;

 until well established, they may be difficult to keep free of weeds for 2-4 years.

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Y FROM JOHN DEERE



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GOLF & ATHLETIC

HINTS: How to tell if a redesign is near

Is your course fair—and fun—to play? Player complaints and marathon rounds might be signs a redesign is needed.

• Longer rounds that aren't caused by increased traffic. Slow-growing greens. Poor drainage. These are all hints that it might be time for a redesign. And it's especially true if you're hearing complaints' from low and high handicappers alike.

"It's easy, for example, to attribute turtle-paced rounds to slow golfers," says Don Knott, past president of the American Society of Golf Course Architects. "But slow rounds can result from more than just slow golfers. They may result from what is actually an outdated golf course."

A classic reconsidered—In 1992, ASGCA member Jeff Brauer provided design services for a complete renovation of the Great Southwest Golf Club, Grand Prairie, Texas. The course redesign was part of the club's overall renovation plan, which also called for a remodeled clubhouse, driving range and golf school. According to Michael Akeroyd, general manager of the club, Great Southwest was nearing its 30th birthday and had come to the end of its "first life."

The problems were caused by tiny greens, poor air circulation, inadequate drainage and poor greens mix. Diminished continued on page 6G



This sculptured lake added to Rio Hondo separates tees from greens and provides an all-around better look.

ELSEWHERE

No fuss compost plan really works, page 8G Keeping workers' productivity up, page 10G Watching fall athletic fields, page 12G

Redesign signs

Look for these signs that indicate it may be time to redesign:

GREENS

- Standing water on greens, even after minor rain showers.
- Too small to hold long shots or too big for short shots.
- Golfers complain that certain parts of the course are 'unfair.' (If you hear this from both low and high handicappers, it's probably true.)
- Speed of play is a good indicator of an outdated design.
 (Remember, with increased popularity of golf comes heavy traffic and an greater need for faster play.)

BUNKERS/OTHER HAZARDS

- Do they challenge the players? Advances in equipment used to play the game and maintain the course can make certain original design challenges obsolete.
- Do you see a major increase or decrease in the balls you find in hazards?
- Have you had to alter your irrigation program in a significant way? Is your current system meeting the course's demands?
- Do you have a decent practice facility? With more golfers using driving ranges, a practice facility can be an important source of revenue.
- Are the red tees fair to women and junior players?

BUDGET

Is the maintenance budget increasing? It could be you're spending more money on routine maintenance, with more costs to come.

> Diseases keep Patterozzi busy, page 14G

REDESIGN from page 5G

play after the warm summers of 1991 and 1992 convinced club management to solve the problems.

Brauer advised that all greens be rebuilt according to USGA standards. Some trees were removed to improve air flow and sunlight penetration around the greens.

SR 1020 bentgrass was chosen for its heat tolerant properties.

Design changes included softer contours for faster green speeds; larger greens to allow for more varied pin placements and a larger target area; and larger, more visually appealing bunkers for easier maintenance, more challenging shots and aesthetics.

Greens banks and shoulders now allow easier access from the cart paths, and are in line with federally-mandated ADA (Americans with Disabilities Act) guidelines.

Both membership and income at the course have increased since the redesign.

Traffic tells a tale—Rio Hondo Golf Course, another classic from the 1920s, was host to more than 100,000 rounds of golf in 1992.

That's when superintendent John Rodriguez noticed that the greens were too small and were not draining well. Tee boxes were also very close, which hinted at a potential safety problem.

Jerry Pirkl was hired for the redesign, and his mission was to change not only the design, but a new visual appeal and identity.

The redesign required that the course be closed for 11 months. Greens were enlarged, four lakes were installed with waterfalls, mounds were added to fairways and a new irrigation system was installed.

Between October of 1994 and March of



The large front bunker at the 191-yard, par 3 sixth at Great Southwest was converted to white sand and mounds were added to the periphery. The back-to-front slope of the green makes the hole play more fairly.

1995, the course was well on its way to paying off the initial redesign cost.

-For a free copy of the ASGCA's Golf Course Development Planning Guide, write them at 221 N. LaSalle St., Suite 3500, Chicago, IL 60601.

GCSAA joins pesticide partnership program

• The Golf Course Superintendents Association of America (GCSAA) will participate in the federal government's new Pesticide Environmental Stewardship Program. Under the program, the GCSAA will work with the U.S. EPA, the Department of Agriculture and the Food and Drug Administration to develop a strategy that further reduces the risks from using pesticides on golf courses.

"We are absolutely committed to using responsible management practices that pose little—if any—environmental risk," says GCSAA president Gary Grigg. "Through this partnership, we'll be able to work with the leading federal authorities to find innovative ways to use pesticides effectively and safely, and to minimize any potential harm to people, wildlife and the environment."

EPA administrator Carol Browner adds that congratulations are due to "the companies and grower groups that are joining with us for their forward-thinking approach to environmentally sound pesticide use practices."

The EPA's Anne Leslie, coordinator of the GCSAA's strategy, says that she is looking forward to working with superintendents.

The GCSAA's plan includes education, training, research and continued careful use of pesticides. Specifics will be announced during the Environmental General Session of the GCSAA Conference and Show next February in Orlando, Fla.



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A no-fuss compost plan that pays off

Northern Michigan golf resort's goal is to be 100 percent zero discharge.

by Ron Hall Senior Editor

The golf course management team at Michigan's Treetops Sylvan Resort turns landscape waste into valuable compost. It does it by following basic composting rules, but not with a lot of fuss.

The Treetops' effort began in earnest when Bruce Wolfrom, CGCS, arrived as golf course manager five years ago. He came from Barton Hills, Ann Arbor, Mich., where he'd been for 20 years.

"Recycling vard waste is something I've always done. This material is just too valuable to throw away," says Wolfrom.



Golf course manager Bruce Wolfrom, CGCS, loves northern Michigan and works to preserve its beauty.

The resort and its golf courses generate tons of landscape waste annually, mostly grass clippings, leaves, chipped limbs, spent flowers and discarded sod. But Wolfrom's management team has a plan to take care of it, and a plan for source reduction, too.

For instance, Treetops purchases its fertilizer in 200-pound bulk fabric containers that are returned to suppliers and refilled. The resort gets no price breaks, and it must use a forklift to handle the palletized shipments. But Wolfrom says it's worth the effort because it drastically reduces bag disposal.

"We have pushed manufacturers, chemical companies and fertilizer companies to help us with their packaging. We want them to be a little more responsible about what comes into the resort and what's going to happen to this packaging when we're done with it." explains Wolfrom.

The ultimate goal, he adds, is for the resort to become 100 percent zero discharge: everything that comes into the resort stays on the property.

"There are a lot of questions and answers out," he admits, "but that is our goal."

One of Treetop Sylvan's

biggest successes so far has been green waste recycling. This benefits the resort by eliminating the need and expense of hauling waste away while it also produces about 300 cu. yds. of compost annually.



Treetops' landscape manager Don Frisbie says the use of compost gives flowers like these astilbes and impatiens extra vigor.

That's slightly more than the resort can use, so there's always a slight surplus on hand.

Don Frisbie, the resort's landscape manager, uses much of this compost on 8,000 sq. ft. of flower beds each spring.

"When you first put the compost down, it makes the bed richer and brings out the color of the flowers," says Frisbie. "But we don't use compost for this rea-



that need to be thought Karen O'Dell, superintendent of the Robert Trent Jones, Jr., Masterpiece course at Treetops Sylvan Resort, says several smaller compost piles around her Usable end product- course encourage employees to use them.

son." He feels double-processed hardwood bark mulch gives beds a more finished look.

Frisbie estimates the compost saves his department about \$2,000 a year in product

costs.

"We found by trial and error that the compost gives us the desired results in our beds," he says, "Occasionally we give them a foliar feeding to give them a boost, but we don't use any granular fertilizer at all."

Also, Frisbie says the beds stand up to diseases and insect pests better since the resort began using compost. The annual beds haven't needed any pesticides in two years, he says.

On the course-Karen O'Dell, superintendent of the Masterpiece course, says she often uses compost to

improve or repair roughs.

"If I've got a weak spot on the course where it's been worn out by the carts, and it's sandy and I can't keep nutrients in, I have the compost mixed in," she says. "It helps out tremendously. It's a good soil additive."

Three compost sites are located around O'Dell's course, along with multiple sites continued on page 10G

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Circle No. 101 on Reader Inquiry Card

COMPOST from page 8G

around the other courses, too. This makes it easier for crew members at each course to bring debris to them.

