

# WHEN IT COMES TO GUARDING AGAINST WEEDS, THINK OF US AS MAN'S BEST FRIEND.



*The Andersons  
Proven Professional  
Turf™ Fertilizers  
Combined With  
TEAM™ Broad  
Spectrum Weed  
Control Get You The  
Results You Need To  
Turn Customers Into  
Friends For Life.*

Standard Professional Turf fertilizer formulations incorporating *Team* include:

- 25-3-8
- 20-2-6
- 20-5-5

Each product is individually designed to meet specific nutrient requirements *and* deliver up to 16 weeks of effective weed control. But you get more than effective-ness. You get efficiency, too, because you get two jobs done with one application.

*Team* is a proven performer when it comes to crabgrass, goosegrass and many other pesky weeds. Plus it's labeled for use on most major turfgrass species. With The Andersons superior formulating capabilities you get clean, free-flowing products for consistently great results. Use The Andersons Professional Turf fertilizers with *Team* and make your customers friends for life.

**the professional's  
partner®**

**The Andersons®**

For more information  
about our Professional  
Turf products, call toll-  
free 1-800-225-ANDY



™ TEAM is a registered trademark of DowElanco  
© 1994 The Andersons.

# Green industry discovering CAD

**Today's design software is affordable and easier to use, but it still takes a pro with a plan to make it work.**

■ Computer-aided drafting, drawing, or design—call it whatever you want. Most people refer to it by its acronym, CAD. In the landscape business, it allows knowledgeable users to produce draftsman-like landscape plans more efficiently than they can by hand.

The key word here is efficiency. It's a tool that can make the landscape design/sell/implementation process more efficient.

Almost all professional users also describe it as a time-saving tool. This is particularly true when they revise landscape plans. It's easier to make changes on the computer rather than with a pencil.

But perhaps the real benefit of using CAD is its ability to more efficiently "marry" designs with their real-life financial parts. In a very real sense, it acts as a calculator, starting by providing material takeoffs of designs. Most programs can quickly provide volume calculations for cubic yards of mulch, crushed granite, or other landscape material, too.

Actually, you did the hard work prior to the design process by pricing your materials and figuring specific labor hours for each type of task. You inputted this data into the program before you made your first design.

But it's CAD's ability to turn out neat, colorful designs quickly that attracts most attention in the industry.

"I'm competing with guys who do sketches on a yellow note pad," says one contractor who claims he turns out full-blown, detailed residential plans in three hours where it used to take him almost a day. "When I hand a potential client one of my designs, who do you think is going to get the job?" he asks.

Explains another landscaper: "Two contractors come to your home. Both of them walk around your property, and you tell them all the things you want done—a brick walkway, a deck, flower beds.

*continued on page 14*

## CAD SUPPLIERS

**LandDesignerPro for Windows**  
Circle No. 311

CAD program to help landscape pros produce comprehensive proposals with full-color designs, plant and materials lists, and cost estimates. New feature: a grow option which portrays landscapes as they will mature over time.

**LandWorks for MAC and PC**  
Circle No. 312

Combines CAD power of PowerDraw (Engineered Software) with landscape features. Built-in plant symbol, irrigation symbol and construction details libraries, multiple layers (base sheet, irrigation layer, planting layer, etc.), color capability, easy calculation of square footage, linear feet, plant counts, etc. Output to Apple Imagewriter, LaserWriters, color PostScript printers, HP plotters and printers. System requirements Mac SE or better.

**Professional CAD by UDS**  
Circle No. 313

For IBM PCs and PC compatibles with Windows. Drafting modified with landscape symbols and tools. CAD drawing automatically converted into an estimate. Computer will do the take-offs. When combined with UDS Estimating software, can cost a project down to the last tree stake. Will also print a detailed work order.

**Site Designer by Landcadd**  
Circle No. 314

Site Designer by Landcadd. Windows-based. Stand alone. Provides comprehensive site planning and landscape design tools, irrigation and estimating capabilities. 3-D capabilities. Site planning. Irrigation design. Landscape design with growth simulator. Fully automated reports. Minimum requirements: 386 computer with a math co-processor, Windows 3.1 and 8 megabytes of RAM.

**Gardenview**  
Circle No. 315

Plant database (can be modified) and 3D garden and landscape design capability. 3-D views from any perspective and any day of the year for correct coloration. Needs IBM compatible.

**ImageCELS Designer**  
Circle No. 316

High-quality, photo-realistic texture maps including brick, block, pavers, cement, finishes, roofing, stone, fixtures, people, sky, trees and landscaping materials.

**Landworks**  
Circle No. 317

CAD system for landscape drafting on a Macintosh. Irrigation symbols, construction details and landscape tutorials. Needs Macintosh SE or better.

**Mini CAD 5**  
Circle No. 318

Mini Cad 5 combines 2-D CAD, 3-D CAD, a database, spreadsheet, and a macro language into one program. Tools make landscape design easy. Both 68K and Power Mac versions included in one box. Requires Mac Plus or better, 4 MB RAM.

**LLDesigns Package**  
Circle No. 319

Driven by DeluxePaint II. Meticulous, colorful hand-drawn graphics for more than 550 cultivars of annuals, biennials, perennials, bulbs and woody plants. Disc containing cultivar info that can be imported into the word database of computer. Various packages available. Need 1MB or compatible 386 or larger with minimum of 2 megabytes of RAM. Requires DOS 5.0 or higher.

## Landscapers agree: they're more efficient, accurate with CAD

■ Patrick Burrier considers himself an artist.

He likes the feel of a drawing pencil in his hand. For years he drew meticulous and colorful landscape designs for clients. He learned the art at Michigan State University, and refined it at his own landscape business in northeast Ohio. He still dusts off his tee-square and pencil. But not often. Burrier designs landscapes mostly on his computer screen now.

The computer, and particularly the Landcadd design software, are tools that allow him to:

- ✓ Reduce the time it takes for designs and revisions, often in half. Clients usually spend less on design fees. Burrier himself can make more presentations and land more jobs.

- ✓ More efficiently and accurately calculate costs for designed projects.

- ✓ Bring customers more directly into the designing process.

Sometimes on a Saturday morning, in fact, he invites a prospective client to his office. Burrier encourages suggestions as he directs the computer's cursor in building a design on the electronic screen. Almost effortlessly he can widen a walkway, change the color and texture of pavers, or add a flower bed.

