

Preemergent herbicides

benefin+oryzalin, (XL), used for control of many annual grasses and some broadleaf weeds in newly planted or established landscape plantings, including some flower bulbs and ground covers. Irrigation, rain or shallow cultivation (one to two inches) is needed for activation.

bensulide (Betasan, Lescosan, and others) used for control of annual grasses and several broadleaf weeds in selected woody and herbaceous ornamental plantings.

EPTC (Eptam) used for control of annual grasses and many broadleaf weeds and some perennial weeds in ground covers and some flowers. Must be physically incorporated into a loose, clod-free soil to a depth of two to three inches immediately after application. Thorough mixing is necessary for good control.

isoxaben (Gallery) used for control of certain broadleaf weeds in landscape ornamentals, ground covers and ornamental bulbs. It must be activated by 1/2 inch of water after application.

oryzalin (Surflan) surface-applied herbicide for control of annual grasses and many broadleaf weeds in established and newly planted field-grown ornamentals, ground covers, bulbs and some flowers. It must be activated by 1/2 inch of water. It may be cultivated one to two inches.

prodiamyl (Factor, Barricade) selective preemergence residual control of many; annual grasses and broadleaf weeds in landscapes. It must be activated with 1/2 inch of water as soon as possible after application.

pendimethalin (Pendulum, Southern Weedgrass Control) used for control of grasses and certain broadleaf weeds in woody ornamentals, perennials, wildflowers and ground covers. Should be applied to weed-free soil. Must be activated by irrigation and to remove granules from foliage.

trifluralin (Treflan, Preen, and others) used for control of annual grasses and broadleaf weeds in landscape ornamentals, ground covers, roses and many annual and

perennial flowers. Apply before weed seed germination or to clean cultivated weed-free areas. Must be incorporated within a few hours of application.

trifluralin+isoxaben (Snapshot 2.5TG, Professional Preen) used for control of broadleaf weeds and annual grasses in landscape ornamentals and ground covers and perennials. Professional Preen is a new product introduced in 1998. Can be applied prior to weed germination or immediately after cultivation.

Post emergent herbicides are applied to actively growing weeds. There are selective and non-selective products. The non-selective products injure or kill any vegetation contacted. The selective products kill or injure some plants but not others.

Post emergent herbicides

bentazon (Basagran T/O) used for control of seedling broadleaf weeds, yellow nutsedge, and annual sedges in selected field grown ornamental trees, shrubs and ground covers. Apply as a directed spray to small and actively growing weeds under good soil moisture.

fenoxaprop (Acclaim) used for control of annual grasses in landscape ornamentals, annuals and perennials. Apply to young (seedling to 3-tiller) actively growing grasses.

glyphosate (Roundup Pro) used for non selective control of most herbaceous and many woody plants. Used for pre-plant cleanup and post-plant directed spray or spot spray for general weed. Apply to actively growing plants. Do not apply if rainfall or overhead irrigation will occur within six hours.

fluazifop-p (Take Away, Ornamec, Fusilade II) used for control of annual and perennial grasses. May be applied over the top of many woody and herbaceous ornamentals in landscapes. Should be mixed with a non-ionic surfactant. Spray annual grasses at two to eight inches tall before tillering. Spray perennial grass during spring growth flush but before heading.

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3. **Select ornamental species and weed management options.** Choose species with design and site compatibility. If you have a hard-to-control weed on the site, it's useful to consult the label of the control to determine which ornamentals are compatible with the herbicide.

4. **Site preparation.** Control weeds which cannot be controlled after planting. The best time to control perennial weeds is before planting. They can be controlled by repeated cultivation, fumigation or Roundup Pro.

5. **Installation and implementation.** After all the preparation, don't introduce new weeds with the new plants. Watch out for weeds on soil balls as you transplant.

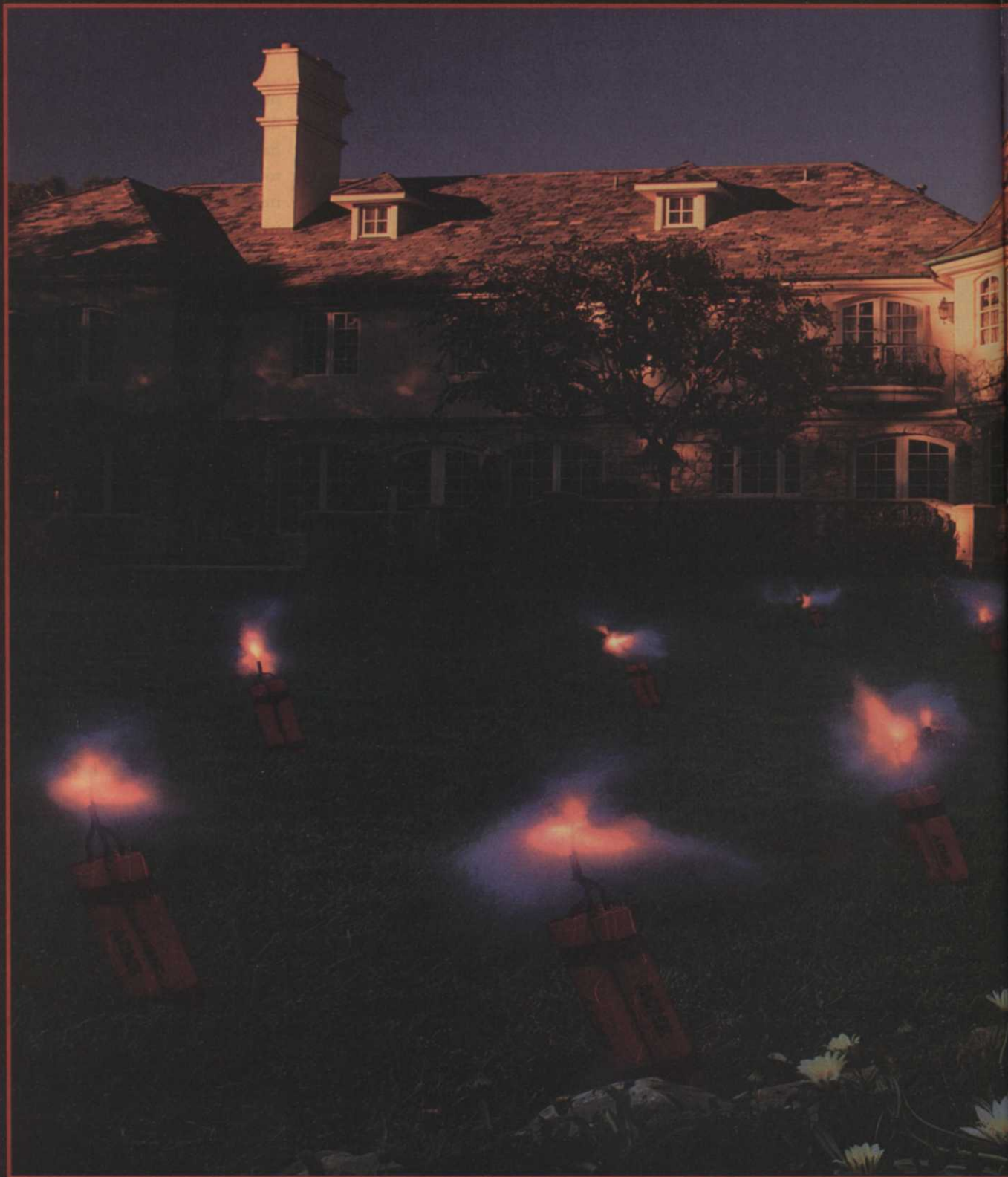
The post-planting and established landscape planting options include organic or inorganic mulches, hand weeding and the use of post emergent herbicides. Mulches serve several functions, they help to conserve soil moisture, they help to keep weed seeds from germinating and the organic mulches decompose and add organic matter to the soil. Organic mulches include many kinds of bark, compost products, pine needles, buckwheat hulls and many others.

To be effective, an organic mulch should be three to four inches thick. When using an organic mulch, it's wise to check the pH of the material. For example, pine needles have an acid pH and so are useful

cont. on page 64

Pelargonic acid (Scythe) non selective contact herbicide for control of most young, succulent and actively growing weeds. May be used in and around walks, driveways, flower beds, trees and shrubs. Ensure thorough wetting and complete coverage of all unwanted vegetation, but avoid run-off.

sethoxydim (Vantage) over the top or directed herbicide for the control of grasses in trees, ornamentals, and ground covers. Should be applied to small actively growing grasses that have not been mowed.



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is before they emerge. A preemergent herbicide application creates a zone of protection where weeds get whacked as fast as they germinate.

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How to defuse a lawn.



maybe two or three postemergence herbicide applications. One treatment of Gallery® preemergent herbicide is all it takes. Use it spring or fall on

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around ornamentals that require a low pH such as rhododendrons.

Inorganic mulches include geotextiles, marble chips, crushed rocks and many others. Inorganic mulches do not decompose, and a layer one to two inches, especially when used in conjunction with a geotextile is usually enough. The area of the country often dictates the kind of mulch that's readily available. If weeds grow through or germinate on the mulch/geotextile fabric, remove them while they're small to prevent tearing holes in the fabric.

There are many herbicides registered for use in the landscape. Each one has specific target pests and plants that will not be injured by exposure to the chemical. The following is a sampling of herbicides registered for use on landscape ornamentals. It's not intended as an endorsement, nor is criticism implied by an omission. Always read and follow the directions on the label. **LM**

Update on herbicide changes

Dr. Larry Kuhns, professor, department of ornamental horticulture at Pennsylvania State University, reports some recent changes in the herbicide market.

1. Dacthal, Derby, Pennant 5G and Snapshot WP are no longer available.
2. Regal Chemical Co. has generic products that are registered for landscape use. Regalkade G (granular formulation of proflaminate, the active ingredient in Barricade and Factor); RegalStar II (granular formulation of oxidiazon and proflaminate, the active ingredient in Ronstar and Barricade); and Regal O-O (granular oxidiazon and oxyfluorfen, the active ingredients in Ronstar+Goal).
3. There have been name changes: Fusillade is now Fusillade II; Prism is now Envoy; Roundup is Roundup Pro.
4. There is a new product, Professional Preen (granular formulation of trifluralin and isoxaben, the active ingredients in Snapshot 2.5TG)

There are many weed control choices for the landscape manager. If time allows for eliminating weeds before a new landscape bed is planted, an effective weed management option is already in use. The wide variety of herbicides used in conjunction with geotextiles, other mulches and hand weeding present workable options.

For chemical control options that are registered for use in your area, check with the local experts. Always read and follow the label.



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Perennials that love the cool, cool shade

Shade gardening evokes a calm, inviting feeling. It beckons one to the garden with wisps of coolness and fresh, earthy smells.

Shade not only varies by season, but it also can vary by time of day. Morning sun, for example, is cooler and preferred by moisture-loving plants. Afternoon sun is hotter and a few shade plants tolerate this condition.

Light to partial shade: In this condition, shade is present for less than four hours a day. This could be an area where sunlight filters through deciduous trees with high branches, and east- or west-facing slope, or the shady side of a building.

Full shade: Full shade are those areas where shade is constant throughout the day.



Myosotis Alpestris (Forget-me-not), a partial shade groundcover.

SHADE-LOVING PERENNIALS (A PARTIAL LIST)

Partial shade

Acanthus	Boltonia	Digitalis
Aquilegia	Campanula (some species)	Erigeron
Aster divaricatus	Cerastium	Iris (some species)
Astrantia	Chelone	Lobelia
Baptisia	Chrysogonum	Myosotis
Bergenia	Clematis (some species)	

Partial/full shade

Actaea	Dicentra	Viola
Asarum	Ferns	Polygonatum
Brunnera	Hosta	
Corydalis	Sanguinaria	

Partial/full shade/ groundcover

Lamium	Epimedium
Aegopodium	Galium
Ajuga	Lamiastrum
Geranium (some species)	Lamium

Woodland shade: Under mature tree canopy with filtered light, well-drained, moist, humus soil.

Wet or boggy shade: In the low point of the garden, perhaps adjacent to a pond or stream. Soil in this garden is always moist to wet, with moderate to heavy shade.

Dry, well-drained shade: On a slope or in very sandy soil with summer drying. The shade is light to moderate.

To install a shade garden

Consider the foliage effect when designing. Many perennials offer a sumptuous appeal with different leaf patterns, colors and textures. A deeply-shaded area can be brightened with the use of a variegated foliage plants such as *Hosta* and *Lamium*.

Thorough soil preparation prior to planting is essential to long term success. This is the only opportunity to work the soil completely. Once plants are established, drainage and aeration cannot be substantially corrected without removing the plants. Organic matter should be added to the soil to improve the texture and drainage. A four- to six-inch layer of organic matter, such as well-rotted manure, compost, peat moss, decomposed bark or leaf mold should be worked into the soil by digging, spading or rotary tilling.

Another key consideration is the moisture retention of your soil. Many perennials are adaptable to soils with varied moisture levels while other perennials are very specific to moisture level. **LM**



17 good reasons why a Bobcat long-wheelbase loader is the wise buy for landscapers.

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2. Bobcat loaders are built to be dependable. Landscaper Roy Poirier of Barrie, Ontario, works each of his six Bobcat loaders up to 2,000 hours a year excavating, backfilling, grading, and loading and unloading topsoil and sod. "I can't say enough good about them," he explains.

3. Designed with muscle to spare, a Bobcat loader will dig all day — and can easily lift and carry sod, bricks, blocks and other heavy loads.

4. A hefty diesel engine with plenty of power makes every Bobcat loader a non-stop work-horse that quickly handles big jobs even in small spaces.

5. With brisk travel speeds, Bobcat loaders cover more ground in less time. "The loaders allow us to work faster and take on more and bigger jobs," says Eric Proffitt, co-owner of a landscaping firm in The Dalles, Oregon.



6. Besides being brawny and fast, Bobcat loaders have added reach and lift height to clear high-sided truck boxes and hoppers. Loading and unloading is a breeze.

7. Bobcat loaders come in sizes to match every job. The 773, for example, is our mid-size lift-and-carry champ. The somewhat larger 863 takes on heavy-duty work with added power and speed, and the extra muscle of the big 873 makes every landscaping job easier, faster and smoother.

8. The hydraulic pumps on Bobcat loaders are designed to generate plenty of hydraulic power to operate attachments like Bobcat® Augers, Landscape Rakes, Power Rakes, Trenchers, Tillers, Breakers and more. High-flow options are also available for some models.

9. Speaking of attachments, we design and build more than any other skid-steer loader manufacturer. Depending on model, you can select from some three dozen attachments, each with full warranty and Melroe's unequalled parts and service support.



