

GROUNDS CATEGORY

Thomas Smith, senior vice president of the Spring Grove Cemetery and Arboretum, Cincinnati, Ohio

The booming voice of Tom Smith has been heard during many green industry events, as a seminar moderator and as instructor. A true champion and standard bearer of the grounds management profession, Smith is always willing to share what he knows with his peers, and he never fails

Tom Smith's career highlights

- ▶ 1970: MS degree in Forest Science, Yale University
- ▶ 1972: begins career at Spring Grove Cemetery and Arboretum
- ▶ 1987: named Spring Grove's vice president of operations
- ▶ 1995: receives PGMS "President's Award"
- ▶ Has served on the board of Directors, Urban Forestry Dept., Univ. of Cincinnati
- ▶ Current president of PGMS' Cincinnati chapter



Evening College; Northern Kentucky University and Cincinnati Technical College.

He enjoys his work

"I love what I do," exclaims Smith. "I'm excited about it. I love to come to work"

Smith is a former president of the Professional Grounds Maintenance Society—now in its 85th year—and currently leads its Cincinnati chapter.

"He is an unassailable, good choice," says PGMS Executive Director John Gillan.

"He is absolutely PGMS's most active member in terms of speaking about PGMS to other groups."

Smith received the PGMS President's

to take advantage of opportunities to learn from others.

"I've enjoyed sharing over the years," says Smith, *LANDSCAPE MANAGEMENT*'s "Person of the Year" in the Grounds Care Category. "It's part of what makes this the best industry in America. It's fun to see people grow and become part of it."

Smith's strength lies in his appreciation of horticulture, and the realization of the importance of horticulture to people.

Smith has been associated with Spring Grove since 1964, when he worked there as a student. He holds a degree in botany from the University of Cincinnati, and a masters in forest science from Yale University, home of the nation's oldest forestry school.

Beyond his many presentations at industry events, Smith's efforts include teaching others in a classroom setting.

Since 1973, Smith has taught horticulture courses at the University of Cincinnati

Award in 1995. "He is a mentor, by birth," says Gillan. "He does that with everybody. He talks about the green industry to anyone who will listen."

LANDSCAPE CATEGORY

Ronald Kujawa, CCLP, president and CEO, of Kujawa Enterprises, Inc. Cudahy, WI

Ron Kujawa and his wife Sally have been running KEI since 1969, when they took to running the business started by Ron's father and uncle. An equipment sales business was added in 1974.

Our 1996 "Person of the Year" in the Landscape Contractor Category, Ron Kujawa has always been willing to do what he can to help the landscaping industry grow and prosper in terms of its professionalism and service to customers.

Kujawa served as president of the Associated Landscape Contractors of America in 1989, and was also instrumental in forming the association's Landscape Management Division in the early 1980s.

"Ron is one of the most sharing people I've ever met, and one of the most visionary," says Debra Atkins, executive director of ALCA. "He comes up with ideas people tend to shy away from for awhile; but they implement them sooner or later. He plants the seeds for many ideas."

One of Kujawa's major industry contributions were his efforts to establish the Green Industry Expo, which brought ALCA, PGMS and PLCAA together for a common trade show. "He was one of the 'Founding Fathers,' the champion behind GIE," says Atkins, "and he has also served as GIE president."

"He knew that GIE was a good thing for the industry," adds ALCA President David Minor, of Minor's Landscape Services, Fort Worth, Texas. "He was very passionate about it, and convinced us all that it was a good thing to do. He pretty much single-handedly made it happen on ALCA's part.

"I admire Ron as much as anybody in this industry," adds Minor. "When I need an honest, straight forward opinion, Ron is the man I ask."

In 1995, Kujawa was awarded the ALCA "Landscape Service Award," for his service, commitment and contribution to the association and the green industry.

Kujawa is a member ALCA's legislative committee, and will also participate in the association's strategic planning meetings.

"Ron is very good at helping set ALCA's road map," says Atkins. "Many people have ideas, but not everyone can or will help."

Kujawa currently serves as chairman of ALCA's associate member committee, which represents its supplier members.