"Before, if I took a master plan out to client in pencil and the client decided to change some details, I had to go home and redraw the whole plan," says Burrier. "With the computer I can make changes in minutes. Then I just reprint it."

That's just one of the benefits that computer-aided design (CAD) provides Burrier's Mentor Landscapes & Supply Co.

"When I visit a property now I put a tape measure on it. We can be right on the money with the computer, down to a quarter of an inch on a design," he says.

This allows Mentor Landscapes to bid and estimate projects accurately. Once the design is complete, and all of the design elements are in place, the computer calculates the exact amount of materials needed—plant material, mulch, pavers, retaining walls, all materials, in fact, needed for the job.

Then, using real-life prices that Burrier has assigned (and periodically updates) for



Pat Burrier: CAD won't make you a better designer, just a more efficient one.

each of these elements, the computer calculates his cost for materials based on each design, and also the labor. It also figures an estimate for the client. Almost at the touch of a button.

"I'm not going to end up saying to a client, 'we forgot to figure these materials and we've got to charge you another \$2,000.' We don't make those kinds of mistakes," he says.

Burrier attended classes at nearby Lakeland Community College to learn how to use AutoCadd, the drawing/designing software for designing everything from widgets to buildings. He then piggybacked the more specific Landcadd land planning software into his system.

By adding custom touches, like his own intricate and colorful plant symbols and an impressive company title block, Burrier makes his designs stand out even more.

Burrier estimates he's spent about \$20,000 on his computer, a 486-series coprocessor with 66 mhz and two drives including a 540-megabyte hard drive, a 24-by-36-inch digitizing tablet and a plotter, plus his design software.

He plans to incorporate more 3-D into his designs. He's also investigating using animation.

But some landscapers say they don't need all the designing capacity of AutoCadd. They say newer stand-alone programs fulfill their design needs fine.

Robin Cloetens of Garden Keepers, a small design/install company in Lake Port, Mich., designs distinctive perennial gar-

dens, rose gardens, water gardens, Japanese gardens and herb gardens.

Cloetens uses a PC and LandDesignerPro software.

"When we design a project, we design what it's going to look like in 10 years," she explains. "We do a full-blown design and then, when we find out what the client's budget is for this year, we back the design down to what they can afford. Most clients love it."

Designs on the computer screen can be held in a client's hand after coming off a dot-matrix printer. They can be done on translucencies layered and put into a binder to show the project broken into its various phases, too.

Bruce de Wit of Rosemont Nursery, Grand Rapids, Mich., puts together booklet-sized presentations containing several different views of a client's property with his software from UDS. Moreover, each computer drawing is accompanied by a materials list and prices.

"I think AutoCadd is too difficult for a small landscaper who doesn't do designing or estimating every day," says de Wit, adding that he found the UDS program relatively simple to master.

"But convincing people that they can do this, too, can be difficult," he admits.

De Wit says that since he combined the computer drafting package with the UDS estimating software he'd been using for several years, he almost doubled the number of estimates he can prepare.

—Ron Hall

## CAD from page 12

"One hands you a little drawing he's just done along with a business card. The other comes back the next day. He's got a cover letter kicked out on his laser printer, a drawing done on his computer. He's got a plant list, a reference list, a whole portfolio of information, including a professional estimate.

"Who's going to look more professional?"

CAD is finally seeping into the landscape industry, although some landscape pros still approach it like it's a snake in a shoe box. That's changing as design software gets easier to operate. Programs are also becoming more affordable. This is catching the attention of landscapers, most of whom run small companies.

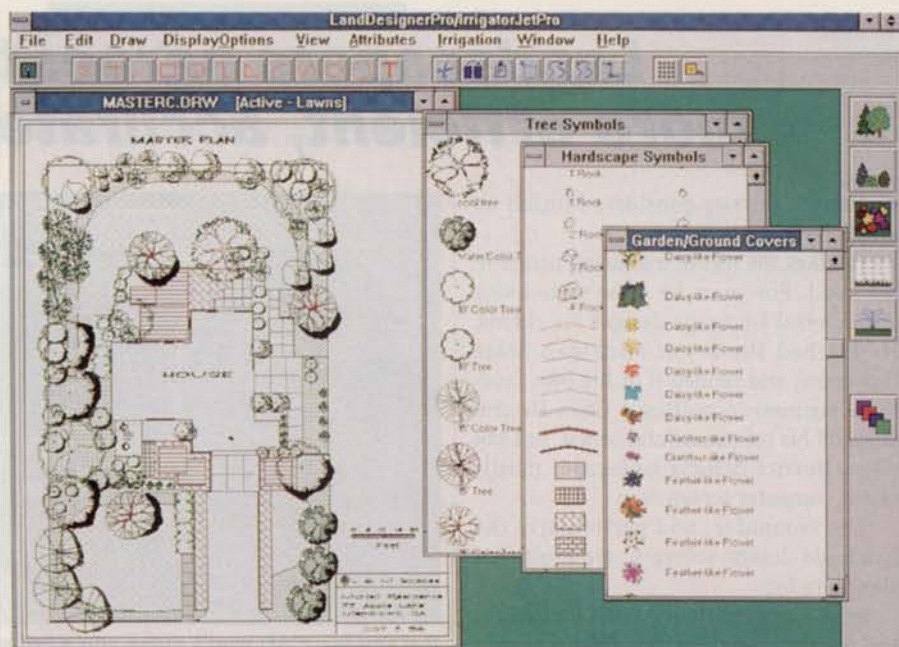
Most CAD-type programs for the professional market come, thankfully, from people who know the landscape business, then developed programs for it.

Their advice to landscape pros: forget the "rinky dink" stuff costing \$59.95 at the local builder supply store, software targeted primarily for do-it-yourselfers. Most of it was written by computer people who *think* they know landscaping.

The good landscape design software starts at about \$400. In fact, landscape pros—including but not limited to landscape architects—who do a lot of designing can easily spend \$20,000 and more for both their hardware and software. That's a lot of computer-related power, enough, in some cases, to moonlight as a rocket designer. No kidding.

Many landscape contractors don't need all of these accessories. Many can incorporate CAD—in 2-D plan views—for under \$2,000 if they're already computerized.

To run CAD programs easily, your IBM-compatible computer system should be at



**LandDesignerPro for Windows, from Green Thumb Software, displays landscapes as they will mature over time.**

least as large as a 486-DX, claims one knowledgeable user. Smaller systems like 286, 386 and 4786-SX lack the math co-processor chip and speed needed to do calculations required by CAD software.

