If you thought the field inside Ericsson Stadium took a beating, you should see what the turf on the outside goes through. More than 72,000 people trudge across this terrain on a single game day, yet it stays green and beautiful thanks to Lofts Seed.

Lofts has been in the turfgrass business since 1923. And our innovations and improvements have set the standard in the industry. So when the groundskeepers at Ericsson Stadium needed advice on which turfgrasses to use, they trusted Lofts inside and out.

Rebel II turf-type tall fescue was the perfect solution for the high profile exterior of the stadium. Rebel II's dense, dark turf provides an attractive landscape and holds up in high traffic areas. On the field, Lofts Tri-Plex Perennial Ryegrass is the exclusive turfgrass seed used for overseeding the bermudagrass.

So trust your next athletic field or landscaping project to the seed they trust at Ericsson Stadium, home of the Panthers. And score big with Lofts.

NEW! Call now to receive your free 1998 Landscape Catalog:
- Full line of bluegrasses, ryegrasses and tall and fine fescues
- Wildflowers and native grasses
- Seeding requirements and rate specifications

Call Lofts Seed toll-free at 1-888-LOFTS CO
www.turf.com
“Turf-Seed Europe will continue with those companies and develop distribution into countries where we don’t have distribution: Greece; the Balkans; Eastern European countries,” says Stanley.

Varieties sold through Turf-Seed Europe will be the new varieties developed by sister company Pure Seed Testing, Inc. The move would expand the companies current European presence.

No research facilities are planned at this point.

The ban on open field burning in the Columbia Basin has yet to make its full impact on seed prices. Growers used to charge a meager 5 cents/acre to burn fields. Now, the labor involved with bailing, raking and chuting will add $70-90/acre to the price of seed, says Myron Lightbody of Jacklin Seed Co., to say nothing of the quality issue that results from ineffective field cleaning.

<table>
<thead>
<tr>
<th>CULTIVAR</th>
<th>MARKETER</th>
<th>AVAILABILITY</th>
<th>PRICE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Southern Choice</td>
<td>Burlington</td>
<td>B</td>
<td>L</td>
</tr>
<tr>
<td>SR 8200</td>
<td>Seed Research</td>
<td>B</td>
<td>L</td>
</tr>
<tr>
<td>SR 8210</td>
<td>Seed Research</td>
<td>B</td>
<td>L</td>
</tr>
<tr>
<td>SR 8500</td>
<td>Seed Research</td>
<td>C</td>
<td>L</td>
</tr>
<tr>
<td>Starlet</td>
<td>Burlington</td>
<td>B</td>
<td>L</td>
</tr>
<tr>
<td>Tarheel</td>
<td>Turf-Seed</td>
<td>C</td>
<td>S</td>
</tr>
<tr>
<td>Tulsa</td>
<td>Advanta</td>
<td>B</td>
<td>S</td>
</tr>
<tr>
<td>Virtue</td>
<td>Pennington</td>
<td>B</td>
<td>NR</td>
</tr>
</tbody>
</table>

**Fine Fescues**

- Anvil hard International Seed B S
- Attila hard Turf Merchants A L
- Azure Lofts C S
- Cindy creeping International Seed B S
- Columbra chewings Fine Lawn C S
- Dawson Advanta C S
- Discovery hard Turf-Seed C S
- Eco chewings Burlington C S
- Eureka hard Fine Lawn/Int'l Seed B/C S
- Flyer creeping Fine Lawn B S
- Cindy red International Seeds B L
- Claudia creeping Ampac C S
- Dawson Advanta C H
- Defiance hard Lesco B S
- Discovery hard Turf-Seed C H
- Enjoy chewings International Seeds C S
- Eureka hard Fine Lawn Research C H
- Flyer creeping red Fine Lawn Research B H
- Jamestown II Lofts B S
- K-2 chewings Burlington B S
- Longfellow chewings International Seed B S
- Marker creeping International Seed B S
- Pathfinder creeping Lebanon C NR
- Oxford hard Lebanon C NR
- Quatro sheep International Seed B L
- Raymond Advanta B S
- Reliant II Lofts C S
- Scaldis Advanta C H
- Shademaster II Turf-Seed C S
- SR 3100 hard Seed Research L S
- SR 3200 blue Seed Research B S
- SR 5100 chewings Seed Research B S
- Tiffany chewings Turf-Seed A S
- TMI 3CE chewings Turf Merchants B S
- Vernon hard Burlington B S
- Warwick hard Turf Merchants A L

