AWN CARE INDUSTRY

about 50 legitimate firms and maybe twice that many "also rans" in Tucson. That's one reason why industry prices and wages are low here, he says.

Starting from a meager \$6,000 investment in 1985, his company topped \$400,000 in sales within two years. Then, harsh reality arrived in the form of debts and client bankruptcies. He had to rethink his company's direction, as he set about rebuilding both its customer base and its profitability.

He now targets Blooming Desert at the residential market, specifically custom homes. (Design/build accounts for about 80% of his sales, maintenance the remaining 20%.)

These efforts show hope. As the residential home market in Tucson warmed, several of his landscapes earned citywide recognition as award winners.

These efforts included both informal and semiformal groupings of desert plants. Cactuses stand out in his landscapes. There are more species of cactuses in the Southwest, more than anywhere else on earth. They come in all sizes and shapes—barrels, balls, sticks and paddles. Gustafson combines them in landscapes with other desert species like aloes, agaves and yuccas.

"We use materials that minimize the harshness of local conditions, but also materials that will do well over time," says Gustafson. "Not everything we use is native, but it has to fit in with and help beautify the harsh environment here."

Decorative gravel around the plants helps keep weeds down but Steve says he still has to apply pre-emergents about twice a year. Even desert plants must be fertilized regularly, says Gustafson, with insecticides used as needed.

"Just because we don't have a lot of lawns to mow, there's still a lot of pruning and horticultural activities we've got to get done," he says. "In fact, I think I could argue that you have to be a better horticulturist here."

Gustafson says Blooming Desert Landscape will continue to sell and deliver the highest quality work it can. Then, he hopes, his company can command better prices for its work.

"We've learned to take the good with the bad, but we think that hard work and perseverance will eventually pay off," says Gustafson. "even though we're still working. And waiting."

-Ron Hall



This Blooming Desert Landscape installation project earned Gustafson city beautification award.



For a pesticide to do it's job, it has to get through surface foliage or turf to the real problem areas. Plex has been shown to be twice as effective as other adjuvants in improving pesticide penetration.* But that's only the start. With Plex, you get more. Plex spreads the pesticide evenly over plant surfaces and then forms a protective film to reduce losses from sudden showers and heavy dew. Plus, Plex keeps your pesticide performing, providing extra protection from

losses commonly caused by sunlight and evaporation. When you want more performance from your pesticides, talk to Terra Professional Products.



*Trial results available upon request.

Circle No. 152 on Reader Inquiry Card

Wisconsin LCO is satisfied with results of new weed program

Spring-Green Lawn Care's 'biological' program stresses fertility, cuts herbicide use, receives customer approval.

When, just over a year ago, Steve Good redirected his company into a "biological" program, he was admittedly apprehensive.

After all, his Spring-Green Lawn Care franchise had been successful as a traditional application company as it grew toward \$1.4 million in annual sales in and around Racine, Wis., in the far southeast corner of the state. "People aren't always receptive to change, especially when what you did in the past worked," says Good.

But he felt he had to make fundamental changes in product choice and product application to deliver the new earthfriendly service he wanted to market. The catch: these changes had to work. Spring-Green had to continue to give homeowners 1) green lawns and 2)weed-free lawns. Or they'd leave.

One change in the program involved grassy weed control; and, Good realized, nothing irks a homeowner more—especially one paying for professional service than a healthy crop of crabgrass in their lawn.

But Good knew the credibility of his company's new efforts would suffer if it continued to blanket-apply pre-emergence herbicides each spring to control grassy weeds.

So, along with switching to organicbased fertilizers, Good abandoned blanket pre-emergence applications in favor of targeted, as-needed applications of a relatively new material, dithiopyr, marketed under the trade name Dimension Turf Herbicide. (Its manufacturer, Monsanto, claims the herbicide has both pre-emergence and early post-emergence activity.)