Whatever the software, your computer designs should not end up looking like they're done by a 13-year-old with too much free time. In fact, most landscapers customize their programs, particularly plant symbols and title blocks. They want their designs to be distinctive.

"We want to see drawings that look hand-drawn, except we do them on the computer where we have this spectacular editorial capability," says the owner of a small landscape firm. "Our designs serve as the calling card for our work."

But CAD, apart from its value for designs and presentations, can be a powerful business management tool, inasmuch as it has to work in tandem with all the other information related to running your business—costs, estimates, schedules, work orders.

"It's nice to have a drawing, and that adds to your professionalism, but the fact of the matter is you still have to count up how many plants there are. And you still have to put a price on those plants. And you still have to calculate how many hours are going into the job," says a Michigan contractor and CAD user.

With today's constantly evolving landscape CAD software it's just getting easier to do.

—Ron Hall

## Salt-tolerant grasses to the rescue

**Georgia researcher rediscovers long-neglected seashore paspalum; seed firms screen traditional turfs.**

■ Salt kills or weakens most turfgrasses.

It wilts and desiccates them because salt in the soil solution creates a high osmotic pressure that restricts absorption of water and nutrients by turfgrass roots. But managers cursed with maintaining high-quality turf in saline environments can smile. Help is on the way in the form of a growing selection of salt-tolerant turfgrasses.

These grasses possess many of the characteristics of fine turf. In fact, they *are* fine turf, but they remain healthy in locations where turfgrass traditionally struggles:

✓ areas irrigated with recycled water (some effluents have high salt content),

✓ along highways "salted" during winter storms, and

✓ ocean-side golf courses.

While traditional species are being rescreened for salt tolerance, some scientists like Dr. Virginia Lehman at Lofts have been developing a newer alkaligrass, Salty. And others are readying grasses you may not be too familiar with yet.

Ronny R. Duncan, Ph.D., has collected—and is evaluating—270 ecotypes of seashore paspalum in turf plots at the University of Georgia, Griffin, Ga. He seeks varieties that thrive on golf courses with high salt levels.

"I'm confident I already have the grass-

# GRASSHOPPERABILITY

Make all the moves



you need to mow.

Drive one and you'll discover Grasshopper's unsurpassed comfort and ease of operation. You'll increase your productivity by finishing in less time and with less fatigue. Adjustable dual-lever steering lets you trim as you mow. No pedals to push. All controls are in the palms of your hands. Advanced dual-hydrostatic direct drives ensure smooth response, while

built-in durability saves downtime and gives dependable service season after season.

## Customize to your grooming needs.

Grasshopper offers the broadest line of zero-turn front mowers, 12 to 25 hp, gas or diesel, cutting widths from 44" to 72", with mulching deck options, plus Quik-D-Tatch® grasscatching systems and year-round attachments.

DISCOVER  
**GRASSHOPPERABILITY**

Get a "hands-on" demonstration at your Grasshopper dealer.



First to Finish... Built to Last

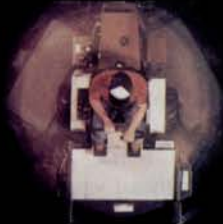
# GRASSHOPPER®

YOUR NEXT MOWER

The Grasshopper Company • One Grasshopper Trail • P.O. Box 637 • Moundridge, KS 67107 U.S.A. • Phone (316) 345-8621 • FAX (316) 345-2301  
Circle No. 105 on Reader Inquiry Card

**grass'hop'per a bil'i ty n.**  
the ability to make all the right moves for mowing quality and time-saving productivity.

## Zero-Radius Maneuverability



## Outfront Reachability



## Time-Saving Trimability



## Square-Corner Turnability



## Durability



©1994

es," says Duncan. "It's a matter of getting them evaluated for the fairways, the greens and the tees, then finding the best ones and going from there."

Actually, seashore paspalum has been found on U.S. courses since the mid-1960s when Pacific Sod introduced a cultivar, Adalayd from Australia, says Duncan. Initially used on golf courses in southern California, superintendents in the Southeast worked with it, too. It probably didn't find greater favor, he believes, because few superintendents knew how to manage it. Most treated it like a hybrid bermudagrass and encountered scalping and thatch problems.

"If you manage it like centipedegrass with very low fertility and cut back on the water, then it does extremely well," says Duncan. "We're developing management protocols for this grass for specific sites like a green, a tee, for fairway use and for roughs too."

Duncan calls seashore paspalum "the year 2000 grass," although he acknowledges it generally takes eight to nine years to get specific varieties into production.

"I told the USGA I wasn't going to sit back and wait for things to happen," says the University of Georgia professor. "In another two to three years we're going to know what's going to work. We will then evaluate them on many, many sites prior to release."

Beyond its ability to tolerate high salt levels (some cultivars will withstand up to 14,000 ppm salt), seashore paspalum requires much less fertilizer than either bentgrass or bermudagrass. So far, Duncan says he's encountered no major insect or disease problems. His major investigations have focused on winter hardiness. He says that shouldn't be a problem either and predicts the grass will be used on golf courses



**Trials at International Seeds shows what salt does to some varieties, in this case Eureka hard fescue and Sabre *Poa trivallis*.**

as far north as the coastal Carolinas.

"From an environmental standpoint, this grass is looking very good," says Duncan.

Although seashore paspalum has seed production capabilities, initially it will have to be vegetatively propagated. Duncan says the species has a complex called self-incompatibility—it must have pollen from plants with a different genetic background. "It's a problem that will have to be worked out," he admits.

Other turfgrass breeding programs have identified other turfgrasses with increased salt tolerance. Some are already being marketed. Expect more to become commercially available.

This past season Turf-Seed Inc. harvested one field of Seabreeze slender creeping fescue that, according to plant breeder Crystal Rose Fricker, was both salt tolerant and performed admirably in shade trials. "We're trying to put out more acres of Seabreeze this fall," she says.

"We have a group of tall fescues that we're cycling (for salt tolerance)," she adds. "In fact, I did all the cool-season species.

We have the survivors planted out now." Particularly promising: salt tolerant bentgrasses collected by Dr. Joe Duich on golf courses located along the Eastern seaboard.

"We have a slender creeping red fescue, Marker, that does very well at 5000 ppm," says Craig Edminster, director of research, International Seeds. He's been examining turfgrasses growing in solutions with 1500, 2500 and 5000 ppm of salt.