Customers as partners

Kujawa's business success is based on his relationships with customers. KEI offers full service and top-to-bottom efficiency for each of its commercial and municipal

Ron Kujawa's career highlights

- ▶ Marquette University graduate, 1953.
- ▶ 1969: Ron and wife Sally take charge of family business.
- ▶ Early 1980: helps form ALCA's Landscape Management Division
- ▶ 1989: president of ALCA.
- ▶ 1990: instrumental in launch of Green Industry Expo.
- ▶ 1995: receives ALCA "Landscape Service Award."
- ▶ Currently chairs ALCA's associate member committee.



clients.

"You have to be able to sit down and establish a good relationship with customers," says Kujawa. "which means two things have to happen: they should like you and trust you, and you have to like and trust them!"

"You really *can* become a 'partner' with your clients, but only with mutual trust and a willingness to talk.

"There are lot of business relationships that are very formal, and that's not necessarily bad; it can be formal as long as it's not a sterile relationship. You have to be able to talk to people."

GOLF CATEGORY

James Snow, executive director of the USGA Green Section, Far Hills, N.J.

Jim Snow, LANDSCAPE MANAGEMENT's "Person of the Year" in the Golf Category, has been with the United States Golf Association's Green Section for 20 years, and has helped to define and deal with many of the agronomic and environmental concerns that have grown as much as the game of golf itself. He has served as the Green Section's national director for six years.

Snow's tenure with the Green Section has coincided with a time of great advancements in golf course design, construction and maintenance and environmental stewardship.

"In 1982, we became committed to expanding research into areas of water management," says Snow, "dealing with such is-

sues as drought stress and disease pressure on turf, and the way water was being used."

A three year program from 1991-93 studied the effects of pesticides and fertilizers on the environment, pesticide leaching and runoff, and golfer and wildlife exposure to control products.

Audubon a highlight

The Audubon Cooperative Sanctuary Program is perhaps Snow's most lasting contribution to the green industry. He and

"Compared to early 1990s, after having done all the research, and having established the Audubon Cooperative Program, the industry isn't being criticized as much as it was," observes Snow. "A lot more people are giving the industry the benefit of the doubt.

"I know some superintendents get tired of hearing about it, but any super who has taken their course through full certification in the Audubon deserves a lot of credit."

Industry stewardship must continue. "As the population grows, and resources become more limited," predicts Snow, "stewardship can't help but become more important."

Revising the specs

The Green Section is further micro-managing the agronomic needs of the various regions of the country.

"We need to refine and regionalize greens construction specs," says Snow. "Intuitively, it doesn't make sense for one

Jim Snow's career highlights

- ▶ 1979: completes graduate studies at Cornell University, joins Green Section as agronomist for Northeastern region.
- ▶ 1982: Green Section expands water management research.
- ▶ 1991-93: study of the effects of pesticides and fertilizers on the environment, pesticide leaching and runoff, and golfer and wildlife exposure to control products.
- ▶ 1990: named director of the Green Section. Helps begin Audubon Cooperative Sanctuary Program.
- ▶ 1998: a new five year program will delve further into environmental and turfgrass research.
- ▶ Editor, *USGA Green Section Record*, with regular reports on golf course agronomic issues from around the U.S.



Ron Dodson of the National Audubon Society started the program in 1990, and more than 2000 golf course superintendents have since come on board to improve the environmental friendliness of their golf courses.

The results of the program are evident, environmentally and in the court of public opinion.

method of green construction to be used all over the world."

"We have a great staff of agronomists," says Snow. "They do their jobs well, and I couldn't do it without them." **LM**

—by Terry McIver and Ron Hall

Changing the Course.

ZENECA
Professional Products

Mexican workers for a price

by RON HALL / Senior Editor

Green industry operations that have employed Hispanic laborers for several seasons usually don't have a problem getting them again. But, if you're just getting started with Hispanic workers you may want to talk to a labor contractor like Bob Wingfield, profiled in this, our second of three articles dealing with the green industry's changing labor market. In January we conclude the series with comments from leading landscape companies about their experiences with Hispanic laborers.

For a growing number of U.S. landscapers and golf courses, the Mexican labor pipeline goes through the offices of Robert Wingfield in Dallas, Texas.



Wingfield: Mexican workers want clean, inexpensive housing.