As Spring-Green technicians walk a lawn, applying granular organic-based fertilizer (Spring Valley Turf Products), they also scout for breakthrough grassy weeds, which they then spot-treat using Solo backpack sprayers. They also treat turf borders. Good says his company backs up its service with the guarantee of a retreat.

"The success of the whole program

depends on your technicians," says Good. "If the technicians don't take the backpack sprayers out of their trucks and use them, you're going to have trouble."

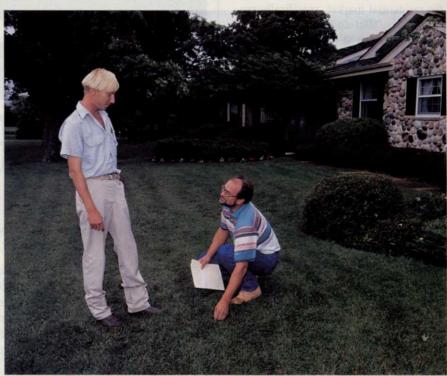
Spring-Green didn't change its program without first directing a strong educational effort at its customers.

"We're retraining our customers," says Good. "We tell them that a strong, healthy turf is going to resist crabgrass infestation. We also leave mowing and watering instructions with them. It's working great."

Of the approximate 1500 customers served by his company, only about six still request the traditional program, says Good.

"For a while, the phone rang all the time with people who were pleased. People told their neighbors that we were not broadcasting lawn chemicals, and just taking care of what is needed."

-Tobi Bolt



Steve Good, kneeling, and Dion La Meer of Spring-Green say the best defense against weeds is healthy turfgrass and technicians who know how to scout.

Write for PLCAA ad guidelines

Lawn care advertising continues to be scrutinized at the state and federal level.

To help lawn care professionals provide information about their products and services that isn't misleading or incomplete, the Professional Lawn Care Association of America (PLCAA) developed advertising guidelines that apply to *all* communications with the public and customers.

"The advertising practices of our industry continue to receive a lot of attention from state and federal regulators," says Tom Delaney of PLCAA. "Lawn care professionals need to keep in mind that advertising, by definition, includes all communications with customers and the public, including letters and any statements made over the phone or in person."

The guidelines include information LCOs need to know about EPA and FTC advertising standards. They describe language that is considered misleading, conflicting or unsubstantiated. They also explain what to say about safety claims.

"All lawn care professionals should have this document on hand when they're developing their advertising materials and company literature," says Delaney.

For a free copy, send a self-addressed, stamped envelope to: *PLCAA Advertising Guidelines, 1000 Johnson Ferry Rd., Suite C-135, Marietta, GA 30068-2112.* What's the landscaper's dream? It's a machine that does the work of many... saves time and labor... and is always there when they need it.

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LAWN CARE INDUSTRY

Deer tick risk smallest on turf

The nymph of tiny *lxodes dammini* most abundant in woodlots. Nymphs are responsible for 70 percent of Lyme disease cases.

by Deborah Smith-Fiola

Chances of having a deer tick attach itself to you are measurably less on maintained and mowed lawns than in the woods or around property edges, fences or brush.

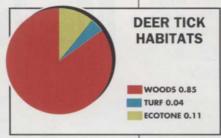
That's significant because the deer tick (*Ixodes dammini*) is the vector (carrier) of debilitating Lyme disease, which is most common in some areas of the Northeast, but has been reported in the Midwest also.

Actually, it's an immature stage of the deer tick, its nymph, that's believed to cause 70 percent of all Lyme disease cases. But, it's not so easy to know when the tick is present. While the adult deer tick is the size of a sesame seed, its nymph is about half that size.

When New Jersey researchers wanted to find out just where people are most likely to

encounter deer tick nymphs they selected 34 residential homesites of 1/2 acre to 1 1/2 acres in Ocean County, New Jersey's Lyme disease hot-spot. They grouped the sites into three specific habitats: the woods, the ecotone (or "edge" of the woods, where the woods meet the lawn), and the turf.