"We plan on screening virtually all the species that we have in our program. Our next group will be our new, improved perennial ryegrasses," adds Edminster.

Having identified salt-tolerant varieties, the company can then offer mixtures that establish rapidly and maintain good persistence along roadsides that get winter road salt. "Of course, some of these will be used on golf courses or in areas that irrigate with effluent water too," says Edminster.

Lofts Seed says its new alkaligrass developed by Virginia Lehman performs extremely well under high salt and/or alkaline soil conditions. Aply named Salty, it's described as a slow-growing, cool-season turfgrass with fine-leaved texture. It can be cut to as low as 3/4" or allowed to grow about 16," creating a natural-looking low-maintenance turf.

Lofts is targeting it for full sun at sea shores and along roadways and sidewalks with salt problems. In fact, says Lehman, it performed admirably on an oceanside hole at famed Pebble Beach, providing healthy turf when the overseeded ryegrass failed because of salt.

It can also be used for winter overseeding of dormant bermudagrass where soil conditions dictate use of alkaligrass, says Lehman. Quantities are available.

—Ron Hall

## Relative salinity tolerance

### GOOD

Bermudagrass

Zoysiagrass

Creeping bentgrass

St. Augustinegrass

### MEDIUM

Tall fescue

Perennial ryegrass

Colonial bentgrass

### POOR

Meadow fescue

Red fescue

Kentucky bluegrass

Centipedegrass

Source: "Turfgrass Science & Culture" by Dr. James B. Beard

*Can a new scent rekindle  
an old relationship?*



# *New Dursban Pro keeps you in step with your customers.*

Sometimes a new scent works wonders. So stay in step with your customers by using new Dursban\* Pro insecticide. It gives you all the performance you expect from Dursban, in a new low-odor formulation.

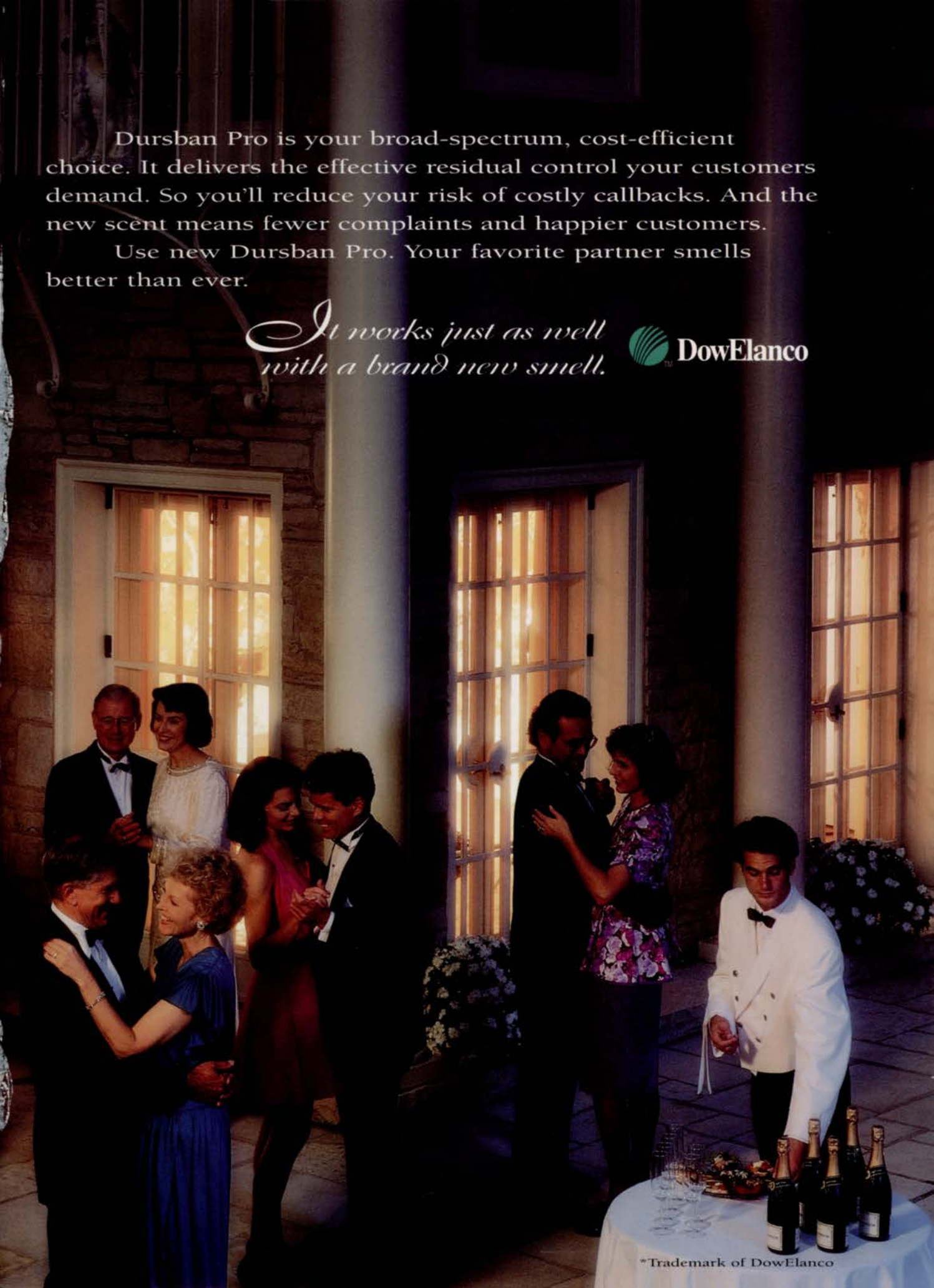




Dursban Pro is your broad-spectrum, cost-efficient choice. It delivers the effective residual control your customers demand. So you'll reduce your risk of costly callbacks. And the new scent means fewer complaints and happier customers.

Use new Dursban Pro. Your favorite partner smells better than ever.

*It works just as well  
with a brand new smell.*



\*Trademark of DowElanco

# *We know pest management inside and out.*

New Dursban\* Pro insecticide, for both indoor and outdoor applications, is another innovative development from DowElanco.

This new formulation combines cost-efficiency, effective residual control, and a new scent—all in one product. The new label has more use sites and target insects listed than the old formulations of Dursban. And Dursban Pro also carries a caution label.