Robert Wingfield knew he was doing a dumb thing. He did it anyway. An irrigation contractor, he put all of his undocumented Mexican workers on a single job. Then he got busted by the U.S. Immigration and Naturalization Service (INS).

"The economy here in Dallas was lousy, and we were on a big job in a hurry-up mode," he says. "Immigration hit us. They got every guy we had. It knocked us dead in the water for about three weeks. Production was way down even after that. It was November, and our guys went home and stayed until spring."

After that raid in 1986, his ninth for using "illegal" workers, Wingfield got religion.

Within the year he had abandoned his 15-year career as an irrigation contractor, and put out his shingle as a labor contractor. For a placement fee for around \$450 per worker, depending on the number needed, he finds and delivers Mexican workers to labor-starved U.S. industries. Nine years later, he's probably the best-known labor contractor serving the green industry. Landscape companies were among the first to ring his phone. They're still calling him, often when they're desperate for labor. Too often, says Wingfield.

"My job is to locate the workers and to make sure they're suited to the job," he says.

Sitting in a Denny's in Arlington, Texas, finishing off a late breakfast on a blistering hot Thursday morning, Wingfield doesn't look like the sort of guy who would drive out onto a deserted Dallas County road to negotiate with a car-load of "illegal" workers. But, he did, almost 20 years ago. Not any more, though.

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*patent pending



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Many green industry employers are finding Mexican workers more willing to work 10 hour days than their American-born counterparts.

He says workers he supplies are the ones that became "legal" in 1987 and 1988 following passage of the Immigration Reform and Control Act (IRCA). About 3 million aliens, mostly Mexicans, received a "one-time" amnesty then.

They became permanent residents and

could live and work in the U.S. But they're not U.S. citizens. They have to first meet citizenship requirements, which many are now doing.

The IRCA's stated purpose was to stop illegal immigration. It strengthened border patrols and, for the first time, established

penalties for U.S. employers who knowingly hire undocumented workers. The IRCA was amended in 1990 with strong anti-discrimination language.

The IRCA accomplished much: it spawned a new industry in counterfeit worker documents and it dramatically boosted the number of labor contractors—but it didn't stop the flow of illegal immigrants.

That flow became a flood when the Mexican peso's value fell by a third in December 1994. Mexico's working poor became poorer overnight. The lure of employment in the U.S. became even stronger.

Understandably so. A May 30 National Public Radio story on illegal immigrants from Cotija, Michoacan, reported that daily wages were \$50 to \$100 in the U.S. versus \$5 in Cotija. The population of Cotija is 20,000 in summer and almost doubles in winter when men return from seasonal U.S. employment.

The INS estimates that as many as 3 million illegals come to the U.S. temporarily each year. The number of illegals living in the U.S. at any one time approaches 4.2 to 4.7 million. More than half are from Mexico.

Congress, responding to the continuing migration, constructed a new immigration law this year. The law strengthens the borders even more.

But, while Congress debated employer sanctions this year, it did little to actually strengthen them.

With so many illegal immigrants in the U.S. labor market, it would seem that the INS wouldn't have any trouble rounding them up. And fining unscrupulous employers. But it does.

Aurelio Rojas, a reporter with the San Francisco *Chronicle*, revealed earlier this year that from 1989 to 1994, only 12,700 employer cases were reported to INS headquarters. Fewer than half resulted in fines to employers, INS records showed.

The INS is apparently stepping up its workforce enforcement. On June 15, it

Things you should know

When Robert Wingfield places Mexican workers with a green industry firm, he advises:

1) Treat Mexican workers with the same dignity and respect as other workers. If they think they're being bullied, they'll leave. Also, you're not going to get them cheaper than local labor, but they'll be more productive.

2) It's better if someone at your operation is able to speak Spanish. If you don't have somebody, find somebody. Many Mexican workers don't speak English.

3) Mexican workers usually will need inexpensive housing. They probably won't be willing to spend more than \$125-\$150 a month. They'll share quarters to keep costs low, but housing should be clean and contain a kitchen, table, chairs, sofa, beds, sheets, blankets, etc.

4) They'll want to work more than 40 hours a week. "About the third day that the sun is shining and they don't get to work, they take off," says Wingfield. "They have to go and find someplace where they can get some hours." Their sole purpose in working for you is to make money.