Periodically, a crew member uses a front-end loader to turn and churn these piles. This is necessary to keep them aerobic. Only once did a pile go sour at the resort, recalls O'Dell. "It began stinking, so we spread it out and let it dry some. Then it was fine."

O'Dell says it takes about a season for the green wastes to turn into compost. Before it's used, it's run through a screener to remove any rocks and soda cans.

One of the prime ingredients in the resort's compost piles is grass clippings.

Before golf course equipment is washed, it's blown off with an air hose. Each course can generate over 300 lbs. of clippings a day. These are swept up and put in the piles.

Grass clippings also come from the lawns in front of the resort's hotel and guest areas. Sometimes, for appearance's sake, Frisbie's crew must bag them and add them to the piles.

But the most largest ingredient, by volume anyway, is leaves. In fact, beginning in September (maples and oaks turn early this far north), teams of workers begin blowing the leaves into windrows on the golf courses. Then leaf vacuums come along and suck them up. These leaves, along with wood chips, are fed into the compost piles almost like ingredients measured into a cake mix. Sometimes sand and soil are also added to control moisture.

"If you have the right combination of wastes, then the compost piles seem to take care of themselves," says O'Dell. "Maybe we've been lucky, but it just hasn't been that difficult for us to compost."

Golf manager Wolfrom thinks more golf courses will be both trying to reduce the source of waste, and recycling what waste they do produce.

"I think our industry is primed for this. Being responsible for our waste is not a bad idea," he says.

Keeping workers productive, the Sandburg/Lakeside way

'Good clean fun' is the way to go, says this superintendent of a course where summer days run to sub-tropical weather.

by Jerry Roche Editor-in-Chief

Sitting in the air-conditioned Houston office of Lakeside Country Club superintendent Mike Sandburg, at around 3 p.m., you can hear the muffled sounds of workers who've survived another day of 95 degree temperatures and 85 percent humidity. They're clowning around in the equipment area, winding the day down.

"Hear that?" Sandburg asks. "You wouldn't hear that at a lot of golf courses." He avoids the tired cliché of the crew that's one big happy family, but you know it's true here.

"I try to pass on the message to be happy with yourself or to find someplace where you can be happy," Sandburg asserts. And that is the key to successful personnel management at Lakeside, inarguably one of the spiffiest courses in east Texas.

"We're a good family—my wife Kelli, my son Matthew—and that includes the guys who work for me," says Sandburg. He does many things well, as a good superintendent must. But the best thing he does is manage people. "The hardest part of this job is dealing with people," Sandburg notes, "and that's something I love to do."

He learned part of his management technique from his father, a hard-working Kansas farmer. ("This is the closest I could be to farming and still make money.") The rest he picked up during four years at ChemLawn, where he saw both the good



and the bad.

"The philosophy of Dick Duke (ChemLawn founder and CEO) was to put the customers and employees first and profits second. But by the time I left ChemLawn, he was gone and things had changed."

Just do it-If there is a definition of

"working superintendent," Sandburg is that. "I can't sit in the office," he notes. "I just like to be one of the guys. And I don't ask my employees to do anything I can't or won't do.

"If you can't take employees out and show them how to do it yourself, you can't teach them. You have to break them in slowly. Only our most experienced guys mow fairways. New guys rake bunkers and work up from the bottom."

He claims that his employees would jump "a bridge, provided he asked them to, and that he jumped off with them. "They know that I do everything for a reason, and they don't question the reason." Continuing education is also a key to the happiness of the 26-person crew at Lakeside.

"I love to see people get better," Sandburg says. "My lead assistant, Chad Stearns, will make a good superintendent someday. And I want him to be a superintendent someplace, but I want him to be ready when he goes. Another employee is 19 years old, has one child and one on the way. He's finishing his GED, and I'm starting him on a training program to be a licensed pesticide applicator."

The training is reciprocal. Since superintendents are supposed to be jacks of all trades, Sandburg finds himself learning the odds and ends from his employees. "Every day's a learning process."

Most of the crew members at Lakeside are Hispanic, some Mexicans and Salvadorans with green cards, and some second-generation U.S. citizens, but Hispanic nonetheless. That makes language another potential *continued on page 16G* CUTWORMS. ARMYWORMS. SOD WEBWORMS. BAGWORMS. GET BACK AT ALL OF THEM WITH DRTHENE® TURF, TREE & DRNA-MENTAL SPRAY. IT CONTROLS A WIDER SPECTRUM OF WORMS THAN DURSBAN® AND DEGRADES RAPIOLY — SO YOU DON'T HAVE TO WORRY ABOUT SURFACE WATER CONTAMINATION. AND OUR NEW WATER SOLUBLE PACKAGING MAKES REVENCE EVEN EASIER.

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Circle No. 125 on Reader Inquiry Card

High school field care a balancing act between traffic and turf management

With lots to do in little time, these sports turf managers keep the turf healthy despite many extra-curricular activities.

by Steve and Suz Trusty

In the busy world of high school athletic field management, optimum turf growth and field playability must coincide with the turf's natural cycles of growth and recovery.

Across the U.S., athletic field managers—at what must be some of the country's busiest high school fields—rely on a variety of sure-fire techniques to ready their fields for the crunch of competition.

Slit seed, overseed—Lonnie Berg's work as grounds supervisor for Hinsdale



Paul Greenwell: four men mow 44 athletic fields. Aeration, topdressing, irrigation repairs and some fertilization is contracted.



Manatee High's football field is used for football and soccer play.

(III.) South High School includes the extra challenge of spring activities. Varsity and junior varsity soccer, graduation ceremonies and the senior picnic are concluded by June, but football practice starts the second week in August.

Soccer play leaves distinctive wear patterns around the goal areas and at the center line of the game field. New soil was spread onto the worn sections, and the field was aerated and topdressed.

"We used a combination of slit seeding and overseeding twice; once on June 12th and once toward the end of July," says Berg. "We used the same mix of Kentucky bluegrasses and perennial ryegrass as the established turf. Each seeding was followed by an application of starter fertilizer."

Fertilization was reduced during the summer, and irrigation was increased—to twice a week for eight hours—to combat the hot, dry conditions.

The turf is reel-mowed every other day at two inches. Fertilization rates are increased and the turf is mowed every day as the first game approaches.

"During the season, we'll overseed with a blend of perennial ryegrasses and let the player's cleat it in," says Berg. "Irrigation depends on natural rainfall and the game schedule. We don't want to stress the turf, or do anything to encourage compaction."

Deep rooting tactics—Bill Antons, superintendent of buildings and grounds for Boone (Iowa) schools, has to shore up the turf after a similar number of activities, and then some. The stadium is the game field for junior high and high school play, and also must endure flag football games on Saturdays. Include varsity practice and band practice, and you have more traffic than any field should endure.

"We keep the bluegrass field at 3½ inches during the summer to encourage deep rooting and for protections from the heat," says Antons. "With this year's hot, dry summer, we mowed a little less and irrigated a little more."

Antons says he will lower the mowing height gradually, starting about the first of August, to hit the game height of 1½ inches by August 20th.

Four pounds of nitrogen are applied between June and November. An overseeding of Kentucky bluegrass varieties is made every spring.

Antons' crew applies liquid chelated iron a day or two before the first game of the season to get a deeper green color. The product is also used for a boost of color for special games.

"The only problem with all this," laughs Antons, "is the field looks so good on the night of that first game that everyone wants to use it."

Washington State's North Thurston School District has one field for three high schools, South Sound Stadium. That's a total of 12 teams: boys junior varsity and varsity football and girls junior varsity/var-

sity soccer. On Saturdays, the Thurston City Youth Football Association uses the field for seventh- and eighthgrade games.

"It's an old-style sandbased field with a crown and sub-surface drainage," says grounds supervisor Matt Johns, "though the drainage system really isn't needed. The turf is a blend of three perennial ryegrass varieties. We run an above-ground piping system for irrigation. Though rains here are usually adequate, because of the intense summer heat this season, we've had to irrigate frequently."

Aeration—For fall soccer, Johns' crews aerate and topdress at the end of the school year. Three or four passes with a core aerifier are done in July and in August; cores are left on the field.

Reseeding follows those aerations. "We'll overseed with the same three-variety blend at the end of the season, too, usually in late November or early December."

Johns says his fields' fertilization program is high in potassium—to encourage deeper turf rooting and boost hardiness—and low in phosporus, because current levels are adequate.

"We're using a slow release nitrogen at the rate of 1 lb./1000 sq. ft. per month.

"We keep the turf at 2½ inches, alternating directions each mowing to keep the grass standing upright. Before the first game, we'll mow in two directions. During the season, we mow three or four days before a game and, if temperatures warrant it, we'll irrigate up to the day before the game."