So continue to look to DowElanco for the latest ideas. We're the company you can count on for quality products, helpful advice and the best service in the business. For more details, call 1-800-352-6776.



# GOLF & ATHLETIC TURF

## Education never ends at Stillwater Country Club

**This former teacher takes delight in showing others how to be more efficient and useful.**

■ Kevin Clunis, superintendent at Stillwater (Minn.) Country Club, believes in education—everyone's, including his own.

It's only natural: Clunis received a bachelor's degree in education in 1981. He even taught school for a while before pursuing a two-year degree in turf so that he could return to one of the part-time jobs he had once treasured—working on a golf course. He was assistant superintendent at Stillwater for just one month before being promoted.

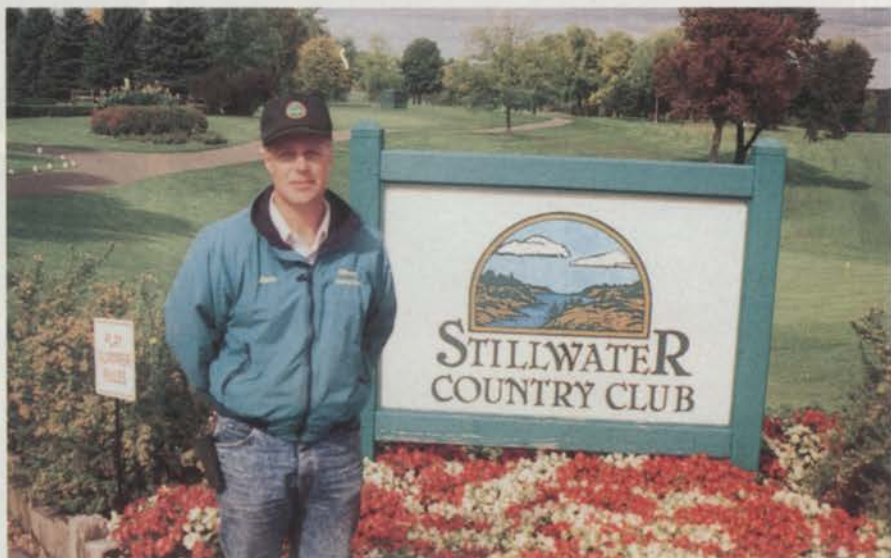
"I enjoy teaching people new things," says Clunis. "Everyone on staff has to know how to operate a weed whip and a walking greensmower. In our profession, you can't stop learning."

The training program Clunis devised is basically hands-on instruction, though videotapes on safety procedures are also used.

He has 19 employees, including a full-time mechanic and a full-time assistant. "I let part-timers do some thinking, and they take pride in that," Clunis reveals.

His assistants are normally hired from the ranks of newly-graduated college students in golf/turf studies. After hiring them, Clunis teaches them everything he knows and, "in two or three years, I move them on" to, perhaps, their own course.

Clunis is also very active in educating



Even after 11 years, superintendent Kevin Clunis still walks out onto the course to watch the sun rise every morning.

his fellow superintendents. He was one of a large group of supers who helped formulate a loose-leaf binder about environmental considerations for members of the Minnesota Golf Course Superintendents Association. The binders were received so well that the Golf Course Superintendents Association of America (GCSAA) is considering a similar project on a national scope.

Clunis has a very laid-back managerial style. "I feel very comfortable allowing people to make mistakes. That hits home a lot more."

"I keep a list of jobs that have to be done posted. I let them pick and choose what they want to do. I'm not always a dictator, and they respond to that."

His philosophy of course management is day-to-day consistency, which is work-

ing well. "A long time ago, a member told me that a player should be able to shoot the course record any day of the week," he notes. "I don't know what the greens stimp at. I know I don't get any complaints, so why worry?"

His worst problem is the damage done by snow mold. "You have one chance before the snow comes to apply product. In Minnesota, you don't get another chance," he says. "Plus, the things that go with it are also problems: ice damage, desiccation—things like that."

Clunis closes the course at the beginning of November every year, then he starts evaluating "what went good and what went bad. We plan through the end of the year and make mid-course corrections."