10. Our reliable Bob-Tach system makes attachment changes fast, secure and hassle-free. A Bobcat loader operator can easily replace a bucket with Bobcat® Pallet Forks, Landscape Rake, Stump Grinder, Combination Bucket, Backhoe, Auger, Grapple and others — all as quick as a snap.

11. Only Bobcat loaders have drive chains that *never* need adjustment. We use endless loop, hardened steel drive chains configured in a "bow tie" pattern for longer life even in the most rugged conditions — with no periodic, time-consuming adjustments.

12. You can forget about axle grease. Bobcat axle bearings are self-lubricating — never need greasing. And our hub design offers great seal protection. Most other loaders require lots of grease — both axle and elbow.

13. Serviceability is unsurpassed. Simply open the swing-out tailgate for full access to the engine's checks and fills, filters and battery. And unlike other brands, the hydraulic lift arms need not be raised to service the machine. Shop time is spent repairing, not gaining access.



THE bobcat ADVANTAGE

14. The Bobcat belt drive design allows the engine to run slower, resulting in quieter operation, longer engine life and lower fuel consumption — another feature found only on Bobcat loaders.



15. Training kits, available from your Bobcat dealer, let you train new operators and bring current operators up to date with the latest safety and operation functions on Bobcat products. Spanish language versions are also available.

16. Bobcat loaders maintain high resale value year after year because of the Melroe Company's long tradition of quality-built products and after-sale support.

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WEEK 1



WEEK 2



WEEK 3



WEEK 7



WEEK 8



WEEK 9

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WEEK 4



WEEK 5



WEEK 6



WEEK 10



WEEK 11



WEEK 12

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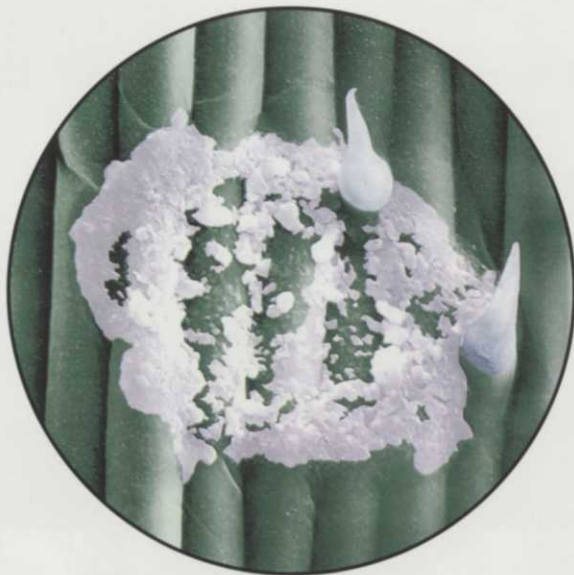
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User must have label in possession when applying these rates.

†For a copy of our Daconil Ultrex Super Weather Stik Guarantee, write to Daconil Ultrex Guarantee, ISK Biosciences Corporation, Turf & Specialty Products, 1523 Johnson Ferry Rd., Suite 250, Marietta, Georgia 30062

†† Micrographs have been colorized for demonstration purposes.

Credibility, what we all need on the job.



THOMAS MASON
Guest columnist
Superintendent,
Birmingham CC,
Troy, Mich.

Credibility is a topic rarely discussed at golf course superintendents meetings. Credibility is trust and faith in another's ability. Credibility is a reason to give the benefit of the doubt. Lack of credibility is a life of frustration.

I cannot ask for credibility; I have to earn it. My success begins and ends with my credibility.

Organizational skills contribute to being perceived as a credible person. I need to correctly write a letter or report, return phone calls in a timely manner, and develop and follow policies and procedures.

Leadership is not telling people what to do. I need to ask the right questions to fully understand the conditions our membership expects. I need to take a good suggestion for improvement and explain it so everyone can understand. I need to make everyone feel part of the finished product. I need to yield to a better idea.

Like most golf course superintendents I want to be respected. I want members of the Birmingham Country Club to perceive me as a professional with a passion for managing their golf course.

I want to sit in a meeting and feel they want my ideas and vision for their golf course. I want to feel I am part of the club's history. I want to feel I am effectively representing the interest and well being of our golf course maintenance staff. I want our membership to have confidence in my representing their club.

As a superintendent in today's world, I must constantly improve myself. I attend turf conferences to improve my agronomic skills. Experience has shown me that I should spend an equal amount of time trying to better understand and improve my interpersonal skills.

It's important for professionals to periodically think about what our actions and words say to

[GOLF]

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Healthy turf for roughs

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Judy Bell tops with ASGCA

our bosses and members.

How am I perceived? Do we speak the same language? Do they understand the terminology I use in my daily life? I realize that I should periodically take some time to see things from a member's perspective.

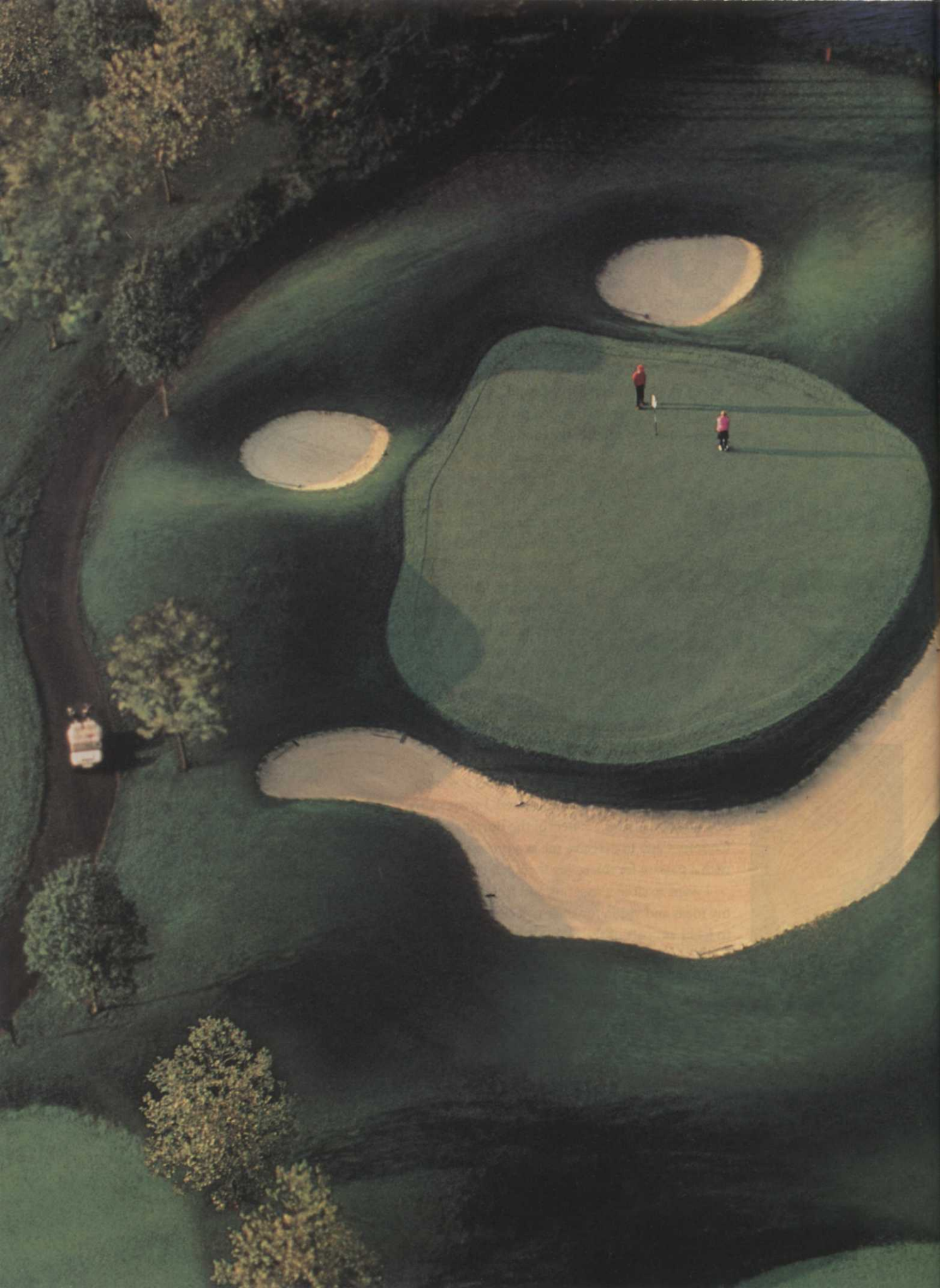
[SUPERS ON COURSE]

Bickler's dream course came true

The 18-hole Encinitas Ranch Golf Course in Southern California opens this month. It was designed by Gary Bickler, ASGCA, San Diego. More than 20 years ago Bickler lived on a country road across from the Ecke flower fields and dreamed of designing a course on the property. The City of Encinitas made his dream come true by hiring him to do just that.

Falcon Dunes finished months early


Superintendent **Pete DiMaggio**, CGCS handled the grow-in at The Falcon Dunes Golf Course at Luke Air Force Base, Glendale, AZ. Falcon Dunes opened this winter. Valley Crest was the prime contractor on the \$9 million project. Construction began in March 1997 and finished three months ahead of schedule. Gary Panks designed Falcon Dunes, which was built without the use of taxpayer dollars.



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Circle No. 105 on Reader Inquiry Card

Greens tips from pros

A panel of veteran superintendents at the 1997 Ohio Turfgrass Conference shared strategies that work for them.

By RON HALL/ Managing Editor

For better greens consider a triangle whose sides are customer satisfaction, a balanced management program, and consistency of play. Consider all three in your greens management program.

That message surfaced over and over again when a panel of respected superintendents explained their greens programs at the Ohio Turfgrass Conference this past December.

Bob Brame, USGA Green Section, Cincinnati, began the discussion by reminding the 300-plus superintendents in the audience to concentrate on providing their greens with the basics—a good growing environment (adequate sunlight and air movement), fertilization, mowing and water management.

The following are some of the greens strategies offered by the superintendents on the panel:

Matthew Shaffer, The Country Club, Cleveland, Ohio, hand waters greens. Greens are on “the edge of wilt at any given time.” He uses natural organic fertilizers (supplemented with micro-nutrients) on his greens, predicated on soil tests taken every other year, about 3 ½ lbs. N per year.

His crew mows with lightweight 19 inch Jacobsen walkers, and cuts every day, maintaining a height between 1/1000 of an inch and 125. On Thursday they usually begin double cutting and double rolling to increase speed for male members who want faster greens, maybe to high 10 or 11.

Shaffer believes in a regular and creative use of rollers, both Wylie and smooth. “We roll, we roll and we roll,” he said.

Gary Price, Snowshoe Mountain Resort, Slatyfork, W.Va., said “we try to stay away from any extremes. My overall philosophy is pretty simple.”

He double cuts some, keeping the height at 135 to 140, and rolls some.

“Our members want a true playing surface and decent speed,” he said. Price insists on keeping mowers lapped and properly adjusted. Edges get faced weekly.

Mark Kuhns, Oakmont Country Club, Oakmont, Pa., hosted the 1994 U.S. Open. Kuhn also favors hand watering because it keeps the greens firm. “You’d be surprised how far you can actually stress greens,” he said. He tries to maintain greens at 11 every day. The stimpmeter is *his* tool. He doesn’t



Gary Price: no extremes

Don't skip that mowing

Terry Buchen, Terry Buchen Golf Agronomy, Williamsburg, Va., said that if a green is not mowed on Monday, it will not be back to the same condition (speed, firmness or smoothness) until at least Wednesday.

“The best conditioned courses get double cut at least every other day,” he said at the Ohio Turfgrass Conference:

Other trends he offered:

- ▶ a move by superintendents toward heavier greens mowers,
- ▶ more use of vibratory rollers on triplex greens mowers,
- ▶ top-dressing about once a week, at least once every two weeks, with many superintendents using straight sand,
- ▶ increased popularity of the Bioject system for

disease control; also good reviews for Heritage fungicide,

- ▶ increased use of fertigation because of improved systems,
- ▶ shorter cuts for greens collars,
- ▶ green speed of 9 feet or faster to keep golfers happy.



Terry Buchen sees shorter cuts on collars.

RH

think it's a good idea for anybody else on the course to be stimping the greens. (A sentiment that several of the panelists heartily endorsed.)

The Oakmont crew aerifies twice a year, and fills the holes with pure sand. Sand is broomed and watered in until holes are completely filled.

The Oakmont greens get about 3½ lb. N per year, most applied as a starter fertilizer after aerifications, supplemented with a dormant feeding of Milorganite the first or second week of December to bring turf back in spring.

Oakmont greens are double cut daily. Kuhns starts the season at ⅛ inch, bottoms out at ⅜, then brings it back to about ¼ by mid July or August.

He credited the fungicide Heritage with allowing him to control anthracnose and summer patch this past season.

Edward Odorizzi, The Country Club at Muirfield Village, Dublin, Ohio, says his course is blessed with "a great mechanic," and that his mowers are in top shape to mow daily, ⅛ inch, a bit lower in summer. That's one reason why his greens are generally regarded as some of the best in central Ohio. Another, and important factor, he said, is the open nature of his course—lots of sunshine.

He aerifies three times a year, twice with a Toro greens aerifier and once in late fall with a Floyd McKay unit. His crew topdresses with straight sand every three or four weeks.

His fertility program is about 5½ lbs. nitrogen, 2 lbs. phosphorus and 11 lbs. of potassium a year.

Terry Bonar, Canterbury Country Club, Cleve-



Mark Kuhns says stimp-meter is a super's tool.

land, has hosted several USGA and PGA tour events. "Topdressing is very important for us," he said. "We topdress a target of nine to 10 times a year. We've been using the same rootzone mix for over 25 years."

Bonar said he favors spoon-feeding in summer, about ⅓ lb. N. per week using a 20-20-20 Peters product. Depending on carry over, he may cut back to half that amount, or perhaps just iron. "I can look at them (greens) on Wednesday and decide how much to put on them on Thursday," said Bonar.

Daconil has been his fungicide of choice, sprayed weekly. It eliminated dollar spot and brown patch this past season. The fungicide Heritage cleared up a developing problem with anthracnose, he added.

He tries to maintain green speed at 9½ to 10½ every day. "If you're consistent every day and you have a decent speed, they're (the members) not as concerned about what the roll is today," he said.

Joe Baidy, Acacia Country Club, Cleveland, and a former president of the GCSAA, believes a superintendent has to build some flexibility into his/her program. "I do what the grass plant needs," he said.