**Bentgrass**

- Backspin Turf Merchants B L
- Century Burlington C S
- CEO International Seed B S
- Cobra International Seed C S
- Crenshaw Lofts A S
- Imperial Burlington B S
- L-93 Lofts B S
- Lopez Fine Lawn A L
- Penncross Tee-2-Green A S

<table>
<thead>
<tr>
<th>CULTIVAR</th>
<th>MARKETER</th>
<th>AVAILABILITY</th>
<th>PRICE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Penneagle</td>
<td>Tee-2-Green</td>
<td>C</td>
<td>S</td>
</tr>
<tr>
<td>PennLinks</td>
<td>Tee-2-Green</td>
<td>B</td>
<td>S</td>
</tr>
<tr>
<td>Penn A-1</td>
<td>Tee-2-Green</td>
<td>B</td>
<td>S</td>
</tr>
<tr>
<td>Penn A-2</td>
<td>Tee-2-Green</td>
<td>B</td>
<td>S</td>
</tr>
<tr>
<td>Penn A-4</td>
<td>Tee-2-Green</td>
<td>B</td>
<td>S</td>
</tr>
<tr>
<td>Penn G-1</td>
<td>Tee-2-Green</td>
<td>B</td>
<td>S</td>
</tr>
<tr>
<td>Penn G-6</td>
<td>Tee-2-Green</td>
<td>B</td>
<td>S</td>
</tr>
<tr>
<td>Seaside II</td>
<td>Tee-2-Green</td>
<td>B</td>
<td>S</td>
</tr>
<tr>
<td>Southshore</td>
<td>Lofts</td>
<td>B</td>
<td>S</td>
</tr>
<tr>
<td>SR 1019</td>
<td>Seed Research</td>
<td>B</td>
<td>S</td>
</tr>
<tr>
<td>SR 1020</td>
<td>Seed Research</td>
<td>B</td>
<td>S</td>
</tr>
<tr>
<td>SR 1119</td>
<td>Seed Research</td>
<td>B</td>
<td>S</td>
</tr>
<tr>
<td>Tendenz</td>
<td>Fine Lawn</td>
<td>C</td>
<td>S</td>
</tr>
<tr>
<td>Tiger</td>
<td>International Seed</td>
<td>B</td>
<td>S</td>
</tr>
<tr>
<td>Tracenta</td>
<td>Advanta</td>
<td>C</td>
<td>H</td>
</tr>
<tr>
<td>Trueline</td>
<td>Turf Merchants</td>
<td>B</td>
<td>L</td>
</tr>
<tr>
<td>Viper</td>
<td>International Seed</td>
<td>B</td>
<td>L</td>
</tr>
</tbody>
</table>

**Other Seeded Cultivars**

- Buffalo Pals Pennington B NR
- Cypress poa triv Turf Merchants A L
- Del Sol bermuda Turf Merchants B H
- Froghair rye Turf Merchants B S
- Laser poa triv Lofts B S
- Mirage bermuda International Seed B L
- Primo bermuda Seed Research B S
- Pyramid bermuda International Seed B L
- OKS 91-11 bermuda Seed Research C S
- Sabre II poa triv International Seed B S
- Sahara Pennington B NR
- Salty alkaligrass Lofts C S
- Savannah bermuda Turf-Seed B S
- SR 6000 deschampsia Seed Research C S
- Stardust poa deschampsia Turf merchants A L
- Sultan Pennington C NR
- Supina bluegrass Fine Lawn B S
- Sydney bermuda Pennington C NR
- Yuma Pennington B NR

.getMapImage()
We've got the seed you need...