Closed for the summer—Paul Greenwell is grounds coordinator for Georgia's Gwinnett County Public Schools. The county has 12 high schools and 44 athletic fields, 10 of which are stadium fields.

"This region has been growing so fast," says Greenwell, "the system's practice and stadium fields have been used for PE classes at some sites. To balance wear, we



Verticutting fields helps control thatch and compaction caused by high use and heavy athletes.



Trailers make equipment transport easy for large school systems with many fields. Photos courtesy Paul Greenweither Photos Courtesy Photos

move practice areas within the available field space and combine varsity and junior varsity practices. Ninth-grade practices are held on the outfields of the baseball fields. Still, a few of the schools must practice on their stadium field."

In what some might consider a bold move, the county closes football game fields during the summer for renovation.

This year, the fields were sprigged with Tifway 419 bermudagrass in mid-June. "We generally mow three times a week, vacuuming at each mowing, and keep the turf at 1½ inches," explains Greenwell. "The pre-game mowing is on Thursday."

It really helps that the coaches and booster clubs paint the fields before practice on Thursday, then do a touch-up painting on Friday mornings.

Greenwell applies fertilizer two or three

times a month to boost growth and strengthen the turf for the impending traffic stress.

"We'll fertilize on Thursday, one week before the first game, then go to a schedule of 1 lb. of N per month. We irrigate on Wednesday, with a follow-up irrigation after the last game of the week. If junior varsity teams play on Saturday nights, the first irrigation is Sunday.

"As temperatures cool, we'll aerate, fertilize and overseed with perennial ryegrasses. Fields must keep growing because, as soon as football is completed, soccer moves in and with both guys and gals playing. There are six soccer teams per high school."

Time/money concerns -Jim Corcoran, grounds manager for the Albuquerque (N.M.) Public Schools. shares responsibility for the school system's 103 fields. Forty-six of the fields are used for practices and physical education classes for the system's 11 high schools. These 11 schools also share two stadium "game" fields, both of which are artificial. The decision two years ago to forego natural surfaces was based on time and money.

"Though I'd personally

prefer to have all games played on natural turf, within our current staffing and budget levels, the artificial turf stadiums are a practical solution," explains Corcoran.

"The large number of games each field must handle was definitely the greatest concern," says Corcoran about the decision to stay with artificial turf. "The two fields are used by each school's varsity and junior varsity football teams, guys and gals varsity and junior varsity soccer teams" and freshman soccer club.

Corcoran says the school district continues to grow beyond its current roster of more than 90,000 youngsters. "Our turfed fields are used for team and club practices, PE and the after-school practices and play of the city's soccer clubs. Our biggest field problem is traffic."

Turf diseases keep Browns' chief busy

Vince R. Patterozzi's grandest dream is to help the Cleveland Browns professional football team get to the Super Bowl. They've never gone.

His immediate goal—and the task for which he was hired almost four years ago—is to make sure they perform on the best and safest playing surfaces possible.

Vince, the Browns' grounds manager, said that this summer presented him with a new set of grounds management challenges. Each season does. Probably the most vexing problem in 1995 has been the proliferation of turf diseases, particularly in the practice fields. Pythium, summer patch and fusarium blight—they all reared their ugly heads, he said.



Temperatures averaging 10 degrees above normal and unrelenting humidity through August didn't help matters, said Vince. Nor did a ¼-inch layer of

Vince Patterozzi, center, told Cleveland-area PGMS members that he battled turf diseases all summer at the Browns' training camp.



Even with the daily pounding of 80 huge football players the practice fields (80 percent sand/20 percent soil) provided reliable footing.

thatch in the turfgrass. Actually, he hadn't been displeased with the thatch prior to the disease problem. It had kept the cleats of the huge players from churning up bare earth.

"I watch people's feet, if they slip or if they don't slip," said continued on page 16G



El Toro zoyziagrass, right side of the string, tolerated mid-summer traffic better than the Kentucky bluegrass/ryegrass blend to its left.

Zoysia gets test at training camp

Zoysiagrass now covers what used to be blacktop paths along the sides of the practice fields at the Cleveland Browns training facility.

Fans congregate to watch practices here. It's also where telescoping "high-boys" hoist metal buckets containing cameramen and spotters high above the action.

This past off-season, grounds manager Vince Patterozzi installed 2,200 yards of El Toro zoysiagrass there.

"We have to have a grass that's very tolerant this time of the year," he told about 40 visiting PGMS members on a blistering day in August.

At least through the heat of midsummer the experiment was working. The grass, in spite of weekly thunderstorms and brutal daily pedestrian traffic, retained fine color and cover.

"Now we have to find out when it's going to go dormant and when it will come out of dormancy," Patterozzi told the other grounds pros.

"We want to find out if it encroaches on the bluegrass (the practice fields are a Kentucky bluegrass/perennial rye combo). Or, in the fall or spring, will the bluegrass encroach on it." He said Dr. Bill Pound at Ohio State University plans to introduce about six more varities of zoysiagrass at the facility to test their wear and cold tolerance.

"Maybe we can help out schools, particularly low-budget schools. Maybe they can introduce this zoysiagrass into their sports fields," said Patterozzi.

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BROWNS from page 14G

Patterozzi. "I usually miss the play because I'm watching to see how the traction is."

Patterozzi battled the diseases with chemical controls. Because the practice fields are used daily by 80 highly skilled athletes, he's very careful about how and when to use them. The Browns' three-year-old practice facility has five fields and is located in the small college town of Berea about 15 miles southwest of downtown Cleveland.

This summer also generated more than its share of thunderstorms and rain. But Patterozzi's been reluctant to haul out the green tarpaulins, rolled up on the other side of the fifth practice field.

"In this disease-prone environment, you can imagine what we're doing by putting tarps on the turfgrass. We might as well put a gun to our heads," said Patterozzi. He described tarp and disease management as his two biggest challenges so far in 1995.

Patterozzi is also responsible for the field at huge, gray Municipal Stadium that overlooks Lake Erie and is now neighbor to Cleveland's new Rock and Roll Hall of Fame and Museum.

In the summer of 1994, he directed the regrading and rebuilding of that field, including the installation of underground irrigation (Hunter sprinkler heads, Buckner controllers) and the laying of 16,000 yards of big-roll, Kentucky bluegrass/perennial ryegrass sod. He uses it in 1½ inches thick in 4-foot-wide, 40-foot-long rolls.

This is sod that's been managed on the farm with the same regimen—fertilization, mowing and watering—that it will receive on the Browns' playing or practice fields, he said. The sod was laid over a sand/soil mix enhanced with about 88,000 pounds of Axis, a diatomaceous earth. Patterozzi felt the product, disked and rotovated into the field, substantially helped the field's drainage during last fall's season.

He used a substantial amount of Axis on one of the practice fields too. On that particular field, Field Two which contains a slightly higher percentage of soil than the other practice fields, Patterozzi used a Floyd McKay aerifier equipped with hoppers to "drill" in the diatomaceous earth.

Patterozzi and the Browns hosted about 40 Cleveland-area PGMS members at the practice facility in August. That particular day, the expansion Carolina Panthers team was also practicing there. —Ron Hall

SANDBURG from page 10G problem spot. But not here.

"It doesn't matter what language you speak, people are people," Sandburg philosophizes. "You treat everyone with respect. You learn to work around it. Those of us who speak English adapt to those of us who don't, because we're the ones in the minority."

Head mechanic Martin Muñoz, who's been at Lakeside for 25 years, is a great help. He's one of only four people on the staff who is bilingual, though Sandburg is working on his Spanish.

Defining 'tournament level'— Lakeside is widely recognized as having one of the top three or four golf courses in the Houston area. It's no fluke.

"We attempt to maintain the course at a tournament level for as long as possible," notes Sandburg. "By 'tournament level,' I mean more of a clean, manicured look not necessarily fast, hard greens and excruciating rough."

He oversees 44,000 rounds per year played on Ron Pritchard's redesign by a membership numbering 850.

With the approach of a farmer ("we learned to use what we had on hand"), the intelligence of a scholar (master's degree from Kansas State University) and help from home ("my wife Kelli has been the driving force in my life"), Sandburg keeps Lakeside beautiful, its employees content.

"I love to see people—my members, my employees—happy," Sandburg concludes. "And I love to come to work because we're all happy here." Another Audubon story...

by Mike Sandburg Lakeside Country Club

At Lakeside Country Club, the maintenance department—in conjunction with the Greens Committee—feels that we have to set precedents. There are times when we could say, "Let's just not do it and run with the pack," but the membership doesn't want that.