Baidy started this past season mowing at ⅛ and went down to ⅜. He said that mowers are checked daily, lapped when needed. The Acacia crew double mows on Wednesdays and on weekends and for tournaments, and rolls several times a week.

Baidy believes in spoon feeding turf each week in the summer, and uses Primo growth regulator every two weeks. He aerifies in spring and fall and topdresses every two or three weeks.

"Understand what your membership wants, and give them what they need," said Baidy. □



Terry Bonar seeks consistent rootzone mix.

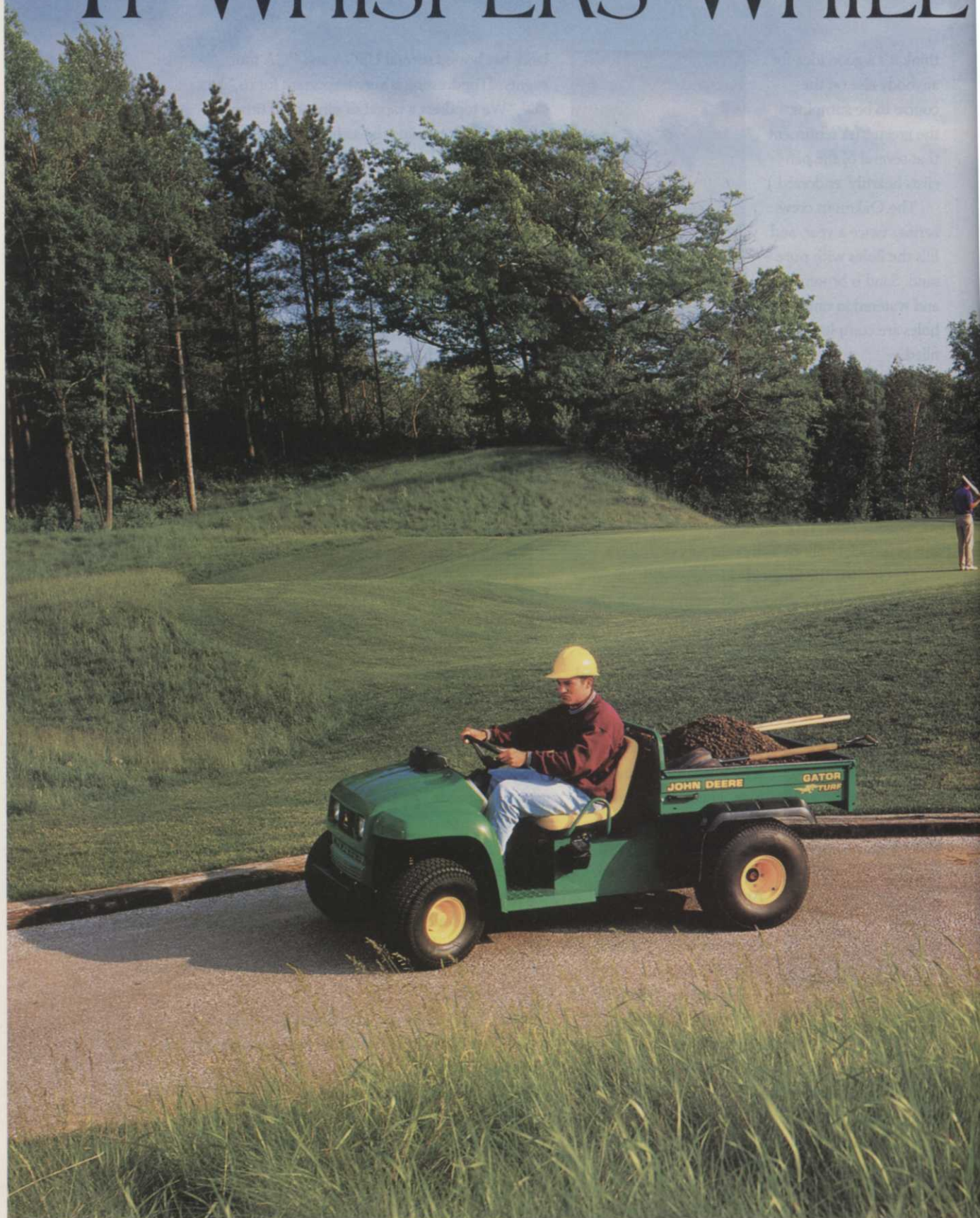


Joe Baidy: understand what members want.

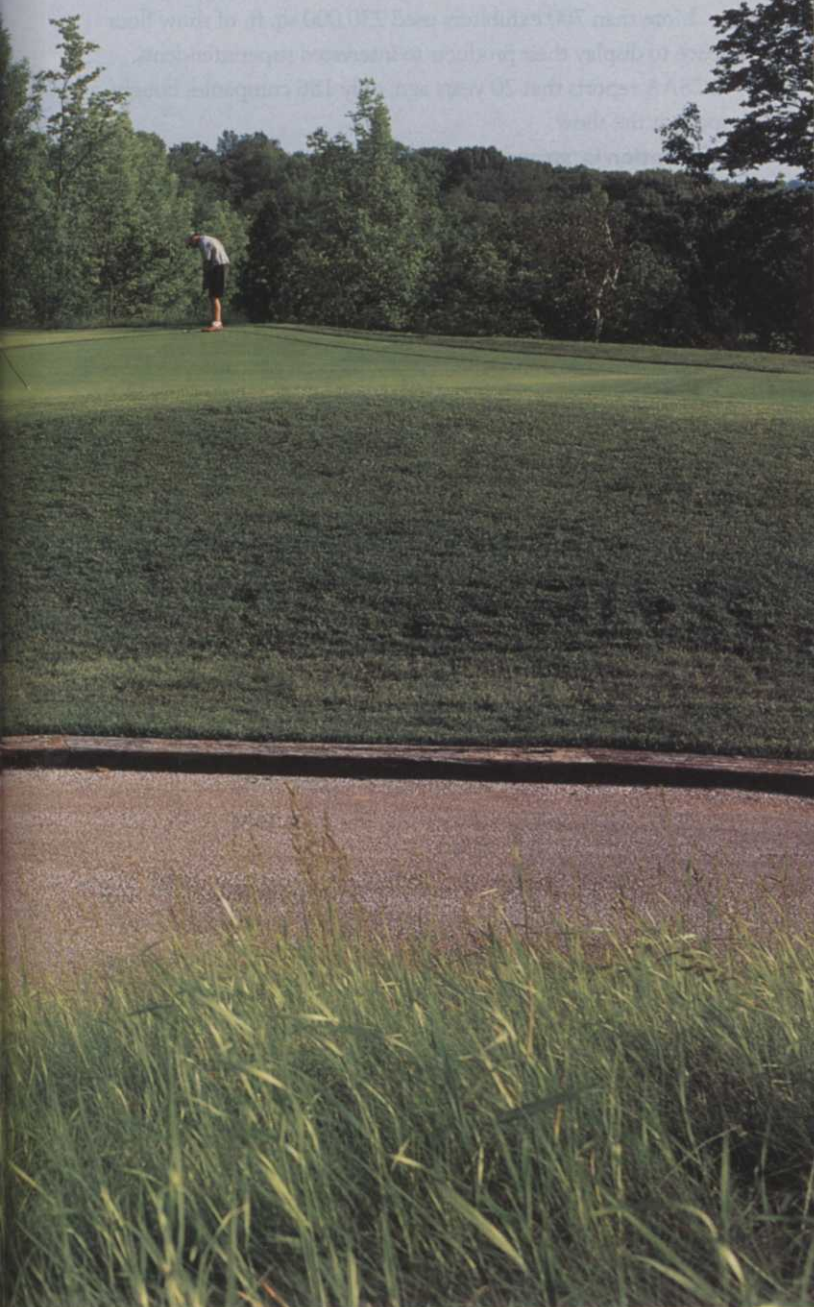


Ed Odorizzi thankful for a great mechanic.

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GCSAA SHOW hits on hot topics

From the growth of golf to innovative management tips, the 1998 GCSAA conference provided a wealth of helpful information and commentary.

by Ron Hall & Terry McIver

The 1998 Golf Course Superintendent's Association of America conference and show surpassed expectations for both attendance and exhibitor participation, reports the GCSAA.

Seminar attendance at the Anaheim, Calif. Convention Center, hit 5,620, a 200-plus increase over the 1997 show held in Las Vegas.

Overall registrants reached 20,500 which is about 1500 less than the record, Dr. Jeff Nus of GCSAA told LANDSCAPE MANAGEMENT. "We should really bust the records in Orlando [in 1999]," predicts Nus.

Attendance at seminars, the Gala and Environmental General Sessions hit record numbers however.

More than 700 exhibitors used 230,000 sq. ft. of show floor space to display their products to interested superintendents. GCSAA reports that 20 years ago, only 186 companies bought space at the show.

Association is 'strong'

The increased attendance is a reflection of the state of the association, which is reported as "strong" by outgoing GCSAA president Paul S. McGinnis, CGCS.

The Association boasts 18,000 members around the world.

"We're already setting new records in growth this year, with 8,400 at pre-conference seminars focused on education and timeliness," says McGinnis.

Steve Mona, CAE, who serves as the association's chief executive officer, reports the group is financially strong in terms of revenues and conference attendees. "Membership now incorporates 60 countries around the world," says Mona, who believes the association can best serve its members everywhere by adding non-agronomic information to mix.

Golf popularity grows worldwide

Golf is becoming more available to the public, and the National Golf Foundation says that bodes well for the growth of the game.

Richard L. Norton, vice president and general manager of the NGF, says the growth of total courses has gone from 13,353 in 1986 to 16,010 in 1997.

The US accounts for half of the world golf market, says Norton, with an estimated 25 million players. Asia was second with 15 million, followed by Canada, the UK, Australia/New Zealand, Europe, South/America and Africa.

Special people speak out

Gaining special recognition at this year's GCSAA show were former vice president Dan Quayle; PGA golfer Peter Jacobson; and golf commentator/professional Ken

cont. on page 12G

New GCSAA officers

GCSAA's new president is **George E. Renault III, CGCS**, superintendent at Burning Tree Club in Bethesda, Md.

Vice president for 1998 is **David W. Fearis, CGCS**, superintendent at Blue Hills CC in Kansas City, Mo.

Serving GCSAA as secretary/treasurer is **R. Scott Woodhead, CGCS**, superintendent at Valley View Golf Club in Bozeman, Mont.



LANDSCAPE MANAGEMENT's golf industry "Person of the Year" Paul Latshaw, Congressional CC, with LM Publisher John Payne, right, and Editor-in-Chief, Terry McIver.



John Hedges, right, director of Hoffco Outdoor Power Equipment, and John Schmidt, a representative for Comet, check out another fine issue of LANDSCAPE MANAGEMENT.



Greeting guests at the Kawasaki reception, from left, Mark Kelly, director of marketing, with Kathy Matyniak, Roger Howe, Vince Iorio.



Hunter International pays tribute to founder Ed Hunter, who died January 23 at the age of 81.



Bob Katula, president of Links Diagnostics, Inc., explains how the company provides digital images of golf courses, to evaluate turf conditions.



AgrEvo's George Raymond is flanked by giant insects at an afternoon press conference as he presents information about the pyrethroid insecticide DeltaGard, effective against surface-feeding pests.



John Deere's Clair Peterson, left, manager of event marketing, visits at the John Deere booth with J.W. Borders, from Deere's Arizona distributor, Arizona Machinery.

A look ahead

What's in the future of the golf management industry, and how do superintendents fit in? These are big questions.

A small panel of green industry suppliers did their best to answer them in a short amount of time during a Friday Forum held in the GCSAA media room.



Kelty: Attack of the multinationals.

Present at the forum was **Michael Kelty, Ph.D.**, vice president, professional business group, The Scotts Co.; **David Fearis, CGCS**, Blue Hills Country Club; **Gene Hintze**, director of

turf and ornamental products, Novartis; **William Foley**, chief executive officer, LESCO, Inc.; and **Harold Pinto** of Jacobsen Division of Textron, Inc.

Conditions of the game are apparently changing, if the 1997 U.S. Open is any indication, says Foley. There, superintendent Paul Latshaw had the greens and fairways double mowed and fast as can be.

"We need to find ways to help superintendents with what they will need to maintain these great conditions," said Foley.

According to Hintze, the superintendent is looking for total solutions, basic research and development.

"New solutions are already being developed that will make the superintendent's job easier and course conditions better. The tools are on the way."



Hintze: Supers want total turfgrass solutions.



Foley: Great conditions demanded on courses today.

"Competition and consolidation is what it comes down to," said Kelty. "Multinational companies are moving in, there's a big shift in the marketplace and margins are down. The next five years will be critical."

Pinto emphasized the industry's global reach.

"The industry is growing fast, except for shrinkage in Southeast Asia. This shrinkage will impact overall growth, and competition will intensify. Look for a lot of consolidation, but the industry will continue to grow. We must think positively."



Pinto: We must think positively!

How to help the EPA

To further improve industry relations with the ever-zealous Environmental Protection Agency, Hintze said the key is to "work with the EPA. We need to first understand the ground rules. And we need to have a common united voice to stand up to the EPA, with logical, professional responses."

"There have been a lot of scares," Kelty said. "EPA is a client-based organization for the Food and Drug Administration. I'm optimistic that science and technology will win out." □

Innovative supers

Superintendents received some valuable information on how to get things done in a variety of time and money-saving ways during the Innovative Superintendent Sessions at the GCSAA show.

Alan C. Bathum, Cascade Hill CC, Rockford, Mich, had to do something about water-logged bunkers.

1. He met with other supers to get their thoughts.
2. He got estimates on architecture and construction.
3. He met with club members and board to get approval. Photos of ideal bunker conditions helped him explain the problem.
4. A survey was done to determine priorities for club improvement. The job was soon finished.

"Make presentations to small groups and hire an architect early in the process for credibility," says Bathum. "Use professionals you can work with."

Stuart W. Eyman, Otis Golf Club, South Dennis, Mass., also gave a presentation on bunker renovations.

"Keep in mind, renovations don't last long," Eyman says.

Eyman says the Otis bunkers contained many stones which wound up on the greens. To solve the problem, he:

1. Made the bunkers smaller, raked back the fill area and screened subsoil.
2. Subsoil was returned to the site and rolled in.
3. Eyman obtained a mixture of sand and clay for backbuilding.
"It's a lot more manageable now," says Eyman. "All I have to do is re-edge it."
Got players who walk anywhere and everywhere? **Robert F. Murtaugh, CGCS**, calls those areas, "goat trails."