Turf Type Tall Fescues

- **FALCON**
  - Turf Type Tall Fescue
- **SOUTHERN CHOICE**
  - Turf Type Tall Fescue
- **RENEGADE**
  - Turf Type Tall Fescue
- **MARKSman**
  - Turf Type Tall Fescue

Perennial Ryegrasses

- **PENNANT**
  - Turf Type Perennial Ryegrass
- **RADIANT**
  - Turf Type Perennial Ryegrass
- **EXCEL**
  - Turf Type Perennial Ryegrass
- **WIZARD**
  - Turf Type Perennial Ryegrass

Bluegrasses & Bentgrass

- **Washington**
  - Kentucky Bluegrass
- **Arcadia**
  - Kentucky Bluegrass
- **HAGA**
  - Kentucky Bluegrass
- **IMPERIAL**
  - Creeping Bentgrass Seed

Fine Fescues & Bentgrass

- **ECO**
  - Chewings Fescue
- **K-2**
  - Chewings Fescue
- **VERNON**
  - Hard Fescue
- **CENTURY**
  - Creeping Bentgrass

Blends

- **MVP**
  - Turf Type Tall Fescue Blend
- **Symphony**
  - Perennial Ryegrass Blend
- **CELEBRATION**
  - Perennial Ryegrass Blend
- **SUNLOVER**
  - Kentucky Bluegrass Blend

Burlingham Seeds

"Seeds for the 21st Century"

P.O. Box 217 Forest Grove, Oregon USA 97116 800-221-7333 503-357-2141 fax 503-359-9223

Circle No. 102 on Reader Inquiry Card
Annuals to warm Southern winters

In warmer zones, whether moist or dry, winter can be as colorful as summer when you use annual plants.

By NANCY STAIRS/Technical Editor

Establishing an ornamental landscape which retains visual interest during the winter can be a challenge, particularly in the northern climates. However, in areas where winters are warmer and milder, the choices increase. Here the use of annuals and herbaceous plants to add color during winter months is one option which can add to the visual appeal of the landscape.

Selecting the right annuals to provide that color is essential. The cool-season annuals grow best in cool soils and mild temperatures, and will grow from fall through winter in more southerly areas. Naturally, what is available and what performs best in your particular area will vary depending upon your local climate, as moisture and humidity can also have an effect on how well plants do. Most of the choices here can be considered as reliable standards; other appropriate selections for your area should be available from your local nurseries.

Snapdragons (*Antirrhinum majus*) - bloom best when temperatures reach 70°F; extent of bloom period may depend on location but can expect blooms until early December and then re-plant in the spring (Zones 7 & 8).

Kales (*Brassica oleracea*) - a colorful foliage plant which is not resistant to a hard freeze, this plant does well in full sun.

Pansies/Violets (*Viola spp.*) - a reliable performer in a broad range of climates (moist to dry), as long as the temperatures are mild.

Carol Hooks, Post Properties horticulturist, in Atlanta, GA, also uses English daisies (*Bellis perennis*) as annuals, and Iceland poppies (*Papaver nudicaule*). On their Florida properties where she finds it is too warm for pansies. Petunias are a mainstay, as are dianthus and salvia (*Salvia farinacea* 'Blue Bedder'). For their properties in Tennessee and...
your good judgment
Will tell you to select

**turf type**
Tall Fescue seed from Oregon

**the beauty**
of the blades

**the strength**
and durability

**the tolerance**
to drought & disease

**the quality!**

Look for the grown in Oregon label. It puts all others in a lower class. A lush, healthy, deep green turf is your reward for selecting superior seed. The world's leading turf grass breeders have been perfecting it for more than 20 years. The tough, vibrant turf will not only tolerate drought, but survive cold winters.

When you select Turf Type Tall Fescue seed from Oregon you can be sure you will enjoy your "good judgment" decision year after year.

Oregon Tall
Fescue Commission
1193 Rayvonne, Suite 11
Salem, OR 97302
503-585-1157
This arrangement combines 'Lemon Chiffon' violas, 'Crystal bowl' pansies, golden oregano and 'Bowie's Mauve' erysimum.