We plan on becoming the first fully New York State Audubon-certified course in Texas. At this writing, we have more certifications—three—than any course in Texas.

A lot of requirements must be met. The first thing you have to do is establish an advisory committee. Though some courses have gone into the community to recruit advisors, I've tried to limit it to members of our club, because they're the ones with the pride in the course.

Lakeside is certified in (1) water quality, (2) water conservation and (3) environmental planning. Our water district has established guidelines that we now follow, and I have a computerized irrigation controller that can time heads to the second.

Some of the Audubon program's requirements are easy to meet, because they encompass things we were doing anyway: things like planting wildflowers in place of grass and cutting down on using

mower fuel.

Even though we're practically in the middle of Houston, we have a new gray fox living on the course because we've provided a food source and habitat. Yellow finches appeared this spring because it's more of a friendly location. We do regular wildlife audits and if we start to see new things, we send the Audubon Society updates.

More people need to hear this story, and more of us have got to get involved with the Audubon program. If that were the case, Paul Harvey would not have a leg to stand on. Some of us are way ahead of Paul, and were doing it before Harvey started his campaign against the golf course industry.

We've got to look to the future. This kind of thinking is becoming the rule, as the new breed of superintendent becomes more educated. You can actually see the changes taking place.

The Audubon program costs more money to start, but the long-term benefits and savings far outweigh the costs. For instance, by planting wildflowers, we've saved money on fertilizer and pesticide costs, we've saved money on mower fuel and we've saved money on the labor it takes to maintain grass rather than the wildflowers.

The point is that golf courses canand should—give back to the environment what others take away.

LAWN & LANDSCAPE

Brightening those long winter nights

Landscape lights can bring happiness to homeowners —but, more importantly, they can also brighten up your profits.

by Ron Hall Senior Editor

• Crisp, dry weather and fewer hours of daylight make autumn a good time—perhaps the best time—for landscape pros to sell landscape lighting.

Some of the reasons are obvious, like being able to do on-site demonstrations earlier each evening. But the biggest reason is that professionally installed outdoor lighting allows homeowners to enjoy their landscapes even as the long nights of winter approach, and probably even more so. After all, most working couples don't return home from their jobs until late afternoon or early evening. In late fall or winter, it's dark by then.

The proliferation of high-quality lighting products has, in fact, made it easier for landscape pros to enter this market. That's because many of these products are low voltage rather than the standard 120-volt.

These low-voltage (12-volt just like the lights on your auto) systems:

require no special training to work with;

are safe to install and to maintain;

□ offer surprising design flexibility;

are energy efficient.

There are four main components of a low-voltage system:

1) A transformer that's plugged into a standard 120-volt electrical outlet and converts it to 12 volts. The higher the wattage of the transformer, the more



Stunning light displays complement beautiful landscape designs, and allow customers to enjoy the view well after sundown. Photo courtesy Rudd Lighting

lamps it will illuminate.

2) Cable that transmits electricity from the transformer to lamps housed in fixtures.

3) Light fixtures suitable for every landscape setting including pools and ponds. Fixtures come in an incredible array of designs, colors and finishes. (Most experienced installers offer just a few popular fixtures. Otherwise clients become confused, they say.)

4) Lamps to supply illumination. Lamps come in different wattages.

Although illuminating a landscape requires little special training, it does call for an eye for design, and a willingness to experiment. It also usually requires a plan. Before installing lights, it's advisable to sketch (ordinary graph paper is fine) the property, showing the locations of buildings and any distinctive trees, plant material and other features that the client may want to light.

Here are some other tips for marketing and selling landscape lighting:

• Provide a **master lighting plan** in conjunction with, or in addition to, any landscape designs that you provide.

• Review your customer files and **target customers** you feel have a need for lighting. Set up **demonstrations** for them.

• Develop colorful door hangers, stuffers or even mailers for homes in the affluent neighborhoods in your market area. Make this **promotional material** visual and exciting. Words don't sell landscape *continued on page 14L*

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Getting bang for your buck, page 24L

LAWN & LANDSCAPE INDUSTRY

Demonstrations 'light up' sales

 Nothing works better than on-site demonstrations for selling landscape lighting.

Just before dusk, Robert Lyons Jr. loads his compact car with a case containing a 500-watt transformer, about 100 feet of electrical cable, and outdoor lighting fixtures.

Bob Jr. and his father operate Lite-Scapes, Inc., an eight-year-old outdoor lighting company in Nashville, Tenn. The elder Lyons spent many years with G.E. Lighting prior to starting the company.

This particular mid-summer evening in Nashville is surprisingly cool as Bob Jr., drives through Belle Meade, a suburb of elegant but older homes about 20 minutes southwest of downtown Nashville.

He's planned three house calls. Two of the stops are to reposition lights installed several weeks before; to make sure that clients are pleased. They are.

"Generally, I believe that less is better when it comes to lights," says Lyons. "There's always a point where you can overdo lighting. My goal is to find the balance."

But his main reason for visiting this neighborhood is to give a demonstration that he's modestly confident will result in a sale.

He's calling on a couple in their mid-40s. Their ranch-style home sits on a small hill above a dark, quiet street. They're preparing an outdoor party later in the summer for about 90 guests. They want it to be special, and they're confident Bob's lighting expertise can help.

The woman is justifiably proud of a newly-installed flower garden and its rockbordered pool. The pool, fed by a small waterfall, is about 150 sq. ft. It contains three sizable goldfish that swim lazily though water plants. She wants Bob to light her pool and its adjacent garden. She also wants uplighting on several larger trees behind the garden.

The western sky turns a deeper purple as Bob retrieves his case of fixtures from the trunk of his car. He plugs the transformer into an electrical outlet on the outside of the house near the garden. He uncoils a length of cable which he attaches to fixtures. Bob prefers copper fixtures because they won't corrode. Also, their brown color blends nicely into most landscapes, even during the day.

"Customers don't want to see the source of the light, they want to see the light itself and how it beautifies their homes and their landscapes," says Bob. Responding to suggestions from the woman, Bob steps one, then another, of the fixtures around the garden. He uses a path light by the garden walkway, a pond light to illuminate the water plants and the small

waterfall of her pool, and a wall light to scatter light through foliage and create intricate patterns on the fence bordering the garden. The fixtures contain halogen lamps and throw off a surprising amount of soft, white light, so when he uplights trees behind the home their branches and leaves come alive.

After almost an hour of experimenta-

tion, the woman seems to be pleased with the effect in her garden and trees. Bob packs away his demonstration equipment and says he'll return within a day or two with an itemized proposal.

Ray Szwec agrees that an on-site demonstration is a powerful selling tool. He and his partner Ken Nicholas operate Nite-Vision in Cleveland, Ohio. And, like Lyon, either Szwec or Nicholas (or sometimes both) arrives for demos just before sundown to walk the property, assess its main features and, just as importantly, gauge the prospect's desires.

But they also want mobility. Instead of a transformer, they use a rechargeable, 12volt, dry-cell battery. They also, typically, demonstrate with just a fixture or two, using a 10-foot cord with clips to attach fixtures to the battery which they carry with them. This allows them to carry a light from location to location on the property and light up individual home or landscape features.

"A lot of our designing is done in conversation with the homeowner," says Szwec. "Before long, the customer is pointing me to different areas. Within about an hour, or maybe an hour and 15 minutes, we've got the whole layout done."

Szwec says not every sale necessarily results from a demonstration though. "Maybe you've already done several jobs in a development. A homeowner there might point to a neighbor's home, one that we've installed lights at, and say, 'I would like my property to look as beautiful as that.'"

-R.H.

LIGHTING from page 13L lighting, emotion does.

• Write an article about landscape lighting for the local newspaper.

 Put up an eye-catching job-site sign when installing a project.



Robert Lyons, Jr. prefers non-corrosive copper fixtures.



Szwec (left) and Nicholas: on-the-spot designing with customers.

• Donate and install a lighting project for a local church or for an important memorial or landmark.

 Put together a colorful portfolio to use in presentations to garden clubs, or at regional garden shows.

• Invite prospects to hold and touch fixtures that you offer. You want customers to understand the difference between the quality of professional compared to low-end, do-it-yourself kits.

• Be flexible. If a customer balks because of cost, devise a schedule to light a client's property in sections.

 Consider offering a temporary lighting service, say for special occasions like parties or wedding receptions.

The growth of landscape lighting, and particularly low voltage lighting, looks strong for the next five years or so. Drive into any nice neighborhood and see how many properties are still in the dark.