—Robert Wingfield, *Oficina de Empleos, Inc.*, 5415 Maple Ave., Suite 112A, Dallas, TX 75235. Phone: 214/634-0500. Fax: (214) 634-1001.

raided the Palatine Park District outside of Chicago and detained 21 landscape workers, one of 55 inspections in the Chicago area. Several landscaping companies in the Chicago marketplace lost workers, too.

Wingfield says he won't deal in undocumented workers, and that's one reason why it's getting harder to find Mexican laborers.

"It's not like you have them there sitting on a shelf," he says. "And it's not like any Mexican can do landscaping. The best guy to get is from the farm, the guy in blue jeans, a big belt buckle, cowboy hat and cowboy boots. He's from the farm. He's used to working hard."

But that's the type of worker other employers want, too. Many Mexican workers don't make it beyond the booming Dallas metroplex right now. They're being snapped up by construction crews and the building trades there.

"If the guys can make \$5.50 an hour here in Dallas, why would they want to move north for \$6 an hour?" says Wingfield.

"The whole workforce problem scares the hell out of me right now," adds Joe Loyet, a landscaper in St. Louis. "If they (Mexicans) can make more money in construction, they're not going to want to work in the green industry for \$6.35 an hour."

In spite of this, Wingfield says he can continue delivering Mexican laborers to American landscape companies. It's just getting harder.

He says green industry companies don't want to hear this because Mexican labor is not even an option any more.

"They have to hire Mexicans out of self defense, to stay in business," says Wingfield. "How many Americans want to go out there in the hot sun and push a lawn mower for 10 hours a day week after week?" **LM**

Tips for hiring foreign-born employees

Unsure of the steps to take in hiring foreign-born employees?

Obtain the "Handbook for Employers" put out by the U. S. Immigration and Naturalization Service. Call 1-800-870-3676 and the INS will send it to you. It explains hiring guidelines.

Develop a procedure to examine each applicant's work eligibility by their documents. This is your main responsibility as an employer. You're not expected to be an expert on forged or altered documents.

An applicant can use many different documents to establish employment eligibility. By law, you, as an employer, cannot specify which documents you will accept. You risk being the target of a discrimination action if you do.

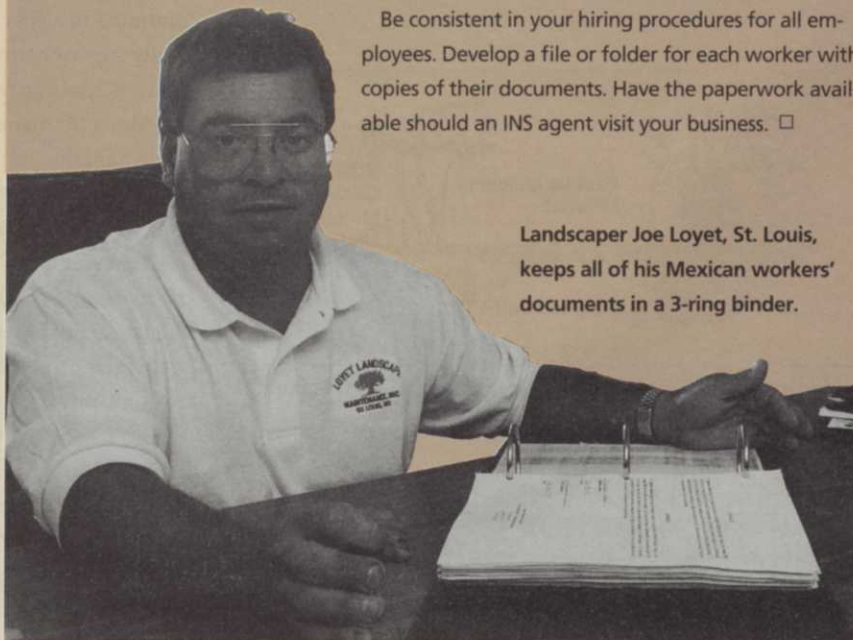
If a worker can document both his identity and employment eligibility, and you comply with the Form I-9 requirements, you're covered. The Form I-9, contained within the "Handbook for Employers," verifies that a person is eligible to work in the United States. One must be filled out for every employee.