Most of the traffic damage Murtaugh sees at Perry Park Country Club, Larkspur, Colo., occur close to tees. His solutions:

1. Stone sculptures for stepping.
2. For dead grass, Murtaugh recommends peat moss.
3. Cart tracks on grass can be overcome by putting up ropes when renovating to give the area a chance to grow.

Thomas Mason, superintendent of the Birmingham Country Club, Birmingham, Mich., shared some of the things he's learned in 20 years with his club.


"Leadership with credibility and organizational skills provides the opportunity to be successful," he said. (See Mason's column on page 1G.) □



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cont. from page 8G

Venturi, recipient of the Old Tom Morris Award for 1998.

Jacobsen, during the Wednesday night opening, called for a change in course design: "with only greens, fairways and roughs. No cuffs, less

water and anything that requires hand mowing."

Quayle, himself an accomplished golfer, entertained the crowd at the Environmental General Session with golf stories and political commentary.

Quayle stretched things a bit when he called repairing divots and raking sandtraps a show of environmental awareness, but he then thanked the superintendents for doing "a great job" and

◀ In this atmosphere of buyouts and acquisitions, Turf Seed, Tee-2-Green and Pure Seed Testing are not for sale, says President Bill Rose, at the Tee-2-Green breakfast.



◀ David Mastroleo, Hillcrest Country Club, named International Seeds' "Man of the Year" for his work with turfgrass test plot presentations.

crest Country Club, Los Angeles, received the 1998 Distinguished Service Award for his contributions to the industry.

Venturi, awarded for his contributions to the game of golf, said he never played a round of golf during which he was not humbled.

"Golf is a special game, where respect has to be earned," said Venturi. □

keeping courses in top condition.

David Mastroleo, golf course superintendent at Hill-

New product news

AgrEvo introduced its proprietary pyrethroid DeltaGard during the GCSAA show. Marketing Manager George Raymond calls DeltaGard a "significant technological advancement for the golf industry." According to Raymond, products containing DeltaGard can be used with exponentially lower rates of active chemical ingredient than the high-dose insecticides of the past because of Delta Gard's unique potency. Labeled for adult annual bluegrass weevil, adult bill bugs, chinch bugs, mole crickets, adult black turfgrass ataeinus and many other surface feeding insects.

Terra premiered its new GoldCote polymer coating technology, slow-release fertilizer.

"Goldcote takes slow-release technology one step further in providing slow release of both nitrate nitrogen and potassium nitrate unlike the majority of other controlled release fertilizers," says Karen Hartman, Southern Division Manager for Terra's Professional Products. Fertilizers with GoldCote are available in urea, monoammonium phosphate and potassium nitrate. Custom blending is available.

Zeneca reviewed its plan to acquire ISK's worldwide chlorothalonil business. Zeneca Business Director Keelan Pulliam also reports the company has purchased Mogen, a Dutch biological disease control company. "We are investing in biotechnology and plant breeding," says Pulliam. Zeneca has submitted its Heritage fungicide to the EPA for use in all turf applications.

"We're in the generic market now [with chlorothalonil]," says Technical Business Manager David Ross. "We've got our work cut out for us.

"Clearly, [chlorothalonil and Heritage] are competitive," says Product Manager Tony Rademaker, "but Daconil is the dollar spot control product, Heritage is not."

Kawasaki's Mule utility vehicle is now available in hunter green. The uv drives and handles much like a car or pickup truck, yet is lightweight,

highly-maneuverable and can weave its way through tight spaces.

O.M Scotts company says its new Contec controlled-release fertilizers provide more control and flexibility in nitrogen release rates than ever before. The Contec line also features consistent particle sizing which ensures more even product distribution and a more predictable growth pattern.

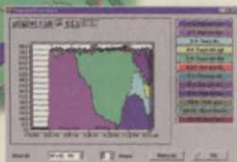
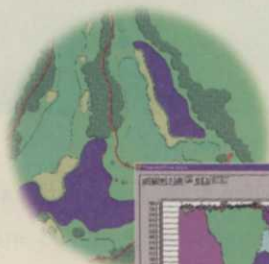
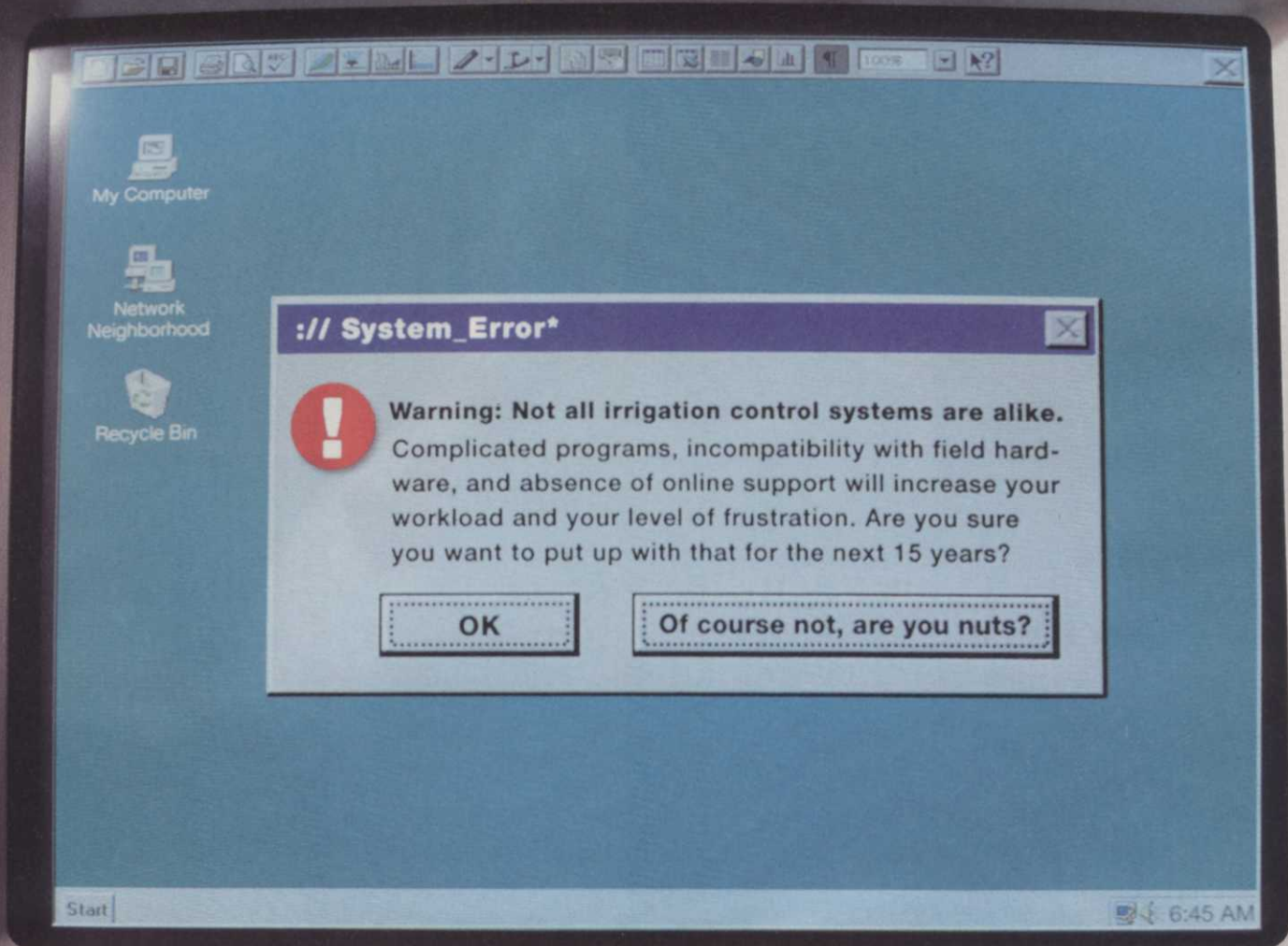
Seeds West, Inc. introduced its fine, certified, turf-type bermudagrass blend, Bermuda Triangle. The blend features certified Yuma, Sultan and Sydney turf-type Bermudagrasses, which, according to the company, have improved turf density, color and texture with a wide range of adaptation. It will be available from Pennington and Seeds West.

Toro's "new generation of triplex mowers" feature a design that places the operator in front of the engine, with cutting units that can shift from side to side up to 22-inches, to allow for additional trimming overhang or to vary the wheel tracks within the width of the cut. Toro reports it will move more into products for sports field maintenance. Toro Irrigation's Site Pro continues to use a Windows '95 platform.

Spanish Training Services, Inc., Evanston, Ill., offers language training for those with Hispanic workers on staff. Jennifer Thomas says she has also developed a "Spanish for Turf Equipment Technicians" for the Turf Equipment Technicians Association. Etonic covers the cost of Thomas's speaker's fee for GCSAA chapters.

Jacobsen Division of Textron called it "the largest new product roll-out in Jacobsen's 77-year history." New from the company: HR-9016 Turbo wide-area rotary mower; LMF-3800/3400 lightweight fairway mowers; SandScorpion electric/gasoline/diesel powered bunker/infield rakes; Aero King greens aerators and a fairway aerator; and new Turf Sprayers.

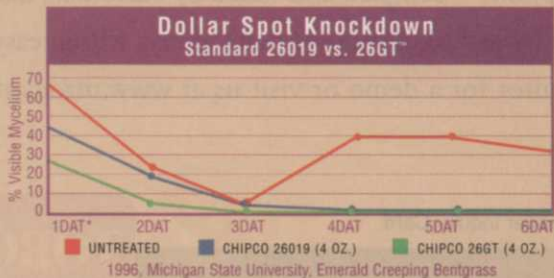
Ransomes' new E-Plex II electric greens mower and Greensplex II both have a new pivoted center cutting reel that swings out from under the mower for quick, easy servicing and maintenance. The reel has an automatic time delay to prevent accidental cutting into the green collar. □



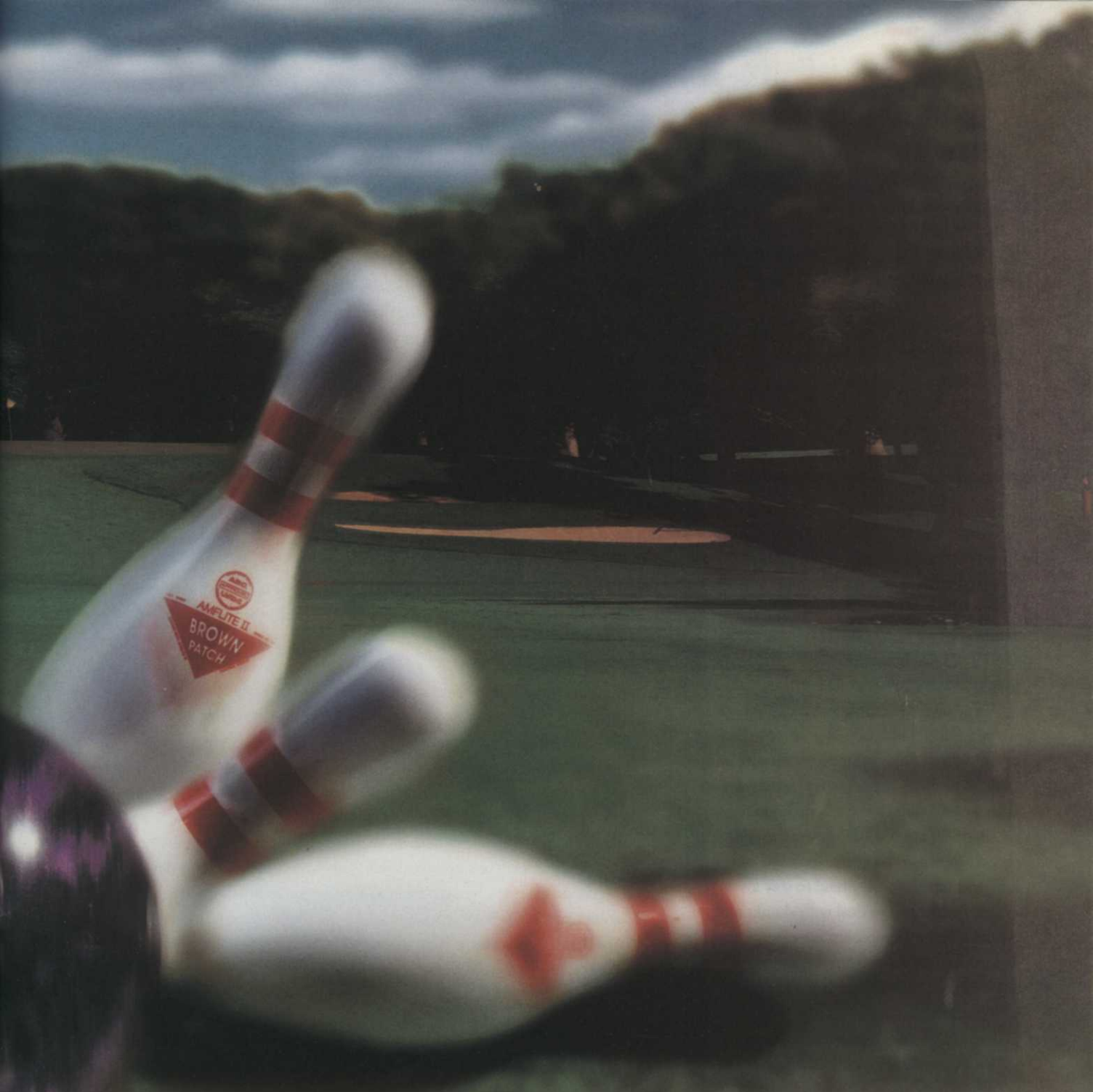
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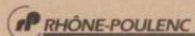


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Critter control options

There's a wide variety of remedies for nuisance pests.

Landscape Management reader advisor Jerry Coldiron of Boone Links/Lassing Pointe golf courses, Florence, Ky., says he's had problems with many species of critters that plague the turf, thanks to the courses' rural location.

"We have a definite geese problem, and we've tried all kinds of things as remedies," says Coldiron, "like stringing piano wire or fishing line along the lakes, and letting the grass around the edges grow up higher, which goes with our back-to-nature approach anyway. The geese don't feel safe in long grass areas, so they tend to stay away."

Jerry's also had to deal with skunks and raccoons. He says raccoons are easy to trap, and are set free away from the course.

"We've also used 'Hav-a-hart' traps, which resemble the animal carriers used by airlines. The critter is lured in with food."

For deer control, Coldiron says he's used ropes, aluminum pie pans, human hair and soap as repellents.