Excellence: the standard by which all else is measured



STRIVING FOR EXCELLENCE: What Charlie says 'you'd better do...'

 Train your people, and then retrain them.

 Make sure that everybody's on the same page, that the messages are flowing through, and that the communication channels are open between all the personnel that work with you and the personnel that work with the client.

• Make sure everything is coordinated in a fluid manner or else you're going have a lot of glitches and glitches mean trouble.

 Be out there: follow up with your customer. Make sure you've done what you said you'd do. Make sure you've done it the very best and that no one can do it any better. The cornerstone of Charlie Racusin's successful career is excellence. He wonders why more landscapers don't pick up on it.

by Jerry Roche Editor-in-Chief

Charlie Racusin of Environmental Landscape Services in Houston, Texas, is not your typical landscaper by any stretch of the imagination. As a matter of fact, some of his cronies think he's "semi-nuts." But they respect him—and why not?

Environmental Landscape's sales were on a course to exceed \$7.5 million last fiscal year. Its key employees stick around a long time. And the company's work is equated with the excellence that Racusin demands.

"I've always believed that whatever I did, I wanted to do first class," Racusin philosophizes. "If you don't strive to be the best, then you may be delivering mediocrity, and anybody can do that. Why should customers continue to do business with you if you're like every other guy on the block?"

Back in 1972, when Racusin founded the company, he saw that nichè.

"At that time, a lot of landscapers did not appear to conduct themselves as professionals in the business world. They might have been knowledgeable horticultural people, but they didn't communicate, they didn't follow up and they were unorganized. I saw an opportunity for a businessman to deliver honesty, integrity, consistency, communication and other 'buzz words' that business people relate to, especially in the service industries."

His company has selected only clients interested in projecting a positive image. Environmental Landscape allows—and even invites—customers to put their signature on the landscapes.

continued on page 16L

Defining autonomy in the field

by Charlie Racusin Environmental Landscape Services

 I can't tell you exactly how many trucks we have—but it's a bunch.

I can't tell you exactly how many people we have on our payroll—but it's a bunch, probably a couple of hundred.

Even though—as CEO/President of Environmental Landscape Services—I have the final say, I don't focus on the details. I have excellent people to do that, people who support my philosophy and can deliver it.

I am, however, a member of our Landscape Action Board, which runs the business. I monitor on a consistent basis the efforts of our people, even though they are capable of handling their own duties. I'm even aware of which foremen are performing better than others. So I'm still keyed in to the quality management aspects of the business. We simply cannot afford to slip with the customer.

Other members of our Landscape Action Board are the company vice president (who wears a lot of different hats), along with directors of landscape construction, landscape management, quality control/safety/field training, irrigation and landscape architecture.

All my people are in another location, and all my administrative people are in yet another location, which might seem weird: you'd think that most business people would want everything under their watchful eye. But by having this setup, it allows my people to have autonomy and to make decisions without my direct involvement on every issue. It allows them to grow individually, and to function in a healthy manner.

It also allows me to step away from the day-to-day bombardment of landscape operations and to focus on strategic planning and marketing.

As any business, we occasionally lose a key person and given our philosophy of building people's intellectual and professional abilities, that's not bad; occasioncontinued on page 16L

LAWN & LANDSCAPE INDUSTRY

EXCELLENCE from page 15L

"We've been successful by delivering to clients who are more quality-conscious than price-conscious," says Racusin. " A lot of people don't want to pay for quality or don't understand it or don't know how to relate to it. The customers who consciously want to separate themselves from others be they multi-family, office, institutional or hospitals—are the ones we've targeted."

A mindset—Enthusiasm and integrity come naturally to Racusin, an ebullient personality with a zest for living.

"Being in this business doesn't take rocket science," he notes. "It takes a commitment and a belief and the desire to be the best. When you have that framework in your mind, the rest of the pieces of the puzzle the ways to achieve those results—come together. It sounds philosophical, but it's true. That commitment to excellence triggers the resourceful creativity in my mind."

Racusin also believes that the landscape business, unfortunately, has become a commodity. "Customers can get the service anywhere, so you'd better be able to deliver something better or you've got no extra sizzle on your steak."

What follows is a major industry problem. "So much mediocrity and so much competition have driven prices to rockbottom. Many customers have intimidated some of the more unsophisticated contractors. Those companies are working at such low prices that it has stifled them from offering growth opportunities to their personnel and themselves."

Over the 24 years he's been in business, however, Racusin has seen the landscape industry grow and somewhat mature.

"Over a period of years," he says, "anyone who stays in business and has weathered the cycles has obviously become more aware, more intuitive, more intelligent, more creative at solving issues and problems. They've been able to make sure their service is better than it was the year before. Everyone has gotten better, and what used to be excellent is now normal practice."

By striving for excellence, Racusin believes, you can command a fair price for a fair day's work. With reasonable profit expectations, a landscaper can offer employees more opportunities for growth, intellectually, professionally and economically.

"Our people are paid better than our competition," Racusin observes. "But pay is not the total key. A person who has that drive for excellence wants to be associated with other people on the same page. We've had people come to work for us for less money than they were making because they recognized the difference in the people and the working environment and the professionalism that we take to the marketplace. And they'd rather be here."

Bull-headed—Part of the landscape industry's current state of affairs is its inability to accept and implement new ideas.

"If you stand 10 landscapers in this room and I tell the other nine what I'm doing—even if it's the greatest idea in the world—I don't believe they will do it. Even if they think it's a great idea, they may not know how to do it, and it may not be in their realm of normal thinking.

"It's amazing that some people are so hard-headed that they're not receptive to new ideas and betterment. You've got to be open and receptive or you won't learn. And if you're not going to learn, you might as well quit."

Not so with the management and staff at Environmental. Designing and selling one program alone can take up to six months of research and brainstorming.

Environmental's owner may expand into other markets, but only cautiously and only if its caliber of service can be maintained. In the meantime:

"I'm happy with what we've achieved," Racusin concludes. "But yesterday's victory will not bring you a lot of gratification today. And what you were good at yesterday is just a steppingstone toward allowing you to have the knowledge to be better today."

AUTONOMY from page 15L

ally they want to go off on their own. However, we have very long—doubledigit—tenure among most of our key people: five years to 22 years. One of the reasons why people stay is because they have the freedom and autonomy and to grow themselves without "Big Daddy" always looking over their shoulder.

My screening process, bundling up those people who coordinate the services, has been a key to our success. When you hire somebody who ends up not being the person you thought they'd be when they walked through the door, you've spent a lot of energy, time and money. You've gone backward instead of forward.

As for me, I bring enthusiasm and integrity to the company. I'm a visionary.

I don't call on every prospective customer, but if it's a significant situation (potential clients with multiple properties, multiple years, six-figure-type annual contracts). I'm part of the decision-making team. I always have a lot of support from my Landscape Action Board, because they're the arms and eyes and ears from the field and they have the answers. I'm just at the negotiating table to assist in finalizing the deal.

My idea is to build our organization in such a way that opportunities continue to exist for me and my employees to grow intellectually and economically.

Audubon for home lawns

The Professional Lawn Care Association of America and the Aududon Society of New York State have joined forces to promote the Audubon Cooperative Sanctuary System nationwide to the lawn and landscape industry.

The partnership allows lawn and landscape professionals to provide clients with a brochure entitled "A Sanctuary for Your Backyard." The brochure provides information about achieving a "wildlife friendly" backyard.

"By encouraging customers to participate, it reinforces their decision to maintain a healthy lawn while reaping its many environmental benefits," says Ann E. McClure of PLCAA.

To receive a free sample Backyard Sanctuary brochure and order form, contact: PLCAA, 1000 Johnson Ferry Road, NE, Suite C-1356, Marietta, GA 30068.

In related news, PLCAA will offer midterm and final exams for the national turfgrass certification program at its annual conference in Fort Worth, Texas, Nov. 12-16. More than 750 people have enrolled in the course. So far, 75 have earned the Certified Turfgrass Professional (CTP) designation.

A university representative will administer the certification exams to CTP candidates who have taken part or all of the course, and are ready to take mid-term and/or final exams. Exams will take place at the Fort Worth/Tarrant County Convention Center Tuesday, Nov. 14 from 4 to 7 p.m. Pre-registration for the exams is required.

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> Journal of Environmental Research

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> Virginia Polytechnic Institute and State University

In tests to evaluate landscape fabrics, Weed-X outperformed four national brands of landscape fabric in weed and root penetration.