In 1995 a Employment Verification Pilot (EVP) system for employers in Los Angeles and Santa Ana turned up 3,000 false immigration documents from the 11,400 new hires that were checked. Under the EVP system, after an acknowledged immigrant is hired, the employer submits the new hire's A-number to INS computers, which return an "authorized" or "not authorized."

The INS extended the EVP system to San Diego in July, and by mid-September about 350 employers with 200,000 employees, plus the state of Florida with 95,000 employees, participated in EVP. The EVP system screens only those who acknowledge that they are foreigners.

Penalties for "knowingly" hiring illegal workers and being audited by the INS, can be stiff, from \$250 to \$2,500 per worker. In a related matter, Florida Gov. Lawton Chiles said that private companies knowingly hiring illegal immigrants would be banned from getting state contracts.

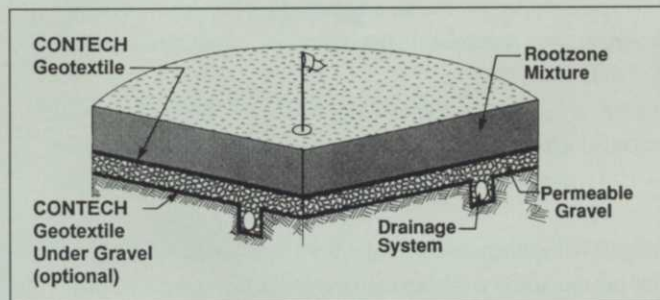
Be consistent in your hiring procedures for all employees. Develop a file or folder for each worker with copies of their documents. Have the paperwork available should an INS agent visit your business. □



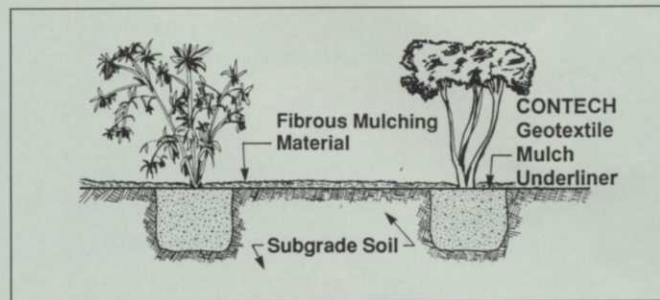
Landscaper Joe Loyet, St. Louis, keeps all of his Mexican workers' documents in a 3-ring binder.



The North American Green reinforcement mat solved an erosion problem in this sloped lawn.



Contech's TerraBond fabric assists drainage and keeps soil layers separate in golf greens.



In a landscape, the TerraBond fabric separates mulch from underlying soil.

GEOTEXTILES

These durable fabrics reduce soil erosion, protect newly-seeded areas, separate soil layers and even stabilize sand bunkers.

Geotextiles channel water, separate soil layers and stabilize a variety of landscaped areas, including drainage systems, roadways and retaining walls and golf course bunkers and putting greens.

They're often overlooked as landscaping solutions, however, according to Tom Baas, manager of the Contech Construction Products' Allied Products Group, Middletown, Ohio.

Baas says Contech makes TerraBond geotextiles for a variety of turf applications, including: slope erosion control; mulch/soil separation; pathway construction; retaining wall filtration; brick patio construction; subsurface drainage; planter filtration and separation; play area construction; putting green construction and sand trap lining.

Akzo Nobel Geosynthetics Company's Enkaturf system offers a long-term, low-maintenance solution to heavily-trafficked athletic fields, says a company spokesman.

Enkaturf is a system in which Enkamat, soil and turf are combined in a specific manner to provide a vigorous and structurally superior turf surface.

Grass roots grow into and through the Enkamat, which provides a permanent fibrous matting that gives the sod structural strength.

You have to match the product to the site. Synthetic Industries of Chattanooga, Tenn., reports in its product literature that soil type, climate, site geometry, agronomic factors and hydraulic conditions all work to influence product choices. The company has an erosion control design diskette to calculate which products to use for a variety of channel and slope erosion control applications.

Tim Lancaster, technical services manager for North American Green, Evansville, Ind. reminds users that overlapping seams and stapling are common installation mistakes when using the company's turf reinforcement products.