For chillier climates

For those of us who live where winters are generally not so mild, shrubs and trees are the best bet for winter color and visual interest. In addition, plants which can provide food or cover for overwintering birds are appealing in a winter landscape. Some examples:

- **Form/Branching** - corkscrew willow (Salix matsudana 'Tortuosa'); Kentucky coffeetree (Gymnocladus dioicus); dogwoods (Cornus spp.); persimmon (Diospyros americana)
- **Bark** - lacebark elm (Ulmus parvifolia); paperbark maple (Acer griseum); lacebark pine (Pinus bungeana); stewartias (Stewartia spp.); birches (Betula spp.)
- **Shoot color** - red osier dogwood (Cornus sericea); Tatarian dogwood (C. alba); some Japanese maples (e.g. 'Senkaki')
- **Fruit** - some crabapples (e.g. 'Golden Hornet', 'John Downie'); evergreen and deciduous female hollyes (Ilex spp.); cotoneasters; Russian olive (Elaeagnus angustifolia); sourwood (Oxydendrum arboreum)
- **Deciduous conifers** - larch (Larix spp.); dawn redwood (Metasequoia glyptostroboides); baldcypress (Taxodium distichum)

Washington D.C. she relies mainly on very hardy pansies and violas and some kale. They also cover the flowers when temperatures drop below 15°F.

According to information from the Florida Cooperative Extension (www.hammock.ifas.ufl.edu/ctt/fairs/39434) the three different climates of Florida must be considered when using annuals for winter color. Petunias, pansies and snapdragons that grow well and flower under cool night temperatures (45-65°F) should be planted in the fall, winter and early spring. Geraniums and begonias can usually survive the low temperatures of south and central Florida. They are actually perennials that look best if treated as annuals.

In Texas, Mark Whitelaw, Landscape Consulting Services, Ft. Worth, Texas (www.markw.com/previous.htm) also uses these plants as annuals (although some may be perennials in some places): Dianthus or pinks (Dianthus chinensis) which will continue to bloom if seed-heads are removed; sweet pea (Lathyrus odoratus) as a climbing vine but be sure to get the annual not the perennial, L. latifolius, which will not bloom until spring; sweet alyssum (Lobularia maritima) a low growing annual; stock (Matthiola incana) which will bloom all winter in southern portions of Zone 8 and early spring in Zone 7; primrose (Primula sp.) will take sun or shade; and dusty miller (Senecio cineraria), another foliage plant but with a silver-gray color.

On the West Coast, where winter can be wet but mild you can also consider stock which can do well in the cold and damp. Nasturtiums (Tropaeolum majus) prefer less moisture and require little work, Iceland poppies can bloom until June and should withstand wind, rain and cool temperatures. Wax begonias (Begonia spp.) don’t take the frost but do well in sun and shade. Sweet alyssum and primroses are also good choices.
Because close isn’t good enough.

If you’ve got problems due to water repellent turf conditions, then you need a product that not only gets water into the thatch and top soil, but actively works below the surface. Nothing is better or faster than Respond Penetrating and Wetting Agent at moving water through the hydrophobic layer and into the root zone, where it can effectively fight compaction, drought stress and localized dry spot.

More quality products you can get only from United Horticultural Supply
(800) 847-6417

United Horticultural Supply
www.uhsonline.com
While our company is national, our focus is local.

United Horticultural Supply is your source for professionals who have the technical expertise and can provide all the products you need to be a success in today's competitive market.

- **Fertilizers**
- **Herbicides**
- **Fungicides**
- **Insecticides**
- **Turf Seed**
- **Soil Amendments**
- **Adjuvants**
- **Equipment**
- **Colorants**
- **Aquatic Products**
- **Micronutrients**
- **Wetting Agents**
- **Plant Growth Regulators**

Call today for a free product guide containing a comprehensive listing of available items.

United Horticultural Supply

Working To Enhance Our World

Atlantic Division
410-548-2200

Great Lakes Division
517-333-8788

Gulf States Division
1-800-457-0415

Midwest Division
402-330-1910

Pacific Division
1-800-637-0422

Southern Division
409-731-1017

Western Division
209-253-5700

Circle No. 110 on Reader Inquiry Card
These are machines to tickle a young man's dreams, and lighten his wallet. They're sleek, they sparkle on the showroom floor and many come with bucket seats with padded arm rests. They look like they could have been styled by somebody with a name like Ferrari. They promise high performance with pizzazz, and more operator comfort too.