*continued on page 4G*

### ELSEWHERE

**Coaxing people  
to new downtown,  
page 4G**

**Bring your  
golfers back,  
page 5G**

**Controlling  
moss algae,  
page 8G**



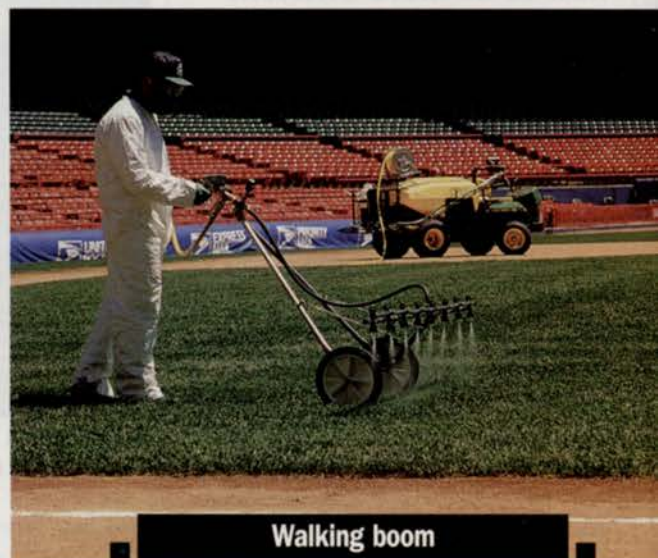
Pendulum spreader



Chemical injection system



Dump option



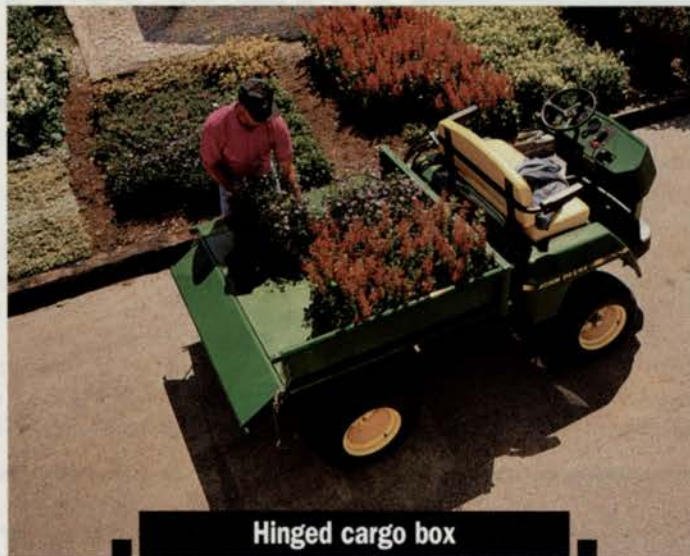
Walking boom

NOW YOU KNOW WHY  
'UTILITY' IS ITS  
MIDDLE NAME





**Belt top dresser**



**Hinged cargo box**



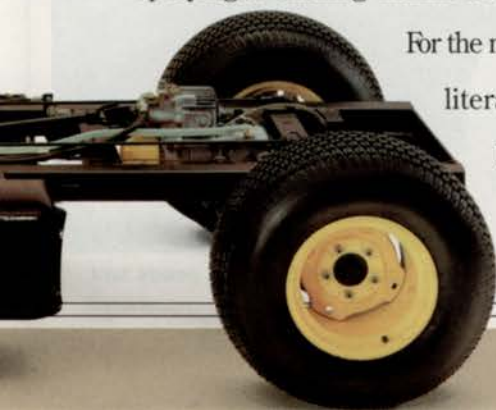
**21-foot sprayer**



**Core harvester**

The 1800 Utility Vehicle truly lives up to its name — offering you tremendous work potential from one basic machine. Foot-controlled hydrostatic drive gives you an immediate advantage. Teamed with a gutsy liquid-cooled engine, this drive system delivers infinite speed control for more precise operation — up to 6 mph while working, 11 mph between jobs. Jobs that can range from spreading to spraying to hauling thanks to the 1800's full host of compatible attachments.

For the name and location of your nearest distributor, or free literature, call 800/503-3373. Or write John Deere, Department 956, Moline, Illinois 61265.



**NOTHING RUNS LIKE A DEERE®**

Some equipment photographed at Blackwolf Run, Kohler WI

Circle No. 107 on Reader Inquiry Card

**STILLWATER** from page 1G

We stay focused on everything involved."

Stillwater is an 18-hole private club founded in 1925 as nine holes. The second nine was built in 1959.

"I can honestly compare my course to the exclusive clubs," says Clunis. Prospective members have taken note, too. The club's membership cap is 415, but the waiting list is 400 names long, even though it was the last private club in Minnesota to admit females as stockholding members (1993).

Members must live within five miles of the golf course. Membership is just \$750 per year, and every penny of the club's membership dues (almost \$400,000) goes toward course maintenance.

"I get the dues money, and the clubhouse is set up to break even," notes Clunis. "Money from the pro shop, guest fees and golf car rental balances all other expenses."

Members—43 percent of whom are retired—"have done a lot of work for the club," Clunis observes. "Three times last

summer, they had 'seed & soil' days where they seeded fairways for me. They have a lot of equity in the club.

"Compliments are always wonderful. They go a long way toward getting me through the season."

Kevin Clunis is doing what he loves, and is happy and content being what he is. Every morning, he walks onto the course and watches the sun rise. "In 11 years, there has never been a day that I didn't want to go into work."

—Jerry Roche

## 'Unique' parks coax downtown rebirth

**Here's how one community used tropical gardens, floral mounds and fountains to draw people back to a long-slumbering downtown.**

■ Exciting parks can help reinvigorate a downtown. A perfect example is Sandusky, a lakefront city of about 35,000 in north central Ohio. Five acres of uniquely landscaped city gardens in the city's Washington Street Park seem to be coaxing its long-slumbering downtown to life again.

Its keeper is Tom Ott, parks and greenhouse director for the city. He and six other city employees design, plant and maintain parks that are as unique and inviting as you'll find in any city.

Ott is a self-admitted "plant" person. He and his family run a small commercial nursery specializing in evergreens on a farm outside the city, too. Although neither he nor any of his co-workers possess degrees in horticulture, he describes them as dedicated landscape professionals. "They really get into what they're doing. They care about really care about our parks."

In his early 40s, Ott is just old enough to remember when downtown Sandusky was the area's cultural and retail mecca. That's when families lined up in front of the city's two downtown theaters after shopping its two major department stores.

Or when teenagers "buzzed the ave." Sandusky Bay on Lake Erie anchored the north end of the downtown cruise; Washington Street Park, with its fragrant gardens, the southern. The kids gathered

at the Frisch's Big Boy Restaurant on balmy summer nights. They arrived in 'Vettes and souped-up Fords, but mostly family sedans. Merchants complained bitterly of the parade of brake lights and polished chrome. Friday night, after all, was a busy shopping night.

But the complaints dried up 20 years ago, as did downtown retail business—just after developers smeared a shopping mall over 40 acres of bean fields about five miles south of the city.

They left behind a shell of a downtown, and incredibly quiet summer nights there.

To hear Tom Ott tell it though, people *are* returning to downtown Sandusky although it'll probably never again be the retail center it once was. About 5,000 turned out for the 1994 July Fourth bash. Many thousands more visit the city's

annual Holiday of Lights celebration in the parks Thanksgiving through New Years. Ott and his small crew put up 35,000 lights in the parks.

Day-to-day evidence of the downtown's rebirth lies in the restored, ornate, 60-year-old State Theater; the trendy new apartments and condos along Sandusky Bay; the renovation of the former Lasalle's Department Store building into county offices. The building overlooks the park's gardens.

These parks are diverse and inviting with their lush gardens of tropical plants (palms, bananas, bird of paradise, elephant ears, castor beans), a Japanese-style sunken garden, succulent/cacti garden, fountains, intricate floral mounds. Many plants are used season after season, like several 75-year-old Phoenix palms.



**Tom Ott, Sandusky Parks/Greenhouse Director, spent just \$700 on seeds and plants this season in creating a downtown wonderland.**

Ott is thankful that the city has never abandoned its downtown parks.

This year Sandusky budgeted just over \$300,000 for its greenhouse and parks. "The city's been very fair with our budget. I've been real happy with the way they've treated us. Our division's never been cut," says Ott.

Parks include five acres downtown and smaller sites in other areas of the city, including flowers and beds at city offices and fire stations. Most of the budget goes for salaries. It's a bargain considering the dedication of his crew, believes Ott. "I keep getting better and better people," he says.

Realizing the budgets are always tight, Ott's crew saves money where it can.