During May and June, they combed the homesites for immature ticks. Late spring is when the nymphs are most active. It's also when people are outdoors a lot.



Of the tick nymphs they found, about 85 percent were in the woods. That's where the immature tick has the greatest chance of finding hosts—mice, birds, rabbits, opossums, raccoons and other small vertebrates.

The ecotone/edge of the woods contained 11 percent of the immature deer ticks.

Turfgrass lawns yielded just 4 percent of the nymphs. They may have ended up in the turf after dropping off an animal host, when fully fed (engorged), where they molt to the nymph stage. Immature deer ticks rarely move more than 10 feet from where they molted, and were mostly found in lawns close to the ecotone (within 4 to 6 feet) if present at all. Homes with wooded buffers between yards had a large amount of edge habitat, and had a greater number of ticks. Untended borders had more ticks than did landscaped borders. Woodpiles or brushpiles held more ticks nymphs too, probably because there were also more mice there. Mice are a key

animal host for immature ticks.

Other studies in New York and Connecticut found 68 percent of deer ticks (all stages) in the woods, 21 percent in the ecotone, and 2 percent in the lawn. Ornamental planting beds yielded 9 percent.

Factors adding to the risk for encountering deer tick nymphs and contracting Lyme disease include: presence of pets (especially dogs), deer paths, birdbaths, woodpiles, brushpiles, bird feeders, and other items or practices which encourage wildlife near the home or encourage people to enter the woods.

Methods of personal protection (repellents, tucking pants into socks) are also necessary in high risk sites. Pesticides labeled for deer tick control can be targeted to high-risk deer tick habitats.

—The author is an entomologist and member of the New Jersey Governor's Council for Lyme Disease.

Tulsa LCO says clients like their lawn care information on video

by Brad Johnson

How many lawn care professionals have the time to sit down with every new customer and explain exactly what we can and cannot do with our service? Usually, we simply leave the expectations of our new customers to chance. That's risky.

What about those customers who don't mow and water properly? Do we just hope that our services will offset their mistakes?

Two years ago we wanted to do something about unrealistic expectations and poor cooperation from customers. But, what really moved us to action was an extensive winterkill in our Tulsa marketplace in 1990. Trying to explain to customers, many of them cancelled customers, why the winterkill was not our fault, led us to produce a customer education video, "Side by Side."

We put the 15-minute video to use during

the 1992 season. It explains:

- What our service can and cannot do.
- Proper mowing and watering practices.
- Insect, disease and weed control.
- Fertilization.

• How customers can help us give them better results.

We've tried written customer education manuals. We've used newsletters, and still do. But, some customers don't read them. Given a choice, it seems, most would rather watch a short video than read.

This past season we used about 450 videos in distributing to over 1,000 of our new customers at our company. We simply left a copy of the video, along with a pre-paid mailer (\$1.05 in postage) in their invoice bag with their initial application.

We also left a survey concerning the video to complete and send back to us. Most customers viewed the video and commented positively. Also, over 70% of the customers sent the video back after viewing. Many videos were used three, four and five times during the season.

This season we're going to use our video as a marketing tool also. We'll be distributing them with leads in 1993 and allowing our prospects and new customers to just keep the video. We believe this will not only generate more leads with the offer of a free video, but will also lead to a higher closing rate.

Does the video really lead to higher customer retention rates, fewer service problems and, in the end, higher profits? After just one year, we really can't say how much our video affected these areas. But, we're convinced they generated better customer relations and cooperation. Many clients said so.

We also believe that companies who make the effort to educate their customers will be ahead of the competition in the 1990s. Our experience with video suggests it's one of the education/communication tools that works, and is affordable.

—The author is owner of green up! Inc. For more information about video, contact Customer Solutions in Tulsa, Okla.; (800) 779-2196.