> University of Georgia

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Giving employees autonomy and encouraging risk-taking

You can't steal second base without taking a big lead off first. If handled properly, over the long haul, the risks are worth taking.

by Jerry Roche Editor-in-Chief

Senske Lawn & Tree Care of Kennewick, Wash. plays a symphony every day. At 7 a.m. sharp, 115 employees dash to 67 trucks at three branches and one satellite

office. And it's all music to the ears of Dan Warehime, vice president of operations.

"It's a symphony orchestrated by the branch managers and their supervisors," says Warehime. "We are highly specialized within our departments at each branch. Integrating those departments is the responsibility of the branch managers."

Growth of 20 percent for each of the past five years has been the result of a loose but welldefined management style.

"We give our stores (branches) a fair amount of autonomy," says Warehime. "We try to make it a fun place to work. The corporate philosophy is to give a guy enough rope to hang himself. Everyone is encouraged to be a risk-taker and make their own decisions. There's a lot of selfconfidence that comes with working here."

The owner, Chris Senske, still keeps a close eye on expansion.

"I like to have a plan with a

line drawn in the sand where the idea will work and where it's not going to work," Senske explains. "When one of the stores wants to try something new, like snow removal, I need a plan. I did not support that particular idea at all, but the branch wanted to do it, so I made sure they had a good plan. So far, it's been successful." The music has not always been sweet. But by 1994, Senske Lawn & Tree's 48th year, its revenues were more than \$5 million.

"Some things that we've tried have been very unsuccessful," admits the company's second-generation owner. "In the mid-'70s we tried energy improvement insulation contracting. It failed. In the late '70s early '80s we made our first stab at grounds maintenance, and that was a failure. But we re-evaluated it and won at it in the '90s.

"Those have been the learning experiences. Most of the things we've done, though, have been very successful—like adding tall tree pruning and aeration,



Vice-president Dan Warehime (left) gives branch managers like Tom Talkington plenty of room to innovate and grow.

which are both closely related to what we do best."

Dominating—Senske Lawn & Tree, thanks to a long history and the aggressive managerial style of retired Army colonel and branch manager Tom Talkington, is the "dominant player" in the Spokane market. That branch provides about 50 percent of the entire company's gross revenues.

Some of the confidence-building ideas Talkington has implemented in his four years with the company:

• He purchased route schedules from the local Post Office and built his service routes off them. If the Post Office routes are so efficient, why not copy them, he thought.

• Truck maintainance schedules are determined by hours run rather than miles travelled. Some spray trucks, he reasons, are running without moving, creating accountable wear on the engines.

 Snow service is provided like insurance. Area snowfall research showed that the company would normally plow eight

> times a year (snowfalls of more than two inches). Customers buy a package that pays for 10 plows, but are told that the company will plow up to 12 times if necessary. It sounds like a real deal to the customer, but the system gives Senske snow jockeys a chance to increase their margins.

> Talkington and the other branch managers must divvy up work among employees in four different profit centers.

Senske's Application Division—lawn care, including weed control, and tree care provides 55 percent of the company's \$5 million annual revenues. The Maintenance Division—pruning, mowing, irrigation repair, etc.—accounts for 18 percent. The rest of the income is from the Construction Division (14 percent) and the Pest Control Division (12 percent).

Company thrust—Key words—the ones the branch

managers consistently hear from corporate headquarters—are "integrated grounds maintenance," "quality," and "response to the customer."

"We've also learned how to become very efficient at delivering precise amounts," says Warehime. But because the company continued on page 22L

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Top Care gets 'higher' education

The grounds at Washington University of St. Louis challenge one of the city's leading landscape contractors.

by Ron Hall Senior Editor

• University grounds stretch a landscape contractor in ways that a corporate park or residential development never can.

Steve Erbe discovered this when his Top Care landscape company began caring for the 169 acres (including athletic fields) at prestigious Washington University in St. Louis.

Perhaps even Erbe didn't realize how much the university would challenge Top Care; not that he didn't get a tipoff in the infancy of his first three-year contract.

In late summer 1992, the university and consequently Top Care—got just one week's notice to prepare the campus for nationally televised presidential debates. This included satisfying all the security requirements that the presence of a U.S. President and two challengers demanded.

You're kidding—"When Top Care started, they said something like, 'You've got to be kidding,' and we said, 'No, we're not kidding," recalls Ralph H. Thaman, Jr., director of the Department of Facilities Planning and Management at Washington U.

"We brought a whole new set of rules and uniqueness to Top Care as a contractor, and I'm sure it was a learning experience."

Admits Erbe: "A campus can require a tremendous amount of muscle instantly."

But flexibility is one of Top Care's strong suits; as one of the largest landscape/lawn care companies in St. Louis, it can deliver a lot of manpower and equipment to a job site in a hurry.

Thaman, who had come there after 30 years in private industry, saw that the grounds at the university could not remain status quo. He was also impressed with Erbe's creativity.

"He (Erbe, Top Care's president) doesn't look at a problem and say, 'I don't know how to do that.' He looks at it and asks, 'What's the best way to do it?""

A matter of priorities—Thaman's mission was simple—raise the quality and the appearance of the university campus.



Paul Norman, horticulturist at Washington University, sees a big improvement with grounds since Top Care took over.

But it had to be done with a budget.

"Our business is teaching and research, not grounds maintenance," he says. "But our campus is an important marketing tool, and it has to be done very well and have some pizzazz."

Challenges included developing specifications for each grounds category, and finding and partnering with an experienced private contractor.

Washington University in St. Louis, like all colleges and universities, competes for a limited number of quality students.

"When a high school student visits our campus, the attractiveness of our grounds becomes a marketing issue," says Bill Wiley, manager of maintenance operations. "The students get to see almost every inch of the campus."

In fact, The Carnegie Foundation for the Advancement of Teaching reported about 10 years ago that 62 percent of high school seniors stated that the appearance of the grounds and buildings influenced them "the most" during their visit to college campuses.

"But the bottom line is that there is a bottom line," added Wiley. "We have to keep expenses at the lowest practical level and still provide the necessary services."

A contracted service— In fact, budget cuts in the 1980s caused the university to disband its in-house grounds department. To fill the void, the university struck a deal with its contracted custodial firm to supply an 18-person grounds crew.

That didn't work well, remembers Paul M. Nor-man, university services supervisor for grounds care and the paint shop. "It was inefficient. We were just not getting the out of these people."

productivity out of these people."

For one thing, the size of the grounds crew rarely matched the tasks it was required to do.

"Sometimes we had to find work for them to do, especially in the winter when their main responsibility was snow removal," says Norman. Once, for instance, the grounds crew spent a day moving furniture. "They weren't furniture movers. They didn't like doing it."

Also, the university's grounds and equipment maintenance had become very costly.

"The workers were operating our equipment, and we were maintaining our equipment," says Norman.

Welcome change—When the custodial company approached the university about revising the grounds program, Thaman saw an opportunity to get expert help.

One of his first tasks was to develop specifications for each grounds category. continued on page 22L

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LAWN & LANDSCAPE INDUSTRY

TOP CARE from page 20L

But the bigger challenge was finding and partnering with an experienced private grounds contractor.

Enter Top Care, whose headquarters are just several miles away. It had already shown it could shine with an atypical account by its on-going maintenance at the beautiful Missouri Botanical Garden, also in St. Louis.

But could it:

• shine on a campus where student security and sports field safety were as important as aesthetics?

provide service for the university's incredible range of events?

 coordinate its efforts with several different departments within the university?

Communication, admits Top Care's Erbe, is almost as great a challenge as the grounds themselves.

"Sometimes when we get into a project, there are three, four or maybe five people we need to be coordinated with," he says. As frustrating as it sometimes is, this



Ralph H. Thaman, Jr., says grounds are important, but not at the expense of education or research.

is, to some degree, by design.

"We've tried to make our grounds maintenance a collective effort of a lot of people who have a reason to be concerned about grounds," says Thaman. "That's from a teaching, from a security and from a marketing standpoint."

Relationship building—Both men, however, agree on one point—the relationship between a university and a private grounds contractor needs time.

"It takes a couple of years to build a relationship," says Erbe. "The first year you're just bouncing around trying to take notes and get the work done. The second year you're planning ahead a little bit better. The third year you're doing a lot of things right."

In fact, says Erbe, grounds maintenance costs to the university stabilized as his supervisors and crews became increasingly more efficient there.

The campus account has given his onsite supervisors a great opportunity to grow as grounds managers, while it's also allowed Washington University to focus on its goals—teaching and research.

RISK from page 18L

must effectively integrate four different divisions, every employee must be taught "to look beyond the things they're delivering." And that's a challenge that requires training, training and more training.