"We only spent about \$700 on plants and seeds this season," says Ott. "We propagate almost all plants from seeds that we harvest ourselves or from cuttings. In fact, we probably couldn't even buy the amount of alternanthera (Joseph's coat) that we use."

By mid-August, co-workers begin taking cuttings of the dark-leaved alternanthera for 1995 beds. They usually prepare 400 flats—60,000 plants—used mostly as lettering or background in Washington Park's six floral mounds. Lighter green santolina forms the borders of these displays which proclaim significant events in the community—for instance, the 75th Anniversary of the American Legion. Or the 150th year of Emmanuel United Church.

"Some of the mounds are reserved up to the year 2018," says Ott, admitting that they take lots of maintenance. To climb onto the mounds without damaging the plants, workers use wooden "chicken ladders."

"We trim them every 1½ or 2 weeks. It takes all of us two days. Three of us take



Rick Choquette, left, and Tom Speir take obvious pride in Sandusky's fanciful mounds.

off with gasoline hedge shears. We've really gotten good with those shears. They can trim just about anything. And what we can't get with the gasoline shears, we get with manual shears."

In fact, if it weren't for power shears and string trimmers, Ott says he and his crew could never keep up with the maintenance.

"I'm actually kind of a plant rat. I hate to throw a plant out. Sometimes my co-workers get upset with me because we have to water, fertilize and spray everything. And it gets real tight in the greenhouse every winter."

Warm-weather specimens like the Phoenix, kentia and sago palms are gathered just before the first heavy frost in early November, trimmed (roots particularly), potted, then packed into the city's 20-year-old, 6,500-sq.-ft. greenhouse.

It gets very crowded in the city greenhouse through the winter, but the work goes on for the next season.

"The park system here started about 150 years ago and it's been growing ever since," says Ott. "I'm just trying to add something to it."

—Ron Hall

## Bringing golfers back to your course

■ If you're interested in making sure that golfers who visit your course return some day soon, maintenance and design tricks can help guarantee repeat play. According to Laurence A. Hirsh, president of Golf Property Analysts, Harrisburg, Pa., here are some things to look for:

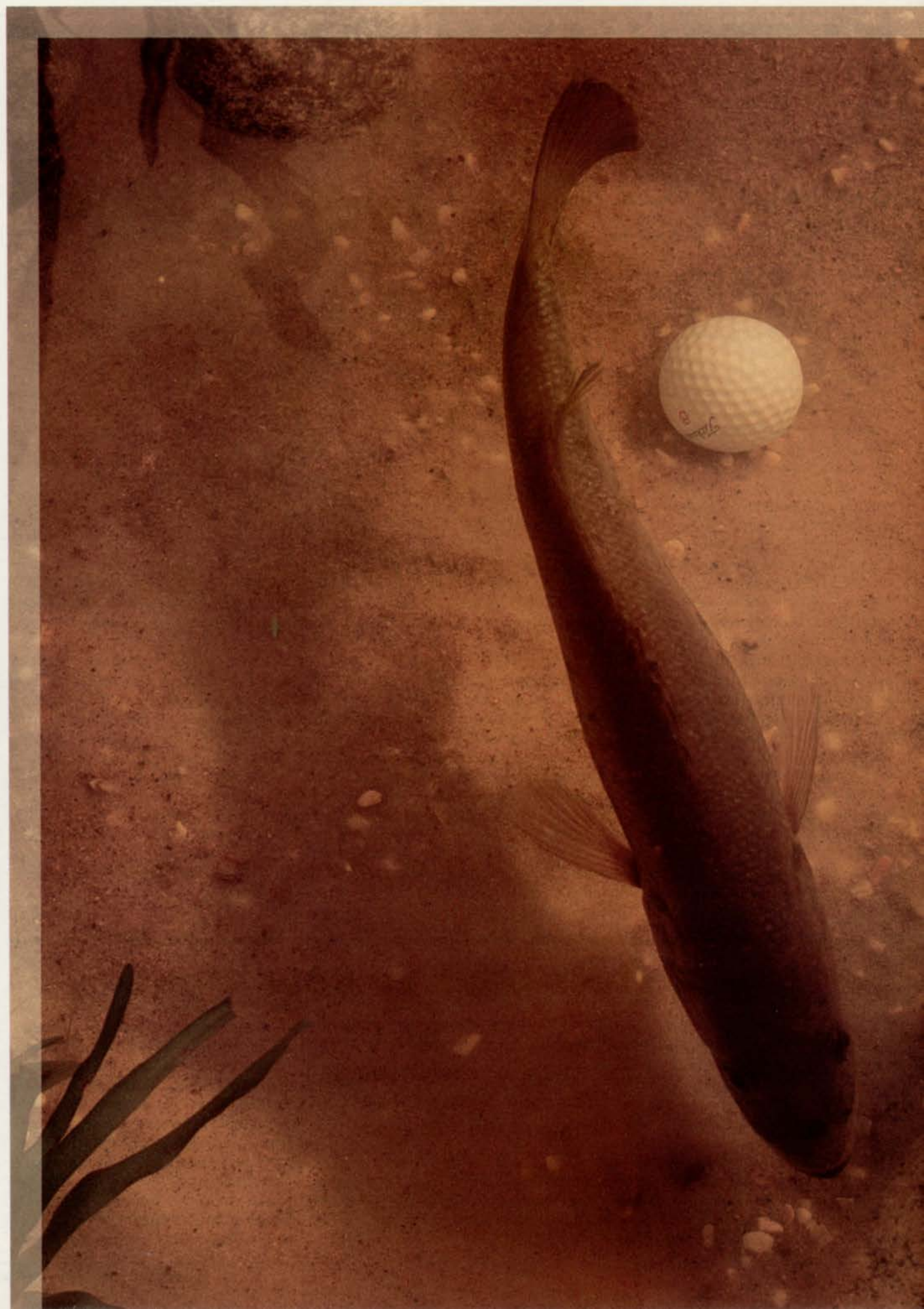
**1) Course conditioning:** are players inclined to return because greens are in great shape? Are fairways wide enough, or too wide? Has the course's appearance been enhanced with mulched beds, orna-

### Maintaining good conditions and integrity of design will keep those greens fees rolling in.

mental grasses and flowers? Do amenities such as tee signs, ball washers, benches and hole liners add to the course's overall image?

**2) Pace of play:** A brisk pace increases the enjoyment of most players. Large tees quicken the game, while providing adequate areas for all levels of players. Hazards should not penalize novice and average golfers too severely or constantly create bottlenecks. Rangers and yard markers also help keep the game moving.