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Randy Willis, CGM Grounds Supervisor NW Missouri State University

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PGMS Membership Benefits (partial list):

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 - discounts rental cars, books
 - membership directory
 - awards
 - information clearinghouse
 - in addition, insurance programs now being developed.

*Conferred by PGMS, grounds manager certification is a program of developing and administering a program of voluntary peer review to establish acceptable competence levels, and to help the grounds professional attain his personal goals.

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TO:	PGMS 120 Cockeysville Road, Suite 10 Hunt Valley, Maryland 21031		 action b keep balls ferrin water or out-of- bounds (retention). b in better define the hole (direction-
I want to grow with PGMS. Please send more information explaining how.			
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Bunker renovation



It may be necessary to repair or replace the existing drains or install new drains where none existed.

GOLF

Step by step on how to make renovation decisions.

• At times, a golf bunker may require some renovation: enlarging to original size, repairing drainage, replacing all the sand, or a combination of any of these.

Whatever the reason, first determine whether the bunker serves a function and is justified. This should be done with the aid and advice of your course architect.

Bunkers are designed and placed on a golf course to perform specific functions:

• to set shot value (strategic),

• to control shots or moving balls (safety),

• to keep balls from water or out-ofbounds (retention),

• to better define the hole (directional) and

• to improve eye appeal (aesthetic).

In evaluating a renovation program, you may determine that a bunker serves no function and may best be removed.

Enlarging-The bunker may only

require being placed back to its original form. Usually, the built-up rolls that form when the bunker closes in will indicate the original shape.

Take a paint gun and re-define the margin, being careful to maintain the shape and allow for exterior drainage. You don't want surface water draining into the bunker. Take hand edgers or sod spades and cut the new margin approximately six to eight inches, depending on the amount of sand to be replaced. Remove the old material (excellent for repairs and depressions), replace with new sand, and blend into the existing sand.

Drainage repair—It may be necessary to repair or replace the existing drains or install new drains where none existed. This means removing all material in the drainage area. Old drains should not be re-used as this cost is minimal. Old trenches should be upgraded and relined. New trenches should be a minimum of 12-by-12 inches and have a grade of 1 to 1-1/2 percent. All trenching, with the exception of the main line, should run perpendicular to the water flow. The main line should run through the drain path of the bunker with the required minimum slope to the exit.

Tile should be slotted to accept water but prevent gravel. Experience has shown that wrapped tile promotes clogging. Place the tile on a graded slope of gravel 1 to 1-1/2 inches deep. Secure the tile to prevent floating and cover with pea gravel (1/4 to 3/8 inch) to a depth of approximately four inches. Leave two inches of trench to accept some sand to fill out the trench; prevent mixing the pea gravel into the sand during the raking operation.

If you are going to leave the trenches exposed for any length of time, be sure to cover the gravel with this sand layer to prevent contamination.

Replacing sand—If all the sand in the bunker is to be replaced, it must be removed down to a firm base. This could entail replacing some sand with a heavy material that will compact to prevent excessive depth of the sand layer.

Every superintendent has his or her own method of removing the old material, be it experience or trial-and-error. I have found that the least messy procedure is a rented Bobcat, two dump trucks (beg, borrow or steal), and two to three dozen sheets of outside, low-grade 3/4-inch plywood.

Keep your trucks on the car paths. Lay the sheets of plywood to the bunker and run the Bobcat over this roadbed. Reverse the procedure when placing the new sand. You will find the cost of plywood and rental of a Bobcat well worth the expense. In any case, save the hand edging until last to remove all scars of the operation.

When spreading the new sand, be careful not to disturb the base or drains. Do not run vehicles over the drains as they may crush your tile.

In any bunker renovation involving drainage, carry your outside tile (solid only) to a creek, lake, culvert or surface drain. You will find that anything less will be unacceptable.

-The author of this article, Al Frennette, CGCS, passed away in September, 1992. It originally appeared in "Through the Green," the publication of the Georgia Golf Course Superintendents Association, and is used with their permission.