For more information on pest control, see the accompanying sidebar. □

Controlling nuisance wildlife

Armadillos, opossums, raccoons, skunks, foxes, wild pigs and various birds may damage turf by digging in search of webworms, cutworms, white grubs, earthworms or other juicy prey. Often you can put a stop to this by eliminating the food supply—controlling the insect infestation.

Other pests, such as moles, and pocket gophers damage turfgrasses by burrowing and pushing up ridges and unsightly mounds of soil. Getting rid of these pests requires patience, persistence and knowledge of their habits.

Note that in most areas, urban wildlife is protected under state and local laws. Professional turf managers should always check with the local conservation officer or state wildlife agency before controlling nuisance wildlife, especially if lethal methods are to be used.

Birds: Except for starlings and a few other pest species, birds are considered beneficial and are protected by federal and state laws. The only appropriate or effective tactic for reducing bird damage to turf is to eliminate the pests that are attracting them.

Canada geese: Steep-sided ponds are less attractive than those with shallow shorelines or open beaches. Geese can be excluded by erecting a three-foot woven wire fence around the pond at water's edge. Or, a two- or three-strand fence made from 20 lb. test or heavier monofilament fishing line. Hang narrow strips of aluminum foil every 3 to 6 feet to make the barrier more visible.

RejeX-IT AG-36 is registered for use on turfgrass and is effective for repelling geese and other waterfowl.

Chipmunks: Hardware cloth is effective. Use 1/4-inch material, and bury it 6 to 8 inches deep to keep chipmunks from burrowing under sidewalks, in gardens and other sensitive sites. Wire mesh live-traps can be purchased or sometimes rented from animal shelters. Good baits include a mixture of peanut butter and oatmeal, nutmeats, pumpkin or sunflower seeds, raisins or prune slices or grain-type breakfast cereals. Place the trap close to the burrow entrance or along pathways where chipmunks are active.

Moles: Trapping is the most effective method for controlling moles. Trapping is usually most effective in the spring or fall, when moles are active near the surface. You must first locate the active, main surface runways.

Raccoons: Controlling white grubs reduces the food supply and usually discourages raccoons from digging. Unlike moles, raccoons like a varied diet and can easily forage elsewhere.

Live trapping is the most effective, non-lethal method of getting rid of raccoons. Use Tomahawk, Hav-a-hart or similar type traps of the appropriate size. Effective baits include chunks of corn-on-the-cob in the milk stage; sardines and other fish; and fish-flavored canned cat food. Melon, prunes, fried bacon, or peanut butter, syrup or honey on bread may also work.

Raccoons are often quite wary about entering a trap. They can often be made less cautious by providing a natural footing on the trap floor. Do this by pushing the wire cage back and forth on the ground until the bottom mesh is covered by soil. Twist-tie the door(s) open for several days so that the raccoon can get used to the "metal object that gives free food." □

Source: *Destructive Turfgrass Insects: Biology, Diagnosis and Control*, by Daniel A. Potter, 1998, Sleeping Bear Press, Inc. For more information, contact Ann Arbor Press, 121 S. Main St., Chelsea, MI 48118; 734-475-8787.

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

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Smoothing out THE ROUGHS

Step-by-step account of how one Chicago-area golf course keeps rough areas attractive with healthy turfgrass.

By BRAD ANDERSON, CGCS

Growing good roughs starts with drainage at Midlane Country Club. Cart traffic over wet soil causes thin and patchy cover in our roughs.

The best method of draining rough is to alter the surface grade with a well placed swale, but in nearly every case the topography doesn't permit it. Our only alternative then is the installation of an underdrain system. Here's how it works:

Survey to identify the low spots. Flag low spots to designate the installation of surface risers.

Place off various trenching routes to find the one which connects the low spots in the least linear feet. Paint the route on the turf.

Wire track the trenching route. Paint hash marks where irrigation lines or wires will be crossed.

Find the closest point of discharge and survey for a minimum of 1 percent grade. In the event of having nothing close to dis-

charge into, I find the nearest swale to daylight the water back to the surface. Daylighting water hasn't been a problem as long as it's channeled into a swale which is outside of the natural flow of golf cart traffic.

Install tile and gravel to trench. Add vertical risers to the low spots. A well placed riser will evacuate the water before it has a chance to puddle, and saturate soils.

Seed bare areas in the following sequence:

- ▶ core aerify two to four times with $\frac{3}{4}$ -inch tine,
- ▶ level off depressions with C.E.C.-

rich, pulverized topsoil,

- ▶ hand-rake level,
- ▶ apply starter fertilizer,
- ▶ drop seed at a rate which lays down at least 10 seeds per square inch,
- ▶ hand roll with 50-gallon roller,
- ▶ cover with straw or fabric,
- ▶ rope off and irrigate for establishment.

For a seed mix I like to use (by seed count) 70 percent bluegrass and 30 percent fine fescue. The bluegrass is very slow to germinate, but the fescue is up in six to eight days, stabilizing the soil. During the



Members at Midlane Country Club get a colorful and attractive first impression as they approach the club house in anticipation of an enjoyable couple of hours of golf.

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Dimension's low use rates and favorable environmental profile mean less worry. The active ingredient features very low toxicity to mammals, birds, and insects. Plus it bonds to soil particles instead of leaching into groundwater.

Dimension offers the widest application window—6 weeks more than other preemergence products. That lets you delay application for optimum control of goosegrass and other weeds. And split applications can stretch control even further for areas with long growing seasons. It all adds up to a turf herbicide that only weeds find hard to live with.

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first year the bluegrass makes up as little as 25 percent of the stand, but with each successive application of nitrogen the bluegrass pushes the fescue out. This gives me complete control over what percentage of bluegrass I desire in my rough.

In our part of the country (northern Illinois), ryegrass is susceptible to crown dehydration in winter, and pythium blight in summer. Because of this it shouldn't be used in areas where drainage is a problem.

Having evacuated the water, and re-grassed the areas which are bare from poorly drained surfaces, my next step is the reconditioning of the underlying soils. For the last four years I have been working at this process with a tractor-drawn core aerifier. We have aerified all of our rough with one-inch tines at least twice. We usually wait to aerify rough until the second week of October because it's such a messy process. We continue to aerate right up until the ground freezes.

The next thing we address is fertilization. The fertilization of rough is a two edged sword. If rough is under-fertilized, it will not stand up to traffic and weed invasion; if it is over-fertilized, it can become expensive to keep up with the mowing.

It has been my experience that the manhours associated with mowing areas treated with higher-grade, slow-release nitrogen sources are proportionately less than that required to keep up with the mowing of areas treated with cheaper more soluble sources.

Rough fertilization should be done with quality materials, applied by someone with a good eye for determining where the product needs to be put down. Applications should be limited only to those areas which are weak from cart traffic and nutrient deficient soils. Wall to wall applications usually end up over stimulating healthy areas to the degree that overtime mowing is wastefully incurred. Another downside of wall-to-wall fertilization is the amount



Brad Anderson's rough improvement program focuses on reconditioning poorly drained and compacted soils.

of time and product required to combat algae and pond weeds associated with nitrogen and phosphorus runoff.

I have had the best results with an early May, 275-lb.-per-acre application of a 16-16-24 analysis, comprised of methylene urea, diamonium phosphate, and sulfate of potash. The high rate of diamonium phosphate builds density, and gives the turf a jump start in spring. The methylene urea gives me an even rate of release right into mid summer. In fall I might make another application of a 1-0-1 analysis if I feel it's needed.

It's of merit to note that the areas of our roughs which are irrigated rarely ever require fertilization. In addition, these same areas require very little herbicide application for weed invasion. This should be a consideration for anyone who is in the planning stages of a new irrigation system. How much time and material is spent on fertilizing and spraying non-irrigated rough? Will the installation of sprinklers in

those areas effect a significant payback savings in product application over a reasonable period of time?

Occasionally an area of rough is heavily shaded. It's almost impossible to grow hardy rough turf in the kind of shade that we have on some of our golf courses. If the trees can't be thinned to allow more sunlight to reach the turf, then we must either rope off the shaded area, mulch everything under the dripline of the trees, or install a cart path to direct traffic through the shade.

Bentgrass is a wonderful fairway turf, but as a rough grass it's probably the worst. The challenge of keeping bentgrass out of our roughs is especially difficult by virtue of the fact that it's stoloniferous and inclined to spread outwards from the fairway edges.

In the future we will be able to apply a chemical to remove bentgrass from rough, but experimentation of the formulations is still in research and development. For now, the only effective way of removing bentgrass from our roughs is to physically remove it with a sod cutter.

In summary, my rough improvement program is predicated on the reconditioning of poorly drained and compacted soils. Starting first with a drainage system that will evacuate water as quickly as possible, thus reducing the compacting effect of traffic over saturated soils, followed by an aeration program for opening up the soil, and finally a fertility and herbicide program that's customized to give various zones what they need, no more and no less.

If these programs are not equal to the wear and tear of golf carts, then the only remaining alternative is asphalt paths. Now we're dealing with human nature which presents a new set of problems. **LM**
—The author is a certified golf course superintendent at Midlane Country Club near Chicago.

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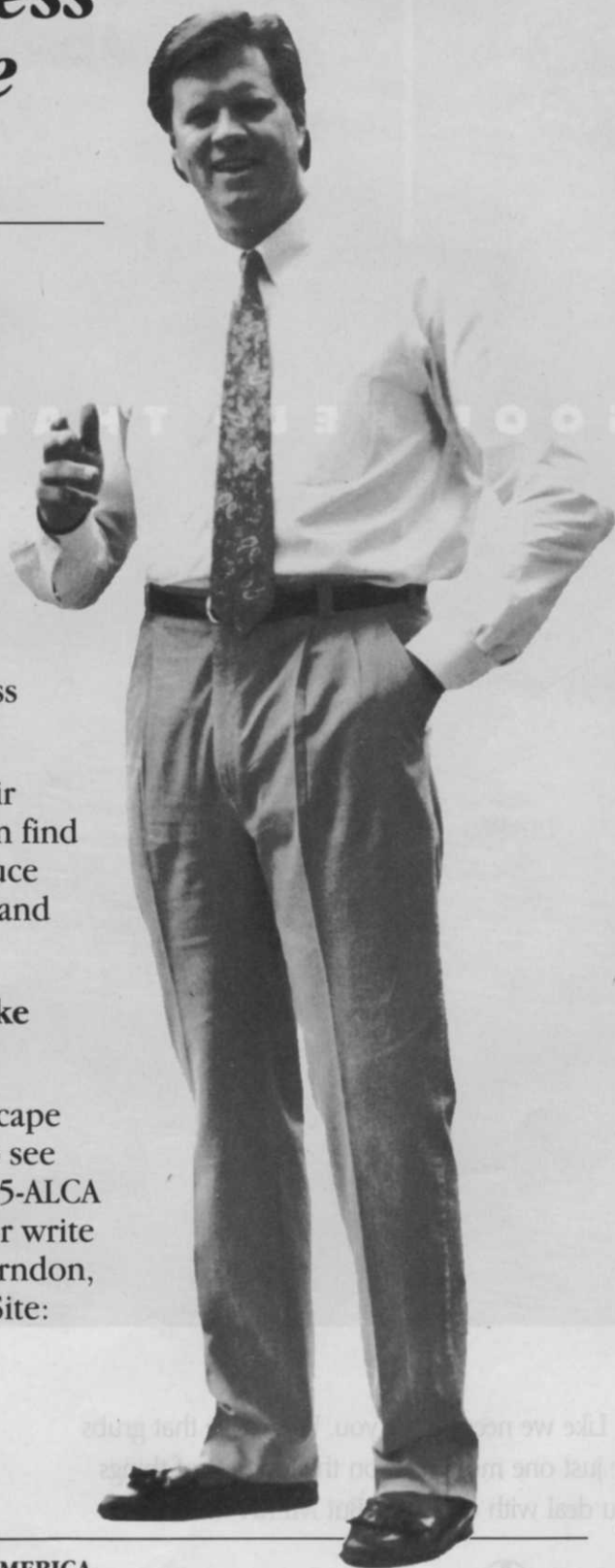
“When I started my business in 1983, I needed expert advice,” says Joe Skelton, president of Lifescapes, Inc., Canton, Georgia. “That’s when I joined ALCA.

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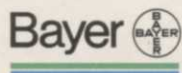




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Architects honor Judy Bell

The American Society of Golf Course Architects chose Judy Bell, immediate past president of the U.S. Golf Association, to receive its 1998 Donald Ross Award. Bell will receive the award at a banquet on Monday, April 27, at the Riviera Country Club in Los Angeles during the 1998 ASGCA annual meeting.

"Judy Bell has devoted many years to the selection and preparation of tournament sites," says Alice Dye, president of the Society. "Her work in the USGA's selection process that presents great golf courses for tournaments has helped millions of people, especially those watching on television, appreciate the artistry of golf course architects. Her appreciation of good strategic design is rooted in the game of golf that she plays so well and loves so much."

Bell, of Colorado Springs, CO, was the first woman named to the USGA Executive Committee in 1987. She served as USGA treasurer in 1991, secretary in 1992-1993 and vice president in 1994-1995 before being elected president in 1996.

Bell and Dinah Shore are the only two female recipients of the award, named after Donald Ross, the legendary golf course architect and one of the founding members of the ASGCA.

Combined turf evaluation effort

The USGA, the GCSAA and the National Turfgrass Evaluation Program (NTEP) combined resources to manage a national research project to evaluate grass varieties (cultivars) on actual golf course settings.

Practice putting greens built to USGA specifications at 16 different golf courses across the nation featured bermudagrass and/or bentgrass varieties. The northern locations tested bentgrass cultivars and the far-south venues are looking at bermudagrass varieties. Both are being evaluated in the transition zone.

The USGA/GCSAA/NTEP project has been using the combined efforts of superintendents, university researchers and USGA Green Section staff for monitoring and evaluation.

Here is a list of the on-site GCSAA/USGA/NTEP research trials last year: CC of Green Valley, Green Valley, AZ; Westwood CC, Vienna, VA; Westchester CC, Rye, NY; The Missouri Bluffs, St. Charles, MO; The Jupiter Island Club, Hobe Sound, FL; The CC of Birmingham, Birmingham, AL; SCGA Members Club, Murrieta, CA; Purdue University North, West Lafayette, IN.

North Shore CC, Glenview, IL; Lakeside CC, Houston, TX; Fox Hollow at Lakewood, Lakewood, CO; Crystal Springs GC, Burlingame, CA; CC of Mobile, Mobile, AL; Boone Links/Lassing Pointe GC, Florence, KY; Bent Tree CC, Dallas, TX; GC at Newcastle, Bellevue, WA.