**3) Maintenance:** Avoid difficult maintenance areas or outdated methods. Examine manual versus automatic irrigation, hand-mowed versus triplexed greens,







ONE INSECTICIDE SATISFIES  
EVERYONE IN THE GOLF WORLD.  
INCLUDING THOSE WHO  
DON'T GOLF.

Maintaining a showplace golf course goes beyond beautiful turf.

There's the birds of the air and the fish in your water hazards to consider, too.

So an insect control program that's less toxic to the  
wildlife on your course is important.

That's where MERIT® Insecticide comes in.

MERIT lets you control grubs and other insects while using  
remarkably low levels of active ingredient.

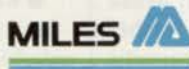
In fact, MERIT is effective at rates 85% to 96% lower than other soil insecticides.

And when applied in the spring to control billbugs and *Hyperodes* weevils,  
MERIT provides enough residual to effectively control grubs throughout the summer.

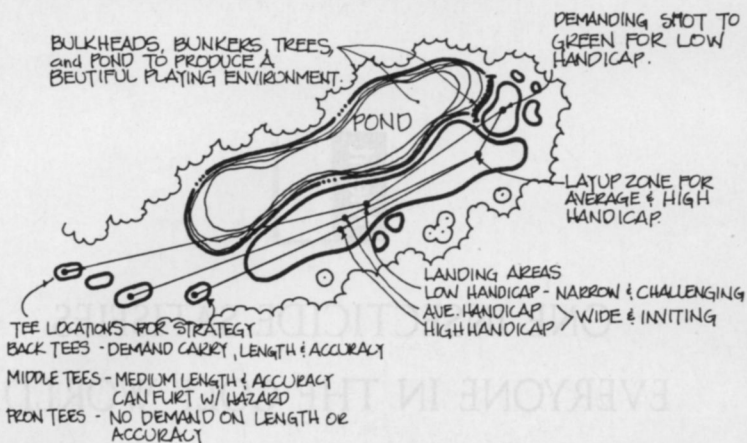
To find out more, contact Miles Inc., Specialty Products,

Box 4913, Kansas City, MO 64120. (800) 842-8020.

Do it for those in golf who actually like landing in trees and  
splashing in water hazards.



**GOLF HOLE WHICH WILL PROVIDE A GOOD EXPERIENCE AND PROMOTE RETURN PLAY TO THE COURSE**



**A golf hole like this one encourages repeat play. It makes use of multiple tees and varied landing areas to test skill and strategy, plus bunkers, trees and a pond for a beautiful playing environment.**

rough maintenance and bunker appearance and consistency to see that you are providing as high quality as the budget will allow.

The key to promoting repeat play is developing a course that provides a challenge, maintains a player's interest and remains in peak condition, adds Tom Clark, former president of the American Society of Golf Course Architects.

"The courses that are able to meet these criteria are usually quite successful in attracting new golfers, developing long-term loyalty and generating strong revenues," Clark says. "They also offer an outstanding drawing card for the community or surrounding development."

When designing a course that encourages repeat play, architects use multiple tees and design greens large enough to

accommodate several pin settings.

"Using multiple tees and pin settings creates variety," says Clark. "The key is to make sure the golfer is not playing the same course every time."

A course in top condition promotes repeat play because golfers can depend on the course to be more playable more often than a course in less-than-peak condition.

"If golfers know a course is in good condition and will generally be open for play, they'll plan to return," says Clark. "For example, a course with good drainage will be open for play more often than a course that drains poorly. This is critical to the many dedicated golfers who want to tee off as soon as the rain stops.

"The architect, superintendent and golfer all share a role in keeping a course in top condition," says Clark.

## Controlling moss, algae in golf course turfgrass

by Gilbert Landry Jr., Ph.D.,  
University of Georgia

■ Moss and algae are found in turf areas because conditions are not good for growing dense healthy turf.

*Mosses* are small plants which have a mass of fine stems. *Algae* are thread-like green plants which form a thin dense green scum over the soil surface. Neither moss nor algae are thought to be parasitic to turfgrasses. The green scum formed by algae is relatively impermeable and once it

dries out, forms a tough black crust.

Factors favoring the growth of algae:

- wet or humid full sun locations;
  - compacted waterlogged fertile soils;
- and

- thin, weak turf.

Factors favoring the growth of moss:

- wet or humid shady conditions;
- acidic, infertile, poorly drained, waterlogged soils;
- excessive thatch; and
- thin, weak turf.

The only permanent control of moss and algae is to correct the conditions which reduce turf growth. The following cultural practices can accomplish this:

**1)** Maintain good soil fertility. Have the soil tested to determine proper lime and fertilizer needs.

**2)** Improve drainage. Soils which stay moist because of poor drainage should be contoured so that water will drain off the area. In some cases, tile drainage may be necessary to correct wet conditions.

**3)** Increase light penetration and air circulation. Trimming back low branched trees may allow for better light penetration and movement. In some cases, removing some of the least desirable trees may be justified. Areas surrounded by buildings and vegetation with limbs close to the ground require considerable effort to provide adequate air circulation and light penetration. Using a shade-tolerant grass such as St. Augustinegrass, zoysia-grass or tall fescue will help. However, if direct sunlight does not reach the ground during the day, a groundcover may be more appropriate.

**4)** Cultivate compacted soils. Aeration with a machine that removes plugs of soil will help reduce compaction. Drainage in fine-textured soils can be improved by cultivation and adding large amounts of organic matter and sand.

**5)** Avoid excessive irrigation. Keeping the surface moist will only increase problems.

Moss and algae problems will recur unless growing conditions are improved, even though you might elect to use the following chemicals:

- Copper sulfate: 2 to 3 oz./1,000 sq. ft.
- Hydrated lime: 2 to 3 lbs./1,000 sq. ft.
- Ferrous sulfate (moss): 4 to 7 oz./1,000 sq. ft.
- Ferrous ammonium sulfate (moss): 10 oz./1,000 sq. ft.
- Non-selective herbicide: apply only to spots covered by moss, according to label directions, and reseed or resod the damaged areas.

Once controlled, sodding is the recommended means of establishing turf under heavily-shaded conditions.

—Dr. Gilbert Landry Jr. is in the extension agronomy department at the University of Georgia. He is a former president of the Sports Turf Managers Association.