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No purchase necessary. Void where prohibited. Toro ProLine No Downtime-Down Under Sweepstakes is open to U.S. residents 18 years or older who are commercial lawn care professionals. Entries must be received by April 30, 1993 to be eligible. Drawing will be held May 31, 1993. See your participating Toro ProLine dealer for details and official rules.

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Respect, once earned, must be maintained

by Greg Christovich

Several times in my career, I have found myself feeling as though I was not getting the proper respect for my position. My insecurity about how my peers, subordinates and superiors viewed my position made me feel uncertain about my abilities, and the tendency was to withdraw from visibility—"drop out of sight"—to avoid any further pain.

Many professional superintendents go through the same thing, whether they've been on the job for years, or they've just arrived at a new position. What most managers don't realize is that their perceived lack of respect is caused by their failure to nurture and develop that respect for the long term.

So how does a successful manager earn a high level of respect from others throughout his or her career? It's not easy, but here are some things that I learned, some the hard way:

1) Don't ever start believing that you've "arrived."

When you finally land that first superintendent's job, or when you've gotten a "prestige" job that's finally paying you what you're worth, don't stop doing the things that got you there. Keep your sleeves rolled up and stay aggressive. The manager who gets comfortable gets complacent, and it shows in his/her work.

I once worked with a superintendent who was having morale problems with his staff. As it turned out, the superintendent was coming to work at 7:30 and was missing some quality time with his crew. Complacency led to a loss of respect.

2) Know that you can't please everybody all the time. But maintain an openness and respectful attitude toward all, even those you don't agree with.

Perhaps the greatest advice I ever got was from Johnny Burns, superintendent at Charlotte (N.C.) Country Club. One day a member walked up to us and noisily complained about the condition of the greens. Mr. Burns told him "thank you" for his concern and feedback, and the member left with a feeling that he was important and respected. Most importantly, he respected the superintendent for taking the time to listen. Johnny's advice to me later? "When someone complains, you first must satisfy their need for acknowledgement, then you have to be like a duck in the rain: let it roll off your back."

Don't hide from the loudmouth types, but don't let what they say break you down. You can't please everybody.

3) Get to know your peer group, and stay in touch with them.

At most clubs, the superintendent is on a parallel management level with the golf director or professional, tennis professional, executive chef and controller. The super should know that he or she is part of this management team and that a spirit of cooperation can further mutual respect.

The super who does not have regular contact with the rest of the team becomes "invisible," and mutual respect continued on page 79



is not possible.

Lastly, I think each of us needs to know that management of any kind has its thankless moments, and these times should not be misinterpreted as a lack of respect.

The more we continue to feed and care for our own image (the way we do our golf courses), the more respect we'll earn and keep for ourselves in the eyes of others.



—The author is general manager of Selva Marina Country Club in Atlantic Beach, Fla.

Lab services critical to growth of golf, claims turf diagnostician

 Proper laboratory testing and consulting can prevent the need for early renovation, according to Steve McWilliams, president of Turf Diagnostics & Design, Olathe, Kans.

"Good testing pays off in many ways," says McWilliams. "For example, if a developer builds a golf course that plays well the first season due in part to proper green physics, there's a big payoff in selling housing, attracting new members and building repeat business for the course."

However, if renovation is ultimately needed, quality lab work is especially critical at that time also, says Chuck Dixon, TD&D's president of technical operations.

"An on-site quality control testing program should be implemented to ensure that the construction materials delivered to the site conform to the design specification," says Dixon.

"Following these fundamental procedures creates a classic win-win situation for everyone." Firms like TD&D can run a variety of tests on sand, turf and soil that can pinpoint a problem and correct it in just a matter of hours, Dixon notes.

In some instances, consulting firms will send a representative to the course to take a look at everything and take the appropriate samples. In other instances, all that is needed is for the superintendent to send the appropriate sample to a testing lab.