"If the overlap is too thick, the turfgrass will not be able to grow through the mat," explains Lancaster. "If the staples aren't

placed properly, a strong wind will lift the mat from the turf surface."

Beyond those mishaps, geotextiles are easy to use. Larger sites are the exception, but all companies publish installation guidelines which, if followed, will make any size job easier.

GEOTEXTILES FOR THE GREEN INDUSTRY

AKZO NOBEL
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Enkaturf is a system in which Enkamat, soil and turf are combined in a specific manner to provide a vigorous and structurally superior turf surface. Enkamat is a tough, flexible soil reinforcement matting made from nylon monofilaments fused at their intersections. Ninety percent of the three-dimensional structure is open space. Grass roots grow through the Enkamat, which provides a permanent fibrous matting that gives the sod structural

strength. Enkamat also produces an aerifying effect that reduces compaction and promotes the growth of each grass plant. For use on golf courses, athletic fields as well as playgrounds, parks, and all high traffic areas.

CONTECH
Circle No. 306
(513) 425-2165

TerraBond geotextiles are made from 100 percent polyester fibers, needlepunched and engineered to meet your most demanding applications, such as subsurface drainage, erosion control and many other professional horticultural needs. On golf courses, TerraBond is used to separate trap sand from underlying rocks and soils; to stop shoreline erosion; provide drainage and filtration behind retaining walls and provide for long-term percolation rates on greens. In the landscape, use in residential developments, shopping centers, athletic fields and parks and schools.

DEWITT CO.
Circle No. 307
(800) 888-9669

Seed and Plant Guard from DeWitt is a white, spunbonded fabric for use in grass seeding of commercial and residential sites. The company says the product provides excellent microenvironment for seed germination and seedling growth. DeWitt reports 90-95 percent average seed growth compared to a 60-65 percent average using hay or straw. Also helpful in protecting against sun scorching and cold weather, stopping wind and rain erosion and bird and insect deterrence. The company has many other products for landscape and nursery applications.

FABRISCAPE
Circle No. 308
(312) 436-0335

Landscape fabrics, frost protection and germination blankets, construction fabrics

and erosion control products comprise most of this company's geotextiles inventory. The company reports its landscape fabric stops approximately 95 percent of weed growth. A filter fabric product protects native soil and silt from clogging drainage septic systems. Professional Plus is a 3.5 oz. non-woven fabric that prevents aggregate, sand and mulches from intermixing with soil and prevents soil movement in erosion control applications.

NORTH AMERICAN GREEN
Circle No. 309
(812) 867-6632

The new C350 Three Phase Erosion Control/Turf Reinforcement Mat combines what the company describes as the superior erosion control effectiveness of a coconut fiber blanket with the permanent root reinforcement capabilities of a synthetic matting. No manual soil filling is required for short- or long-term erosion control/mulch projects. The company's Bio Net Series of 100 percent biodegradable erosion control blankets are made from lightweight, high strength jute yarn netting. The woven construction of the BioNet reduces the risk of wildlife entrapment.

PC CONSTRUCTION FABRICS
Circle No. 310
(330) 335-3635

Nonwoven geotextile fabrics are used to prevent siltation of aggregate drains. Geogrids reinforce the stone base over poor soil in a large parking lot. The company makes woven and non-woven geotextile fabrics of various sizes and weights; drainage products; pavement joint repair systems and three kinds of erosion matting.

REEMAY
Circle No. 311
(615) 847-7000

The Typar Tree Circle prevents

weeds around existing or newly-planted trees. The 36-inch, die-cut circle of fabric is placed on the ground around trees. The product is porous, and it resists tearing, punctures, rotting, chemicals, mildew and microorganisms.

STABILIZER
Circle No. 312
(602) 952-8009

TurfGrids fibers create durable surfaces for athletic fields and other high traffic natural turf surfaces when mixed into the soil base. These engineered fibers give additional strength and stability by reinforcing the base soil and root structure of natural turf playing fields, roadways and parking areas.