"The turnover rate here is relatively low (less than 12 percent), except in the Maintenance Division, so our training is starting to take hold," Warehime notes. "We have 40 to 50 employees year round. In the winter, they're on half-time and unemployment, and that's when we give them a 40-hour training course."

Senske's business focus is on upscale residential. Its Application Division is 70 percent residential and Maintenance is 40 percent residential.

The Construction Division is mostly upscale residential.

High-profile accounts include Hewlett Packard and Kaiser Aluminum. But the company dabbles in other areas like grainery fumigations that require technicians to wear full scuba gear.

Such diverse jobs have earned Senske Lawn & Tree Care its well-deserved reputation of the local symphony orchestra and it's as capable of playing Woodstock as the Hollywood Bowl.



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"PLCAA has amazed me. I belong to two other lawn care associations but PLCAA is the best by a wide margin. In terms of professional development and consumer-oriented information pieces, they are outstanding." —Les Stewart, Nutri-Lawn



"I joined PLCAA before I ever did my first lawn professionally. I believe the more information you can obtain, the better informed decisions you can make. Anyone who is someone or wants to be someone in the industry belongs to PLCAA."

—Lou Wierichs, Jr., Pro-X Systems

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Getting the most **BANG** for the **BUCK**

PLCAA board member Larry Messina got where he is by being an astute businessman—and that means watching where the dollars go.

by Jerry Roche Editor-in-Chief

 Larry Messina doesn't belong to a buyer's cooperative. He doesn't need one.

Messina, owner of Lawn Cure of Southern Indiana, does all his company's buying. His expertise at haggling has enabled the company to grow to 2500 customers in five Indiana and Kentucky counties.

"My forte is buying," says Messina. "I'm a good purchasing agent and get good value out of every dollar I spend."

Messina's secret is that he maintains "partnerships" with his key suppliers. Not surprisingly, they're all on a first-name basis with him.

"I shop around and make certain that I get a good deal," says Messina. "We just bought some Triumph for grub control and I made sure to check prices with three suppliers. I sometimes get as many as five or six different quotes and compare price and quality of products.

"I normally buy the lowest price, but not all the time. With the Triumph, I ended up getting an excellent price from the Andersons."

The bottom line, of course, is that any money lost by not making prudent purchases comes out of the owner's pocket.

"When I called up one of the suppliers about the Triumph, it was \$8-9 a gallon higher than another. And when you're buying 100 gallons, that's a substantial savings," Messina observes.

It's the same with equipment. When he needed new trucks, he immediately requested quotes from the fleet sales departments of about 20 dealers all across Indiana and northern Kentucky.

"I probably had about 20 faxes from various Ford dealers—all the new trucks we buy are Fords—and ended up buying from a dealer in Indianapolis" 100 miles to the north, Messina notes. He says he's gotten used to the ribbing he takes from his friends on the Indiana State Lawn Care Association, of which he's a past president. "Those guys used to tease me because I shop so much, but they also



Teresa (left), Larry Messina's wife of 28 years, pushed 50 lawns in one day by herself in the early days of Lawn Cure of Southern Indiana.



Jeff Smith (left), who worked part time as a student for Lawn Cure, is now in charge of all lawn care production at Lawn Cure.

used to call me to find out where I was buying," says Messina, with a satisfied smile. "I have a good reputation among our suppliers, too, because I'm a tough sell and I'm demanding, but I also make sure I pay everything on time."

Much of Messina's early job history was in sales, so when he's talking to suppliers, he knows whereof he speaks. He spent five years working in an auto dealership and was a store manager at Diamond Centers before starting Lawn Cure in 1978.

"I wasn't all that happy in the auto business," relates Messina. "I hated retail, too, because the work is mostly on week-

ends and nights. I've always wanted to own a business with repeat sales involved."

Messina's lawn, at the time, was being sprayed by his friend, Paul Decker of Louisville, who also installed and repaired sod. It didn't take long for the light to go off in Messina's head.

"I thought that if Chem-Lawn could do that, I could," he remembers. "So I took out a second mortgage on my house and bought a spray truck and I was off and running three months later. It's amazing how the thing took off."

Yet, if he had it all to do again today, things would be different.

"Another division that we started in 1987—industrial weed control—we call No-Gro Chemical Trimming. I piddled with it for three or four years before getting serious," Messina observes. Special services include weed control in fenceline gravel and—a big moneymaker—treating rip-rap rock along the banks of the Ohio River.

"Now No-Gro accounts for 20 percent of our annual revenues, and we run two trucks full-time. If I moved to another part of the country, I wouldn't start a lawn care company, I'd start an industrial weed control company. There is a niche to be filled."

Key employees—Teresa,

Larry's wife of 28 years, has always been supportive of whatever he's done.

"I can remember back in the first year of the business when I hurt my back and couldn't walk the lawns," Messina recalls. "I had 50 lawns to do, so she volunteered to push all 50 lawns. She was a real trooper."

Today, Teresa is office and computer manager while Jeff Smith, who was

LAWN & LANDSCAPE INDUSTRY

Messina's first employee, is service manager and production manager on the lawn care side of the business.

Messina's business degree from the University of Indiana has paid handsome dividends. In 1991, he was able to buy out a competitor, Surgreen. On a hunch, he kept Surgreen's name and it has responded by growing from 235 customers to 375.

"It's like one company competing against another," says Messina, "and there are some advantages. When it comes to commercial bid work, a lot of times we can go in with two independent bids, and with Surgreen we can also have a New Albany phone number which seems to attract loyal New Albanians."

Messina now considers himself a bona fide businessman—for life.

"I see myself not ever selling my business," he says. "I see myself bringing on a general manager and I'll be like a chairman of the board and he'll be like a president. If I sold the business and paid the capital gains tax (28 percent), it wouldn't afford me enough money to live the rest of my life."

The worst place for Kentucky blue

"Kentucky is the last place you should use Kentucky bluegrass," says Larry Messina of Lawn Cure of Southern Indiana, which has clients in two Kentucky counties in and around Louisville. "Now, everybody's recommending turf-type tall fescue."

His company, however, does not include seeding, sodding or mowing in its list of services. Lawn Cure personnel have to maintain whatever's on the property.

"The biggest problems in this part of the country are annual grasses like foxtail, crabgrass and goosegrass," says Messina, "so my biggest concern has always been buying pre-emergence herbicides."

Lawn Cure uses Barricade as part of its first round at its highest recommended rates. "We want to get a head start on chickweed and henbit as soon as possible, so we schedule a granular fertilizer and pre-emergence weed control treatment around Feb. 20th because it's too early to make a liquid application for weed control at that time," Messina says.

Lawn Cure's complete five-round program:

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2) BROADLEAF WEED CONTROL + LIQUID FERTILIZER. May and June

3) GRANULAR 50% SCU WITH MICRONUTIENTS AND IRON + spotspray LIQUID POST-EMERGENCE WEED CONTROL, July and August

4) LIQUID HERBICIDE + LIQUID FERTILIZER, September and October

5) GRANULAR FERTILIZER, November and December, finishing

around Dec. 20th

-J.R.

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Street tree suitability

Chinese pistache was No. 1 rated tree in the south San Francisco area by arborists, landscape architects and landscape gardeners alike.

Arborists, landscape architects and landscape gardeners generally agree about the applicability of using certain street trees, according to a 1992 study.

Eight species were rated by 28 arborists, 20 landscape architects and 25 landscape gardeners in Sunnyvale and Redwood City, Calif. They were in general agreement that *Pistacia chinensis* (Chinese pistache) and *Magnolia grandiflora* (Southern magnolia) were excellent street tree choices.

The group ranked Southern magnolia high in visual aesthetics, shade and disease resistance and Chinese pistache high in visual aesthetics, drought tolerance and overall suitability. Interestingly, the latter far outscored the seven other species in the rating category "overall suitability."

The trees were rated on a five-point scale with 5 being very good and 0 being very poor. In "overall suitability," Chinese pistache rated 4.1. Its closest competitor was Chinese hackberry (*Celtis sinensis*) with a 3.8 rating.

Robert Sommer, Christina L. Cecchettini and Hartmut Guenther of the Department of Environmental Design at the University of California-Davis authored the study and wrote results for the "Journal of Arboriculture." Here are other observations:

Overall Suitability: The Chinese pistache was rated significantly higher than five of the other species and the Chinese hackberry was rated significantly higher than four other species.

Visual Aesthetics: Top-rated trees were the Chinese pistache and American sweetgum, each of which was rated significantly higher than the two lowest-rated species, and the Modesto ash to four other species.