"Many clients mail us a sample, we test it and overnight the results back to them," says Dixon. "Time is (sometimes) of the essence, and we are prepared to respond quickly."

TD&D and companies like it can also consult on the optimal mixes for greens, sandtraps and fairways, using the experience they've gained in the past in soil science and lab testing.

So if your course is considering any renovations, the best place to start is with a good laboratory that will test existing materials for you and provide consulting

Liability can take many considerations

Affirmative action, safety are important.

Robert Ochs, attorney for the Golf Course Superintendents Association of America, says affirmative action, as defined by the Civil Rights Act of 1964, should be a consideration of most superintendents.

"The act prohibits age, sex, religious or race discrimination in any form," says Ochs. "It requires a minimum of 50 employees and an 'effect on interstate commerce.' This means that if just one of



your members is from out of state, it applies to you."

Having an affirmative action plan in place can do nothing but benefit your course, Ochs notes.

Ochs: best advice
is to 'document,
document,act
act
document,
do
usv

"If you do have an affirmative action plan, it sets you apart; if you don't, it can be used against you." Affirmative

action plans should be updated on at least an annual basis, he says.

The most important factor in proving yourself in court is an obvious attempt to satisfy the moral requirements set by law. Much of this is just common sense. But documenting your actions and making an attempt to recruit minority groups through local colleges will help.

"If you've given it the 'old college try,' you've satisfied the moral requirement," Ochs told GCSAA members at the organization's annual conference.

When it comes to this and other legal action that may be taken against you and/or your course, he says you should "document, document, document." He prefers handwritten notes to yourself that you can file away.

"They don't have to be fancy," Ochs admits. "Those handwritten notes are fabulous. They're great evidence in a court of law because they show the obvious intent for you to be a 'reasonable man.'

"If you think something is significant,



Aerification practices for bentgrass greens

Many kinds of machines available for breaking up layers, Georgia expert says.

• Aerification can alleviate the problems caused by layering on bentgrass greens, according to Dr. Bob Carrow of the University of Georgia.

"The presence of fine-textured layers on bentgrass greens causes the most problems," says Carrow, "although not all layers are bad. But once layering starts, it can become a snowballing effect. Even a very well-built USGA green can develop layers."

Wetting agent injections can help hydrophobic sands while aeration can help hard, compact coarse-textured sandy soils, Carrow claims.

One of the excellent machines to aerate away layers is the Toro Hydroject, which

write it down. And even if you never use it, you're out nothing."

Another liability consideration is the safety of people on your course, both employees and golfers, he says.

You are always "under an obligation to act as a 'reasonable man." Which is nothing more than using common sense in everything you do relating to the safety of the course.

"Your insurance company is a valuable resource when it comes to liability risks," Ochs says.

Also, "posting is the cheapest form of insurance, and it's so easy to do."

-Jerry Roche

uses high-pressure water. "It doesn't disturb the surface, it mixes any layers, and it can be done quite often," Carrow says. Though golf course superintendents can't topdress immediately after using a Hydroject, they can inject some liquids other than water—like wetting agents with the machine.

Another deep aerifier is the Vertidrain,

which penetrates up to 18 inches into the soil. "The Vertidrain doesn't d i s t i n g u i s h between good and bad layers," says Carrow. "It will decrease rooting, but on bermudagrass the roots left will be much more viable. In the case of bentgrass, this



Carrow: Aerate at least once a year for better results.

effect becomes a negative."

Deep drills like the Floyd McKay are good devices to use in both coarse and sandy soils, Carrow states. This spring, the company should have a new prototype for the golf course market ready. On the other hand, "turf conditioners" like the Yeager-Twose sub-aerifier, works better on finetextured soils. The Yeager-Twose machine uses vibrating blades that can drop materials into slots in the soil.

"If I had a well-built USGA green, I'd still want to do at least one core aeration a year," Carrow concludes. "It's unusual not to build layers, and aerification is still very effective at breaking up those layers."

-Jerry Roche