SYNTHETIC INDUSTRIES
Circle No. 313
(800) 621-0444

Landlok Turf Reinforcement Mats has been developed to complement and enhance the physical and biological capability of plants to protect soil from erosion. Turf reinforcement mats provide superior temporary erosion protection, rapid vegetation establishment and outstanding long-term erosion resistance to shear stresses associated with high water flow velocities in steep slopes and channels. **LM**

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- Scar Slopes
- Geotextile Reinforced Soil Retention

SYNTHETIC INDUSTRIES

Landlok mats control erosion in larger, trouble-prone areas.

DeWitt
Geotextiles

FABRICS for PLANTS

Innovative Products for Plant Protection and Weed Control

WEED CONTROL | PLANT PROTECTION | ACCESSORY PRODUCTS

DeWitt makes a wide variety of erosion/weed control fabrics.



In micro-injection systems, tiny holes are drilled near the base of the tree to accommodate a feeder tube. A pressurized capsule, filled with treatment fluid, is placed directly onto the tube.

Many companies are discovering new opportunities for higher profits and lower liabilities in today's micro-injection systems.

The cost, hazards and limitations of a spray-only program tend to adversely affect the bottom line. While there is little question about the effectiveness of a spray-only program, many companies are missing the opportunities of caring for larger trees and shrubs. With micro-injection, problems that previously had no treatment are easily controlled and prevented.

Tiny holes drilled near the base of the tree accommodate a feeder tube. The tube is inserted in the hole and a pressurized capsule, filled with treatment fluid, is placed directly onto the tube. In a few minutes, the tree drinks the fluid up. After about one season, the hole is completely callused over.

Cortese Tree Specialists of Knoxville, Tenn., sells injection only, largely to avoid liability risks.

"We just don't have much need for spray equipment any more because the liabilities are too high," says Jim Cortese. "Most of my headaches disappeared when we switched from sprays to micro-injection. Not only that, but it separates us from our competitors. Using the proper technique, we get better results with an injection than any spray program ever could."

A small fiberglass spray rig costs approximately \$2,500. Add repair, maintenance and material costs, and the cost rises to at

Tree injection a neat, clean method

Micro-injection of trees is flexible, unique and brings high earnings for a small investment.

by MARTY SHAW

least \$3,000 a year to provide this basic service to 100 customers.

There was early reluctance to micro-injections because of Bidrin, a restricted-use pesticide that is slow to be taken up by the tree. With the newer materials, not only can you leave the capsules unattended, but they come with user-friendly "warning" and "caution" labels that are not restricted. New materials also last longer: Imicide (containing Merit) works for up to two years while the longest spray residual is only about four weeks.

Other benefits of micro-injection are:

- It only kills active pests. This can be an important selling point to some clients.
- All the material is used. None is lost to evaporation, dripping and drift, nearly eliminating the threat of legal liability for chemical trespass.
- Applicator error is almost non-existent. Micro-injection materials are clearly labeled and color-coded. All materials are pre-mixed, so that no illness, injury or catastrophic damage is likely to occur.

Product choices

J.J. Mauget sells insecticides, fungicides, antibiotics and fertilizers for a multitude of problems. Mauget makes the smallest wound of all other capsule-type systems ($\frac{1}{16}$ -inch) and has been used throughout the country for more than 30 years. Cost starts as low at \$1.60 per unit. For more information, contact Nate Dodds at (800) 873-3779.

The Wedgle system uses a wedge-shaped insertion needle and a high-pressure



All material is used in a micro-injection. None is lost to evaporation, dripping and drift.

injection unit to inject a pocket of material below the bark. Less damage is done to the surface of the tree, yet little is known about the wounding under the bark. According to Wedgle literature, some problems with leaking and premature failure of the needle may also occur. The cost of the injector system itself is \$375. Wedgle injectable insecticides cost \$2.08 per insertion and injectable iron is 58 cents per treatment. Contact Chip Dolittle at (800) 475-8163.

Alamo, by Ciba Turf & Ornamental, is a fungicide product that uses a capsule with an $\frac{1}{16}$ -inch diameter feeder tube to accommodate the larger volume of propiconazole. The cost per injection is \$6.60. Call American Arborist at (610) 430-1214. **LM**

—Marty Shaw is a certified arborist and licensed horticulturist with Landscape Associates, based in Knoxville, Tenn. He has 10 years field experience with micro-injection.