Golf course design info is on the web

Developers, municipalities, and interested golfers seeking more information on golf course development can consult www.golfdesign.org, which now boasts more than 20,000 hits per month. In addition to the Architect's Corner, the ASGCA web site contains information on all members of the Society, tips for remodeling a course or building a new one, media information, and other helpful material.

Le Sage gets big honor from AEC

The Alliance for Environmental Concerns (New Jersey) presented Armand H. Le Sage with its 2nd Annual "Illona Gray Environmental Award" at its annual meeting last fall at Fiddler's Elbow Country Club, Bedminster, NJ. Le Sage is golf course superintendent of White Beeches Golf & Country Club.

The AEC is an organization comprised of individuals from the pesticide regulated community in New Jersey. It represents professional pesticide users at the state regulatory and legislative meetings; it educates members concerning certification, training and licensing through newsletters, seminars and conferences; it communicates facts about responsible pesticide use to the public; and it joins forces with allied associations to coordinate appropriate responses to key issues.

Le Sage has served twice as president of the AEC and has been on their Pesticide Regulation Task Force. He is an active member of GCSAA and is participating in its Ambassador Public Speaking Program. He is also a member of GCSNJ and is a guest lecturer in the Turf Management Program at Rutgers University. A decorated Vietnam veteran, he and his wife Mary-Justine Lanyon, have two children.

John Buechner of Lawn Doctor made the presentation to Le Sage who is retiring as a board member after 11 years of service.

Like locomotives steaming towards each other on the same track, the Green Industry is on a collision course with consolidation. It'll change the industry, first one segment then another like nothing before it.

This is no secret to anybody familiar with the industry. But the speed that it's happening; that's surprising; and it's likely to accelerate.

An obvious example is giant TruGreen/Chem-Lawn/Barefoot Grass absorbing more established lawn care companies and increasing its share of the application market each season. TG/CL has no competition, not beyond local or, in some cases, isolated regional markets. TG/CL has been on a tear throughout the 1990s, and it shows no signs of slowing down.

The consolidation of chemical lawn care businesses is not necessarily a model for the consolidation for any other segment of the Green Industry. Each segment will be represented by a national presence, or perhaps several. But these mega-presences will develop in their own unique ways.

The process is already well under way:

- ▶ in the golf market with the continued growth of large golf course management companies,
- ▶ in institutional grounds care with organizations like Marriott and ServiceMaster,
- ▶ and now in the fragmented, and still relatively young, landscape services market.

One of the most eagerly awaited events at the recent ALCA Executive Forum was an afternoon reception sponsored by a new landscape services company known as LandCare USA (see article on page 26L).

About 100 people attended the reception, most of them independent landscape company owners. They learned at the reception that six of

[LANDSCAPE/GROUNDS]

PAGE 4L ▶

Profiles in irrigation contracting

PAGE 15L ▶

Computer imaging, picture perfect

PAGE 20L ▶

Build your workers to keep them

PAGE 26L ▶

National landscape firm is born

Consolidation is in green industry's future



Ron Hall

RON HALL
Managing Editor

their colleagues had joined forces to launch a national landscape operation.

While the purpose of the reception was strictly informational, it's message seemed to be: *we're just getting started and we're looking for like-minded companies, maybe like yours, to become a part of us.* Some of the company owners at the reception will join.

Others, those who want to remain independent, surely left wondering what consolidation means to them and their companies. **LM**

[PEOPLE & PROJECTS]

Ruppert promotes two

Ruppert Landscape Co., Ashton, MD, promoted Chris Davitt to senior vice president/director of operations. He's been with Ruppert 17 years. Bill Meissner, with the company five years, succeeds Davitt as director of landscape installation. Ruppert has 800 employees in 13 branch offices on the East Coast.

Miraval project on time

The Groundskeeper hustled to finish the Miraval resort community project in the Catalina Mountains. The Tucson-based company, working with the landscape architect and general contractor, planted nearly 13,000 trees, shrubs and groundcovers and laid 11 1/2 miles of irrigation line to finish the installation at the same time other trades were completed. The project earned an award from The Arizona Landscape Contractors Association.



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PROFILES IN irrigation contracting

These contractors know how to make money by installing irrigation systems. Their companies are bonded, their employees are trained, and they know how to bid.

By BRUCE SHANK, BioCom
Part II of a Series

Three contractors from across the country are presented here to give you a feeling for the regional differences in irrigation. All evolved into irrigation from another occupation because the need was there. All three contractors successfully responded to their markets in their own ways. There is no single formula for success.

However, there are basic tenants that apply to success. They include:

- ▶ a close relationship with irrigation distributors, irrigation consultants, landscape architects, and water agencies,
- ▶ employment of trained and certified irrigation specialists,
- ▶ knowledge of bidding and bonding practices,
- ▶ strong business discipline and record-keeping,
- ▶ involvement in local landscape, golf, municipal and water conservation organizations,
- ▶ attendance at major regional and national trade expositions, and
- ▶ a fascination and sincere interest in

nature, plants and man's designs for them.

Maldonado Nursery & Landscaping, Inc.

The story of Maldonado Nursery & Landscaping is one of a fast-growing metropolitan area, a family business following a common evolutionary trail in the landscape industry, and water shortages.

Founded in San Antonio, TX, during the 1980s, Maldonado grew rapidly with the surge in the city's business. Like Miami and Los Angeles, San Antonio has grown as both U.S. and Mexican businesses have increased trade. Ironically, San Antonio's growth has been matched by a growing water shortage in the region.

The 10-year-old company was launched by **Roy Maldonado, Sr.** as a landscape construction company for residential and small commercial projects. It didn't take long for the company to generate enough work for his three sons, Roy Jr., Jerry and Oscar, to join him.

As the business grew, the family realized they were losing jobs to landscape companies with irrigation divisions. Roy gave Jerry the responsibility for figuring out how to solve the problem. "We were getting beat

out on bids by companies with a complete landscape construction package and ran into scheduling conflicts with our irrigation subcontractors," explains Jerry. "Although we ran into irrigation on most jobs and had a fair understanding of it, we didn't work closely with irrigation distributors."

After six years, Jerry and Oscar started to develop the irrigation division by getting licensed. "Texas has an irrigation license law, so we got licensed," Jerry recalls. "At first, we shared the landscape trucks. It didn't take us long to figure out that fully stocked trucks were the only way to go, so we added racks and bins to a few trucks. When we did that, we felt more like our own division."

Maldonado keeps accounts with all local irrigation suppliers. One supplier, Alex Garza with GPM Supply, was especially helpful, says Jerry gratefully (Garza now has his own irrigation consulting business). "Alex helped us with design and introduced us to AutoCAD irrigation programs. He encouraged us to get involved with the Irrigation Association, the Texas Turf Irrigation Association, and local groups.

"We got to know irrigation designers and landscape architects and learned what they want in an irrigation contractor," he adds. "Through them, we got on more bid lists and met many more general contractors. We discovered that general contractors select who they feel comfortable with more than who has the lowest price. Because we had an existing landscape division, we could do more for general contractors and had a track record to get bonding. The more irrigation work we did, the bigger the jobs got. We subscribe to the Dodge Reports to stay on top of construction projects being planned here. We also participate in the annual builders show by installing an irrigated landscape on a model home. More than 30,000 people attend that show, including builders and developers."

Two years ago, Maldonado became a certified backflow prevention tester, which brought him into close contact with the

city water department. That relationship became especially important when the local Edwards Aquifer started dropping to seriously low levels and water restrictions were developed. "Irrigation is part of the solution to water shortages, not the problem," Jerry stresses. "When restrictions are implemented, landscapes without irrigation systems are at risk most. If you have a system, you are allowed to set your controller to irrigate at specific times. If you don't, you have to stay home from work to water when the city says you can."

San Antonio issues fines for those irrigating at the wrong time. Irrigation systems are regulated by the Texas Natural Resources Commission for sprinkler spacing and flow. The public is given a phone number to report those who don't follow the rules. "People don't want to risk their

larger, multi-function company helps Maldonado. "We always promote from within," boasts Jerry. "Everybody starts as an assistant and works their way up. By the time they become foremen, the company's values and procedures are instilled in them. Those who show an interest in irrigation are properly trained and developed to be future foremen. They grow and we grow, just as we grow as San Antonio grows. By doing our part to make sure that San Antonio's water isn't wasted, we guard the future of our company. This is a family company and we want to hand it over to future generations of our family. Nobody cares more about conserving water than we do!"

Landtrends, Inc.

Water is also a major concern in San Diego, CA, home of Landtrends, Inc. Virtually every landscape project the company



Glenn Moore says his best golf course irrigation system work is the product of solid referrals from satisfied customers.

landscapes burning out or getting a fine for having an improperly designed and installed irrigation system," Jerry remarks. "We protect them from both threats."

Maldonado's operations have continued to grow in spite of drought. They added a nursery three years ago and started a maintenance division last year. "The advertising we do for those divisions has increased people's recognition of our company," says Jerry. "They see our trucks all over San Antonio and know who we are from our radio, newspaper and Yellow Pages ads."

The fact that irrigation is a division of a

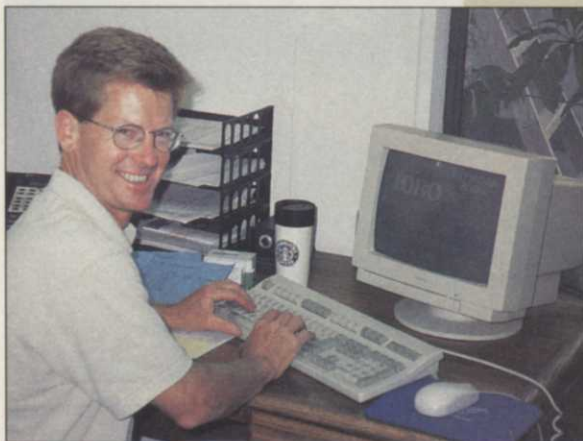
installs involves irrigation. Most building permits require an irrigation plan. So, when **Jon Ewing** started Landtrends in 1981, he knew immediately that irrigation had to be included in his service mix. Today, he has 300 employees in two states and his company is a leader in implementing new irrigation technology.

"In many instances, irrigation is a third of the contract," reveals Ewing. "It's the nature of the landscape business in Southern California. We have at least two trained irrigation specialists on every construction crew and at least one on each maintenance

crew. Those individuals are strongly encouraged to become Certified Landscape Technicians in irrigation."

The California Landscape Contractor's Association (CLCA) created and the CLT Program, which is used in other states today. As president of CLCA three years ago, Ewing encouraged other states to adopt the CLCA program.

"We find that a landscape architect or irrigation consultant is involved in many of the projects we do," observes Ewing. "Our job is to install irrigation to their high standards and to stay on the leading edge of irrigation technology. We work closely with builders, developers and condominium associations to give them the information they need to manage water costs. Water and landscaping represent the highest cost for associations or owners after a project is built. Many now use treated effluent water



Eric Shepard of Landtrends can check up on irrigation systems from miles away, thanks to computer technology.

for irrigation to cut costs. It takes the best knowledge and technology to manage these resources properly."

Landtrends is now able to communicate with a property's irrigation controller from its office 24 hours a day. Eric Shepard, Landtrends project manager for Aviara in Carlsbad, CA, tracks daily water use and performance for the exclusive development's 400 acres of commons. "Every morning I get to the office and check on the 38 satellites at Aviara, 20 miles away,"

How to price irrigation services

If you have been subcontracting out irrigation work, you have general idea of pricing. You already know that the subcontractor has to make a profit in the work he does. The key, according to Jim Huston, president of the management consulting firm Smith Huston, Inc., located in Englewood, CO, is to price labor and materials separately. Both should include overhead and profit. The resulting totals should be listed separately on the invoice. Both will have their own profit included.

Mark up materials a minimum of 20 percent (ten percent for overhead and ten percent for profit), Huston recommends. Check the retail or manufacturer's list price in your area. If your 20 percent figure is below the retail price, you might be able to increase your margin. If a distributor or retail merchandiser gives wholesale prices to anyone, you have a problem. Consider changing distributors or brands to differentiate your materials from retail choices.

Various industry research reports provide general observations regarding material pricing. Sprinkler heads, valves and controllers represent two-thirds of the cost of materials. Expenditures for each of these three items are approximately equal. This should alert you to plans which understate controller prices, for example. Wire, pipe and fittings constitute the other third of material cost. You might want to use different mark ups for different types of material.

Cost of labor is a misnomer. It really includes a number of different things and is based upon time — for the crew, for vehicle(s), for travel to and from the job site and picking up materials, for specialized equipment, and for fuel or power used. Miscalculate the time a job takes to complete and you either lose profit or price the job too high. Labor cost per hour can vary according to the type of work and equipment used.

On top of straight time costs, you need to add labor burden, a term that includes everything else needed to enable that crew to be out working. Some items are general and administrative costs, rent, taxes, insurance (i.e. liability, worker's compensation and health), advertising, legal fees and dues. Finally, add in a percentage for profit. Total these costs for a month and divide by the number of billable hours in the period. Now that everything is broken down by the hour, pricing is easier and more accurate.

Landscape contractors have a pretty good idea of their costs. What they aren't sure of is time. Once you get a crew trained for irrigation, concentrate on timing. Be reasonable and set goals for crews that are reachable.

Focus on consistency and anticipating unusual problems in advance. Once you get timing down, you can predict billing fairly accurately. One good serviceman can generate a \$100,000 in billing, says Huston.