Shade: The American sycamore was rated significantly superior to five other species, and the Modesto ash to four other species.

Drought Tolerance: The Chinese pistache was rated significantly better than two other species while the Australian willow was rated significantly better than three other species.

Droppings, Debris: The Australian willow was rated superior to five other species and the fern pine to three other species.

Disease, Insect Resistance: The American sycamore and Modesto ash were tied for last place. Each was rated significantly worse than the remaining six species.

Pruning Requirements: The Modesto ash had significantly more pruning requirements than three other species.

Root Problems: The American sweetgum and Southern magnolia fared poorly. The sweetgum had significantly more root problems than six other species and the magnolia more than five other species.

Growth Rate of Mature Trees: No significant differences among the species.

Interestingly enough, all three groups that participated in the survey had a high degree of agreement on most of their observations. Highest degree of agreement was in regard to shade and debris.

STREET TREE SURVEY RESULTS

SPECIES	VISUAL AESTHET.	SHADE	DROUGHT TOLER.	DEBRIS	DISEASE RESIST.	PRUNING REQUIR.	ROOT PROB.	GROWTH RATE	OVRALL SUIT.
Southern magnolia (Magnolia grandiflora)	4.2	4.1	2.8	2.3	4.0	3.6	2.1	3.4	2.9
Chinese pistache (Pistacia chinensis)	4.4	3.8	4.1	3.4	3.7	3.2	3.8	3.5	4.1
American sweetgum (Liquidamber styraciflua)	4.3	3.5	2.7	2.2	3.6	3.4	1.7	3.6	2.6
Australian willow (Geijera parvirflora)	3.5	3.1	4.0	4.1	3.8	3.4	3.7	3.4	3.2
Fern pine (Podocarpus gracilior)	3.6	3.2	3.2	3.5	3.7	3.3	3.6	3.3	2.9
American sycamore (Platanus occidentalis)	4.1	4.5	3.5	2.4	2.6	3.1	3.2	3.8	3.2
Chinese hackberry (Celtis sinensis)	4.0	3.8	3.8	3.4	3.6	3.3	3.5	3.6	3.8
Modesto ash (Fraxinus velutina)	3.9	3.7	3.7	2.9	2.6	2.7 So	2.6 mmer, Cecc	3.4 hettini, Guenti	2.8 ner, 1992

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NOTHING RUNS LIKE A DEERE®

Employee guidance, niche marketing are keys to growth in landscape biz

There's a lot of psychology involved in success when you have to deal with other people on a daily basis.

by Terry McIver Managing Editor

Since it doesn't look as if businesses will ever be able to run without people anytime soon, it helps to know a little something about psychology when it comes to dealing with customers and employees.

The more you know about how people will usually behave in certain situations, the more successful your company, and the easier your job, says Michael Witteveen of the Garick Corp., Cleveland, Ohio.

The more you can predict how people will react, the better your chances of winning more business by working the "system" and keeping customers and employees happy.

Witteveen tries to play to what he believes are two truths about human nature: the need for "systems" in peoples' lives, and the need to be led.

Work the system—People do indeed rely on systems and routines to get them through the day. We wake at a specific hour, we drive to work by a regular route, and we do our best to end the work day by 5.

When the systems concept is applied to business, it means you have to learn the systems and routines of those you're trying to service or influence.

For example, have you ever tried to get anything accomplished quickly in a government office? Even something as mundane as renewing your license plates can be a frustrating experience, because, as Witteveen says, "the people behind the counter are working a system we don't know about."

So in a bid situation, you have to learn the paperwork requirements and approval systems involved when you work with certain agencies and companies who are your customers.

What's my job?—Witteveen says you should work your program and crew in the same manner.

According to Witteveen, employees

want to know three things:

- what has to be done;
- how they're doing;
- their value to the company.

"When you delegate, it's up to management to make sure the work is done right," Witteveen advises. "Directions must be clear to avoid confusion and wrong decision making.

"Give employees their attainable goals. What is needed for him to be successful? What are the milestones for each job? The better you can arm people with self-correcting milestones, the better the chance of the job being done right."

Stand out—In days of heavy competition, Witteveen insists that a company must have a definitive niche. Being "a great company" just isn't enough.

What does your company offer that the other guy doesn't? Decide on your niche and work it to your advantage through advertising and example.

Decisions of this sort also involve how you perform the service. On the top end,



Witteveen: There are right and wrong ways to delegate.

says Witteveen, is ultra-high service orientation. At the bottom of the service spectrum—but not necessarily in a negative sense—is quick and efficient execution of programs. Unless you want to feel the pressure from both ends of the service spectrum, you'd best decide which kind of service you can best provide.

"It's toughest to be in the middle, with nothing to set your company apart," says Witteveen.

Witteveen spoke during an Ohio Landscapers Association local trade show in Cleveland in July.

Lawn care pros golf for turf scholarships

The Massachusetts Association of Lawn Care Professionals and Ohio Lawn Care Association braved recordbreaking summer heatwaves to participate in scholarship golf outings.

The MALCP raised \$3400 for its turf scholarship fund at its fifth consecutive Golf Classic, held August 10 at Pine Oaks Golf Club in Easton

Total monies raised for the MALCP Scholarship Foundation this year is near the \$16,000 mark.

The Lebanon Turf Products team took first place honors, followed by Prescription Turf Services of Middleton and Partners Quality Lawn Service of Easton.

Green industry sponsors included: Lesco; Bayer; Lebanon Turf Products; DowElanco; Cadwell & Jones; Ciba; PBI Gordon; Agriturf; Riverdale Chemical; Rohm & Haas; United Horticultural Supply; and the Professional Lawn Care Association of America (PLCAA).

The OLCA outing was held July 14 at Shamrock Golf Club in Powell, Ohio. Seventeen green industry companies were represented, and \$1100 was raised for the 1995 Scholarship Fund. Sponsors included The Scott's Co., Bayer; CLC Labs; Agri-Urban, Inc.; Gravely; Lesco; United Horticultural Supply and DowElanco.

The OLCA recently celebrated its fifth anniversary.





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HOT

Working around the clock to 'Rock Around the Clock'

CLEVELAND—"We keep seeing Elvis," says Phil Cavotta, vice-president of Cavotta Landscape, which installed the exterior vista at the brand-new 2.5-acre Rock 'n' Roll Hall of Fame here.

"We used to see rock stars coming in and out all the time," Cavotta says. "I talked to Wolfman Jack just three weeks before he passed away."

The Rock Hall was due to open Labor Day weekend, but midway through July, contractors were behind schedule.

"This is called the crunch," says Cavotta, whose company sub-con-

tracted the earthwork and sodding. "It will be done on time. But these last weeks are going fast and everybody's push, push, pushing.

"With five weeks left, we're 75 percent done. We could have been all done if the other contractors had been done on time.

"I should be the last guy in, but that's not how it works. The schedule looks good on paper, but the city fathers get involved and something always happens. It's like a domino effect: when one contractor falls behind, we all fall behind."

Building architect I.M. Pei asked that the landscape be kept simple be-cause he didn't want it to detract from the building itself, which features a large



A glass roof that has been known to toast plants adorns the entryway to the new Rock 'n' Roll Hall of Fame (top). Cavotta Landscaping's installation crew still had a long way to go five weeks before the building's grand opening ceremonies.



glass roof that slants down toward the entrance and exterior rotunda. That glass was an unexpected problem.

"The heat coming off the glass toasted some taxus plants we had put in," notes Cavotta. "The temperature off the glass, depending on the time of day, can be 30 degrees higher than the (ambient) temperature.

"We had to re-plant and redesign the sprinkler system to keep the new plants moist. We added some heads and went to a threetimes-a-day watering schedule. Because the wind off the lake is so

variable, it affects the irrigation, too."

Cavotta Landscaping has a crew of six working full-time, including supervisor Tony Gabriel. After the installation is complete, at least one full-time person will be needed to maintain it. Cavotta is still trying to win the maintenance contract.

"The city and the port authority are involved in choosing the maintenance contractor," says Cavotta, "and they're looking at dollars. They can spend \$90 million on the building, but when it comes to landscape maintenance, all of a sudden they're pinching pennies."

When the Rock Hall job is done, Cavotta Landscaping will have another high-profile feather in its cap to go along with the world-renowned Cleveland Clinic, which needs a full-time crew of 12 to maintain 200 acres that include 40,000 New Guinea impatiens in six-inch pots.

"When the Rock 'n' Roll Hall of Fame is done, it'll be another feather in the city's cap, too," Cavotta concludes.

-Jerry Roche

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