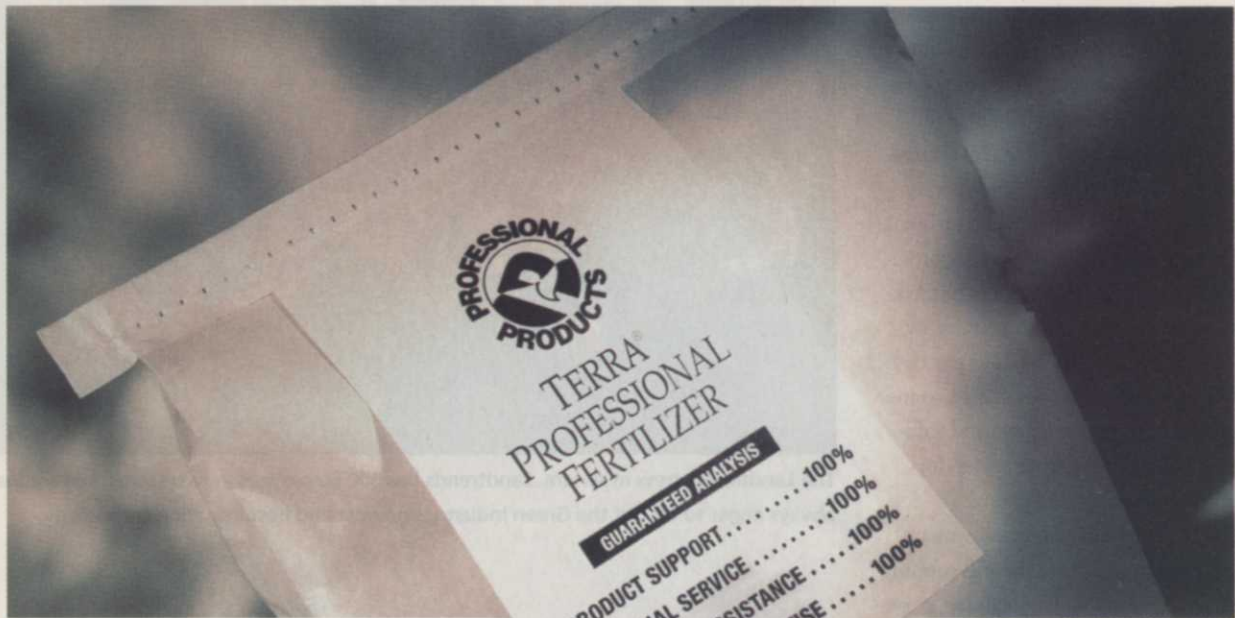
While this is textbook business management, Huston urges contractors should also learn about the prevailing pricing in their market. "Once you understand the pricing structure in your area, you can use the market to your advantage," he adds. "Take a serious look at service contracts for your customers. They are often more profitable than installation and are easier to schedule."

reports Shepard. "I can see immediately from checking flow whether a headed was blocked or a sensor caused a satellite to skip a station. The computer also tracks amperage, so we know if a solenoid went

bad or a valve is stuck. That station is checked by the crew as soon as it arrives on site." The Aviara crew consists of 18 full-time landscape and irrigation workers.

Landtrends has a similar setup for the

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Tracking water use and making improvements can save associations tens of thousands of dollars each year. "We saved one client \$30,000 per year on his water bill," Shepard points out. "With remote access to irrigation information, we could conceivably manage an entire city's irrigation system. That type of control is very important when you begin to use effluent water. It's not that the water is dangerous, it's actually very safe. Instead, it's because the treatment plants need to know how much effluent water will be used per day."

"We feel obligated to our clients to invest in the computer hardware and software required to take the next step forward in irrigation control," promises Ewing. "We are getting business now because people know we are up and running with advanced control. The learning curve has also been shortened with help from Toro for being one of the first to use its technology."

Glenmore Landscape

Both Jerry Maldonado and Jon Ewing want to install the "Big System"—a golf course. Until you have completed four golf course irrigation projects, it's hard to get on "the list." Not only is **Glenn Moore** on the list, his Glenmore Landscape Service, is many times the preferred contractor on the list.

"I grew up in the back of my dad's Cushman truckster," he quips. His dad, **Sherwood Moore**, is one of the top-ranked golf course superintendents of all time. His tenure at Winged Foot, Woodway Country Club, and the Captain's Club have made him the Henry David Thoreau of golf course management. New England is a very close network of gifted, hard-working traditionalists. "I was a lucky guy to be the son of such a well-respected person," says Glenn.

Like any son of a famous person, Glenn had a lot to prove to establish his own credibility. But he stuck close to home to do it. His first project was to automate the



The Landtrends crew at Aviara. Landtrends has 300 employees in two states. The company is always eager to try out the Green Industry's newest and best irrigation technology.

irrigation system at Woodway when he was still a teenager. The club had a quick coupler and hose system, he recalls. The mains were cast iron pipe. The club decided to contract out the first few holes with the club's staff doing all the cleanup and much of the wiring. They were not happy with the results and decided that they could do a better installation job in house. The club bought a used trencher and as soon as play dropped off in the fall, they started cutting in trenches. They completed the rest of the system in-house. Glenn was only a teenager and the superintendent's son, so people were surprised when the retrofit worked like a charm. He was 'hooked' on the work, he says.

Moore started attending seminars given by distributors. One of them was presented by Koonz Sprinkler Supply. Another was taught by an irrigation contractor from Hungary named Louis Toth. Both men would later become presidents of the Irrigation Association.

When he wasn't working on the golf course, Glenn drove an old dump truck loaded with mowers to make extra money.

He started to sell and install irrigation on his wealthier customers' yards. Soon, people were asking him to do ballfields. His customers who were members of golf clubs in the area starting spreading the word. He started getting calls from superintendents.

"If you do good work, you will succeed," he warns. Glenn has done jobs costing more than \$700,000 but it takes years of proving yourself on smaller jobs to get an opportunity like that.

"I was lucky to cut my teeth with some great golf course superintendents, architects and irrigation consultants, Glenn says. Although his company is listed in the Yellow Pages, all his work comes from referrals.

Networking is clearly one of Moore's strengths. He has served on the board of directors of the Irrigation Association and currently serves on its Certification Board. He has also served on the boards of and help every office in several state landscape and irrigation associations. He and fellow contractor, Jesse Anderson, formed the Connecticut Irrigation Contractors Association. □

1998

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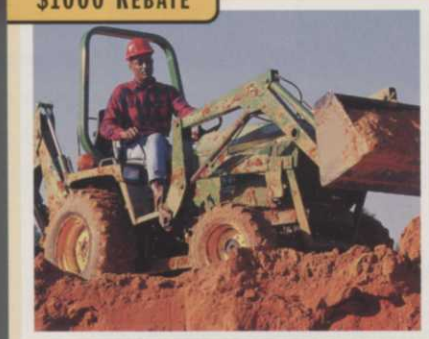
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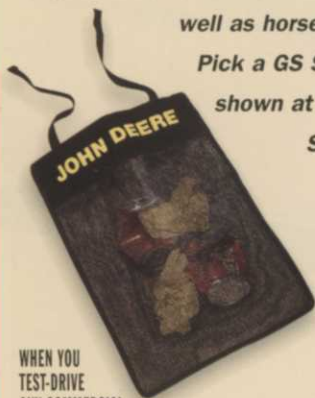
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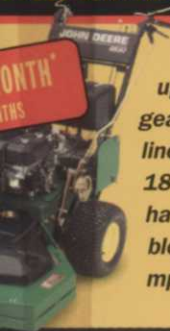
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Computer imaging lets you be picture perfect!

Landscape imaging gives residential customers a chance to "see" their landscapes before they're installed.

By RON HALL/ Managing Editor

Computer imaging for landscape designers is changing the way contractors attract residential customers. The proponents of landscape imaging claim that it

- ▶ speeds the design process,
- ▶ allows rapid design changes,
- ▶ gives clients more opportunity to participate in the design process,
- ▶ increases the contractor's chances of selling the job.

"It doesn't come down to, purely, how do we create better designs," says Jim Karo, president of Visual Impact Corp., Hopatcong, NJ. "It really comes down to better communications. How to better deliver a concept to your customers, have them understand it, agree with you and move forward. And in less time."

Traditionally, landscape designers have relied on pen and pencil drawings to help customers and potential customers visual-

ize the landscapes that the contractor is proposing. Some contractors now produce these site plans with their computers. The overhead site plan is a view from above the property. It shows representations of structures such as homes and outbuildings, features such as creeks or hills, and any proposed landscape improvements such as patios, decks, pools, trees and ornamentals. These are all drawn to scale, sometimes lovingly so.

These drawings serve several purposes, including the location and size of landscape features and plants. They can serve as a working plan for installers. The designer also counts on the site plan to help sell the project to the client.

But, as Karo points out—"Your friends don't come to your house in helicopters. It doesn't matter what your landscape look like from up there. It matters what it looks like from the curb."

He says that customers are more likely to respond favorably to a more realistic view of their proposed landscape. This is where computer imaging is strongest. Here, basically, is how it works. Like everything else, familiarity with the program speeds the process.

The "designer" takes a photograph of a client's, and scans the photograph onto a computer. Obviously, the better the quality of the photograph, the better the computer image. For most purposes, a small, automatic-exposure, self-focusing, 35 mm camera will do just fine. Or, the designer can use a digital camera and immediately download the image. If he or she has a laptop they can do this in the cab of their truck, or in a client's living room. For now anyway, the image from a digital camera is



The 'before and after' capability of selling with imaging programs makes them just the thing for the faster-paced lives that many people seem to live.

not as sharp as a photograph, but the price of digital cameras keeps falling and the quality gap is narrowing too.

Once they've scanned the photo of the house into the computer, they go to the imaging software's library and retrieve whatever features (pavers, retaining walls, etc.) or plant material. They "layer" and size these landscape features onto the image of the house and surrounding property. These libraries offer several thousand plant choices, just about anything that's commercially available.

"What you want to create is an image that looks so realistic that you can't tell that it's an image," says Karo. "You want to wow the customer. The customer has to see your idea. The customer has to understand it."

That's why most customers prefer to see a photo realistic image of what their landscape is going to become rather than an overhead site plan. Even so, he acknowledges, the site plan is valuable too, particularly for job costing and also to give



The question to pose to potential customers when showing them this comparison might be, "Would you rather live in the 'before' house or the 'after' house?"

the installation crew a plan to work from.

"It also makes a lot of sense to do it on a computer because you can make your

moves and changes a lot quicker," he says. More and more landscape companies are offering the computer-generated image, then putting together more detailed plans if the job looks like a "go".

Landscape imaging has caught the eye of other industries, says Karo. For example, some real estate developers are using it to show prospective homeowners what their property could look like with a professional landscape. Or, even, to sell the landscape as part of the home package.

Nurseries and garden centers are beginning to use it to increase plant sales. One growing trend is to offer free design services with, say, a certain amount in plant sales to a client.

"This is a tool, just like all the other tools you have in your business. It really comes down to, how can it help my business? How can it make me more effective? How can it separate me from everybody else out there?," says Karo.

"And, how can it help me sell the job that much quicker?" □

Getting started is getting easier

Computerization is a necessity for today's grounds manager or landscape company. Computers save labor and time when it comes to performing routine, repetitive tasks. And, increasingly, they're being used as a creative tool.

The good news for landscape companies is that the price of personal computers and software keeps dropping, and the tasks that they can perform—including landscape design—keeps increasing.

Here, in a nutshell, is what you'll need to create landscape designs with imaging, according to Jim Karo, president of Visual Impact Corp., maker of Computer Landscape Design Software:

- ▶ a personal computer with, at least, a Pentium chip and 16 meg. Most new computers have 32 meg. The software is designed to be used with Windows '95, and will be compatible with the to-be-introduced Windows '98.
- ▶ a monitor. Buy the largest one you can afford.
- ▶ a scanner. You should be able to find one that will scan at 300 dpi for under \$300.
- ▶ a color printer. Again, you can buy an acceptable one for under \$300.
- ▶ a 35 mm camera to take photographs of client's properties. The small, automatic-exposure, self-focusing models costing \$120-\$300 will work fine.
- ▶ A Zip drive to back up your designs after they've created on your computer.
- ▶ imaging software from a reputable company. And one that continues to offer new products, upgrades, and prompt technical support.

—rh

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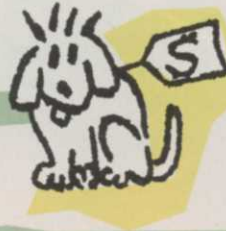
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Build your Workers

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Worker recruitment, training, and retention become more critical in 1998's low-unemployment economy.

By RUTH E. THALER-CARTER



Lebo Newman says training should be on-going.

Once someone is on his team, Eric P. Cross seeks to "grow" them through development and rewards.

"We keep them focused," says Cross, president of Duke's Landscape Management, Inc., Hackettstown, NJ. "We make the work fun, as much as possible, by being creative, friendly and challenging." Cross also remembers the basics: "We pay well, often better than our competitors, and we offer bonuses, a 401K retirement plan and health insurance."

To encourage and retain his 40 employees, Cross has a policy of on-going rewards. We have monthly training sessions for all employees," he says. Once the work is done, we make it into a pizza party, with a birthday cake for everyone whose birthday is that month. If a crew has been sweating their guts out in the summer heat all day, I'll get them ice cream when they come back to the shop. I like to surprise people with gift certificates, ball game tickets." Cross also makes constant use of educational resources of state professional organizations, nearby Rutgers University and area junior colleges. He also occasionally brings in motivational speakers "to get people pumped up" and excited about their work.

On the practical side, Cross makes sure his company keeps its equipment and trucks in good shape. "That's a way of showing our people that we care about their safety," he explained.

One proof that these policies do result in valued employees, notes Cross, is that "other

companies often try to hire our people because they know our crews are well-trained!"

One area that Cross already is working to improve in the new year is the company's promotional structure. "We're bringing in a consultant to help us look at how people can move up in the company, among other concerns," he says. "We'd like to do a better job of that, because people who know they have a career path are more likely to stay with you."

In fact, we have a whole list of things we want to look at with the consultant's help to make things better in 1998."

All of these efforts are not only important but invaluable for any landscape company looking to succeed in the new year, especially one with a goal like Cross's of 20 to 25 percent growth this year. "Our employees make the company," says Cross. "They are our most important asset."

The static nature of the local economy is pushing Tim Aalbu, president of Aalbu Landscape Maintenance in Everett, Wash., to recruit harder. "We will be working with our state association on cooperative job fairs, to promote both our industry and our own companies," he says.

He will also be working outside the industry with organizations like the Private Industry Council.

"Unemployment is at its lowest in our area since the early 1970s, the local market has dried up, so we're going out of our area to look for new people," he says.

This may include offering a shuttle service to pick up and



photo: Fred Bird

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return workers needing to ride a ferry to work. Or, "we may create partnerships with agencies that work with the disabled and disadvantaged," Aalbu says. "We'd have to be careful about the type of job, but we believe this is an untapped niche in the workforce."

While looking for new people in new places, Aalbu also works hard to keep those already in the company. "We just had our annual company holiday party, and gave out \$20,000 in bonuses," he said. "The labor market meant that we were very short-staffed throughout the year, and everyone did extra work."

Aalbu also started a 401K retirement plan and kicked in \$10,000.

Realizing the employees who feel valued tend to stay put, Aalbu says he gives "a lot of attaboys" and is aware of every good thing an employee does that deserves a little extra recognition.

"We do a lot of little things to make people feel encouraged and appreciated."

Training is another way of rewarding, encouraging and motivating staff, but it's also vital to providing valuable service and building client loyalty.

Training is vital for Redwood Landscaping in Santa Rosa, Calif., according to Lebo Newman, president. His exterior commercial maintenance company operates across nine counties in northern California and has about 200 employees during peak seasons.

Redwood invests at the front end of the process, by "spending a lot of time making sure a new employee will fit in"

before hiring, and then providing on-going training with an eye toward developing career employees.

The company's training program reflects Newman's long-time involvement in industry certification, which originated with the California Association of Landscape Contractors (CALC) and now is a focus of the Associated Landscape Contractors of America (ALCA).

"Our training program has been linked to certification all along, but is only part of our training focus," says Newman.

"Training is such a multi-faceted effort at our company that our employees often refer to Redwood University." Redwood's training starts with a six- to eight-hour orientation for every new employee. It covers administrative details to safety to company culture, "our basic value of courtesy and service," says Newman. To ensure both confidence and safety, "not one piece equipment can be used unless you've been trained on it," he adds. Keeping track of such extensive training is done with a "master sheet" for each employee. It notes every training activity each employee has completed.

Even new managers go through "Redwood University," Newman adds. "We don't assume that anyone knows how to run anything. That's not just for safety reasons. We are teaching our company's style,

technique and culture." That includes being "the least offensive" to neighbors and customers when operating noisy equipment such as leaf blowers, a hot issue in the California. "We've gotten a lot of calls about how polite our people are and how much their courtesy is appreciated."

At Bio Green in Ashburn and Manassas, Va., the benefits of training go beyond meeting state regulations. "A training program lets us assess the value

of employees, have a mechanism for constant re-evaluation, builds consumer and customer confidence in our company, expands our market, and gives us a basis for employee raises and promotions," says David Schrader, staff agronomist and sales vice president.

Training is a tricky issue, though, in a company that has about 20 employees in the winter and 60 in spring and summer. "We walk a fine line on how much to invest in training, because we have a huge number of new people every year," adds Schrader.

Bio Green uses a state-mandated two-tier training system for pesticide application, which involves 40 hours of training and a 50-question exam to obtain registration status.

The "initial hump" for Bio Green, Schrader says, is to get people through the testing process to keep enough certified people on staff.

Achieving state registration and certification is an incentive for employees, who receive "an automatic bump in pay" once they pass the test. Bio Green has a formal tracking mechanism: a written list of Route Foreman Skill Levels that break down to four different levels of competency, with progress to each skill level verified by the vice president of production and branch manager.

One of the best training tools in the industry is the ALCA Certification program. "We offer a full two days of training to prepare for the Certified Landscape Technician (CLT) test, and we're finding that we have people taking it simply as a training resource," says Beth W. Palys, CAE, executive director of the Landscape Contractors Association (LCA) of DC-MD-VA, in Rockville, Md. Many larger companies, she says, use certification guidelines as part of their in-house training programs, above and beyond preparation to taking certification tests. That's because "certification is seen as a process that validates landscaping expertise," she said. "It's not an easy test to pass, so doing so means that a person has a technical value to both the company and the industry."

"There is a real need to differentiate between companies and find qualified people. Training and certification are one way to do so." □

—Ruth E. Thaler-Carter is a freelance writer-editor based in Baltimore, Md.



Tim Aalbu is seeking creative ways to attract, retain workers.

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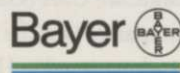




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LandCare **USA** arrives

Six regional landscape companies join forces to found a company that they feel will soon be recognized nationwide.

Five landscape companies and one tree company are the founders of a new national landscape services company. By the time you read this, other landscape or tree care companies may have merged with Land Care USA.

This consolidation is needed, say the founders of LandCare USA, to better serve the growing number of properties owned or managed by regional, national real estate and other commercial concerns.

"There's a tremendous consolidation of the owners and managers of real estate," said William F. Murdy, chairman and CEO of LandCare USA.

"They're looking for larger professional companies to continue to consistently deliver what they want on their properties."

The founders are:

Roger Braswell, president of Southern Tree & Landscape Company, Charlotte, NC.

Bruce Church, president of Church Landscape Company, Chicago.

David Luse, CEO of Arteka Corporation, Eden Prairie, MN.

Jeff Meyer, president/CEO of Desert Care Landscaping, Inc., Phoenix.

Hal Cranston, president of Four Seasons Landscape & Maintenance, Foster City, CA.

Linda Benge, president and CEO of Trees Inc., Houston.

They reportedly received cash and stock, and positions on the LandCare USA board, in return for merging their companies into the new national company which is headquartered in Houston, TX.

On Feb. 16, they, and more than 50 other landscape company owners and managers, gathered in a

ground floor room at the Vinoy Hotel during an afternoon reception at the ALCA Executive Forum here. The purpose of the reception was twofold: to explain the concept of LandCare USA to the landscape professionals who were attending the ALCA forum; also, to attract new member companies. LandCare USA was formed late in 1997.

Hal Cranston, who recently agreed to serve as Chief Operating Officer for the new firm, said that he and business partner Jim Marcus, joined the national firm to grow Four Seasons Landscape.

"We look at this not as an exit strategy but really as a growth strategy," said Cranston. "We've spent over 30 years building our business from one location to eight locations. And every other year or so we would add another branch or maybe open another location. We wanted to accelerate that process.

"We felt this was the way to get to the next plateau where we could obtain additional resources.

"We also, most importantly, wanted to stay involved in the business and let our employees participate in the growth and in the expansion," he added.

Notra Capital Ventures II, also based in Houston, is backing the new venture. John R. Oren, managing director, said that Notra has, within the last 10 years, been involved in consolidations of other industries fragmented by the presence of many smaller companies: heating/ventilation/air conditioning, same-day delivery services (Oren himself owned a company in this business), ambulance services, bus services, and metals.

He stated that several of the national companies backed by Notra then went public and are now traded on the New York Stock Exchange. This is also the goal of LandCare USA, with an initial public offering perhaps as early as May, it was stated several times at the reception.

Oren said the consolidation's goals are threefold: share holder value increase, customer service in-



Hal Cranston is LandCare USA COO but he's still looking to grow Four Seasons.

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crease, and employee improvements.

"We act as sort of a key agent to bring entrepreneurs together to create a company that essentially partners up with the business owners to help them grow their businesses in a way that they could not do as privately held," said Oren.

LandCare USA President Murdy, who came from the real estate industry, emphasized that the new company wants to "maintain the entrepreneurial spirit and fervor" of the joining companies rather than having "an homogenized, one-size-fits-all, report-it-all-this-way company."

Added David Luse, Arteka, Eden Prairie, MN. "I think the operative word here is partnership, merging rather than selling out. We have no interest in that (selling out). The interest is to partner with other leaders around the country and gather all of those best practices and build another great company."

Added Mark Yahn, Ground Control,

Orlando, "My business wasn't for sale either.

"Since we've become committed to the concept, we've contacted a lot of our friends in Florida."

In response to questions from some of the landscapers at the reception, Murdy said that LandCare is focusing on companies with strong commercial landscape installation/maintenance and/or tree care presences in their particular markets. He said that \$1.5 to \$2 million in revenues is about "the bottom end" of the range for partnering with LandCare USA.

"We're trying to be as flexible as we can within the confines of being able to have something that continues to deliver. But



Mark Yahn enthused about LandCare USA.



Bill Murdy said consolidation underway.

residential we're not focusing on. Or on owning inventory like nurseries."

Again, in response to a question from the audience, Murdy said that LandCare USA looks to expand into other markets across the country. "We

have a national presence, but it has a lot of holes," he admitted.

"Professional real estate and management organizations are looking for other professionals who can deliver to them in a responsible and responsive way the kinds of landscape services that they want," he said as the reception ended.

"As more of these combine, the people who can deliver in more than one place are going to be advantaged." **LM**

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

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

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

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

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

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

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



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

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

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

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

Who Should Get Marty Grunder's Special Report?

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

How To Get Your Free Report:

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

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Events

MARCH

6-7: Tampa Spring Expo, Florida State Fairgrounds, Tampa, FL. 813/960-1457.

7-15: FloralScape, Cleveland Convention Center, Cleveland, Ohio. Kati Campbell, 216/721-1695.

10: Tree & Landscape Care Workshop, Ramada Plaza Hotel Carowinds, Fort Mill, SC (Charlotte), Jeanne Campbell, 864/656-2479.

10: Community Tree Conference, Bowker Auditorium, Stockbridge hall, UMass-Amherst, MA.

Kathleen Carroll, 413/545-0895; Dennis Ryan, 413/545-6626.

12: Tree & Landscape Care Workshop, North Metro Tech, Acworth, GA. (Atlanta), Jeanne Campbell, 864/656-2479.

11-13: National Truck Equipment Association Annual Convention & Exhibition, Las Vegas, NV. Joan Christophersen, 800/441-6832.

12-15: ALCA Student Career Days, North Carolina State University, Raleigh, NC. 703/736-9668.

14-18: Chicago Flower &

Garden Show, Navy Pier on Chicago's Lakefront. 312/321-0077.

18-19: CLCA Landscape Industry Show, Long Beach Convention Center, Long Beach, CA. 916/448-2522; 916/446-7692.

21-22: State Garden Show of Texas, Heart of Texas Fairgrounds, Waco. 800/727-9020; 817/772-8696.

22-25: Crittenden Golf Expo X, Palm Springs Convention Center, Palm Springs, CA. 800/208-6508.

26-29: Capital District Garden & Flower Show, Hudson Valley Community College, Troy, NY. 518/356-6410, ext. 418.

APRIL

4: Design, Plant Selection and Maintenance of the Perennial Garden, Lakeland Community College, Mentor, Ohio. 614/292-7691.

6: ASCA Arboricultural Consulting Academy, Arbor Day Farm (Lied Conference Center), Nebraska City, NB. Call ASCA 301/947-0483.

19-22: North American Snow Conference, sponsored by the American Public Works Association, Kansas City, MO. 816/472-6100; 816/472-1610. **LM**

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 **The National Arbor Day Foundation**

The Bunton Division of Jacobsen Textron has appointed seven new distributors: American Parts Distributors, Inc., Rockford, IL; Beaver Valley Supply, Denver, CO; Horizon Irrigation and Turf Solutions, Tempe AZ; Kimber Distributors, Syracuse, NY; Mid-America Golf and Turf Equipment, Shawnee, KS; Vans Supply and Equipment, Inc., Green Bay, WI; W.F. Miller Co., Novi, MI.

The 1998 Tournament of Roses Parade in Pasadena, CA, awarded its Sweepstakes Trophy to the float entered by the **Rain Bird Sprinkler Manufacturing Company**, Glendora, CA. The float, entitled *Adventures in the Rain Forest*, depicted the treasures of a lost civilization in the rain forest, complete with waterfalls, animated monkeys, butterflies

with wings flapping and a mist of water falling throughout the forest. It was decorated entirely by Rain Bird employees and their families.

Mesa Sprinkler purchased Phoenix-based Horizon Turf, Horizon Turf de Mexico, and Washington-based Evergreen Pacific and united them under the new name Horizon. Horizon, based in Tempe, AZ, is now the largest supplier of irrigation and turf-care solutions in the West with 165 employees and 15 locations.

L.R. Nelson Corporation, Peoria, IL, reorganized its turf division this past fall. **Dave Eglinton**, vice president of sales and marketing, says that three regional sales managers will coordinate all turf sales and marketing efforts under the direction of national sales

manager **Charles "Pepper" Putnam**. **Dale Hansen** is the Midwest regional sales manager; **Jeff Rzepecki** works in the West; and **Clark Graham** heads the Eastern sales effort.

The Toro Company topped the billion dollar market in sales in 1997. Net sales for the year were \$1.051 billion compared to \$930.9 million a year ago, an increase of 12.9 percent, including sales from its James Hardie Irrigation acquisition. Without Hardie, Toro net sales were flat compared to last year. "This year was a challenging one for Toro but also a pivotal one in that we made key investments that position us for growth into the 21st Century," said **Kendrick B. Melrose**, chairman and chief executive office of Toro.

Century Rain Aid acquired

Gulf Coast Pump, a wholesale distributor of irrigation and well drilling supplies with four locations in Alabama and Florida. Century Rain Aid, headquartered in Madison Heights, MI, now has 68 locations in 18 states and Canada. It's a subsidiary of Richton International Corporation.

Dr. Richard Hurley, executive vp of **Lofts Seed**, presented an annual royalty check totaling \$822,522 to Rutgers University. Hurley made the presentation to Dr. Reed Funk, Dr. Bill Meyer, Dr. Dan Rossi, and Bruce Clarke. In related news, Lofts, based in Winston-Salem, NC, awarded academic scholarships to 28 students this fall. Since 1983, the Peter Selmer Loft Fund has awarded over 150 scholarships to students studying turfgrass science at Cook College of Rutgers University.

Edwin Hunter, founder of **Hunter Industries**, died at the age of 81 in San Diego, January 23. Hunter held more than 150 US patents for turf and landscape irrigation products. His first company, Moist-O-Matic, used thermoplastics in the manufacture of irrigation equipment. After Toro bought Moist-O-Matic, Hunter directed Toro's irrigation division for 20 years. He founded Hunter Industries in San Marcos, Calif. in 1981. He is survived by sons Paul and Richard, and a daughter, Ann Welborn. Donations will be accepted at the Edwin and Frances Hunter Scholarship Endowment Fund, The Bishops School, 7607 La Jolla Blvd., La Jolla, CA 92037.

Info center

VIDEOS AND LITERATURE FOR THE GREEN INDUSTRY

POPULAR REFERENCE BOOK... *Turfgrass Management Information Directory*, edited by Dr. Keith Karnok, features several new sections. There is now ordering information for several hundred videos, slide sets, books, magazines, seed and fertilizer samples and more. The director also includes complete listings of soil and plant analysis labs, diagnostic labs and computer services. There are climate maps, turfgrass chemical information, scientific names of turfgrass pests, conversion tables and calculations. Cost for single copy is \$34.95. Discounts are available for bulk orders. Contact Ann Arbor Press, 800/858-5299.

GARDENING IN HOT SPOTS... *Heat-Zone Gardening* (from Time-Life Books) by Dr. H. Marc Cathey, President Emeritus of the American Horticultural Society, (with Linda Bellamy) is reported to be the only available gardening guide that explains the first-ever AHS Plant Heat Zone map by Dr. Cathey. The book offers ideas to create ideal gardens that fit both climate and landscape, in any locale. Color photographs and illustrations, as well as step-by-step instructions on how to choose climate-adapted plants. Design and gardening techniques for drought and summer heat conditions are included. Cost is \$24.95. At bookstores now.