In Louisville a couple of weeks ago several thousand of us got an opportunity to put some of these incredible machines through their paces.

Are we talking about the new model year Corvettes? No way, my friend.

We're describing today's commercial mowing machines. These shiny, sleek cutting units dominate EXPO '98 in Louisville each July. They're the stars there, make no mistake about it.

Each year manufacturers compete for the landscapers' dollar with even more mowers, and more features on their mowers (including colorful paint jobs) as they come up with even more descriptive names for their units—names like Turf Tiger, Chariot, Surfer, or Laser Z, among others.

There are so many mowing units in so many different styles and shapes in Louisville that you could spend all three days of the Show just picking up literature and comparing claims, not to mention actually operating them in the turfed demonstration area just outside the convention building.

While landscapers, faced with tight margins and even tighter labor, want machines that cut turf faster and more precisely, they also—judging by their reactions at Expo '98—want machines that are kinder to operators, and units with eye appeal too.

The commercial mowing business is incredibly competitive and every advantage apparently is worth gaining, including image. LM
It's easy to arrange financing and leasing right at your GMC dealership.

©1998 GM Corp. All rights reserved. GMC and the GMC logo are registered trademarks and Comfortably In Command is a trademark of General Motors Corporation. Cat is a registered trademark of Caterpillar, Inc. Buckle Up, America!
The standard sloped hood on the GMC C-Series may look like a styling detail, but we actually redesigned it for business reasons—yours. The sloped hood offers your drivers better visibility. In fact, they can see six feet closer than with our specialty hood.

The Hood Is Sloped, The Advantages Are Straightforward.

That seemingly simple change in the shape of the hood makes it much easier to see on narrow urban streets, in tight alleys and at busy loading docks. Improved visibility helps prevent accidents and damage to your trucks. It allows your drivers to do their work more efficiently, more quickly and with less aggravation.

Managing Your Trucks
Is Like Managing Your Business:
Every Detail Counts.

The new sloped hood is just one example of the attention to detail that goes into every GMC C-Series truck. From 150,000-mile coolant to HEUI electronic fuel injection standard on Cat® 3126B diesels, GMC trucks are engineered to save you time and money—meaning you can spend more time running your business, less time worrying about your trucks. For more information and a catalog, see your GMC dealer, call 1-800-GMC-8782 or visit www.gmc.com/at_work on the web.

To help you manage your business, we can put our heads together—and our noses to the grindstone.
Proven ways to recruit, retain and get along with your workforce.

By CARMEN ZAYAS

In my seven years as head of human resources for Clean Cut, Inc., I have seen the pendulum swing from having an excess of viable job applicants, to this year's mad scramble for employees. And, it probably is not going to get better in the near future. The following programs have helped us stay ahead of the employee crunch.

Keep in mind though that programs in and of themselves are not effective. What has made our recruiting and retention so successful is the ability of our people to implement our programs. Equally important is dedication to providing employees with the tools, resources and rewards necessary for them to grow and advance.

Recruiting

The most important aspect of successful recruiting is to have strong company loyalty among your employees, and to have number one source of good applicants. More than 65 percent of our employees come from employee referrals. And this group enjoys the highest retention rate of any other group in our company. We pay a bonus for each referral, plus we run an overall contest. At the end of every six-month period we offer a $1,000 bonus to the employee who has referred the most, active employees. We try to make the contest fun, we tally referrals by employee on a huge board and we refer to it during each meeting.

It's important to develop game rules up front and inform all employees. For example, articulate what qualifications applicants must have to be hired so that employees are not discouraged if some of their referrals aren't hired.

Give them the tools to recruit effectively. We print small cards in English and Spanish that say who we are, what we do and what positions we're looking for. We leave a small space for employees to write their names. They can then hand these cards to prospective applicants. We roleplay during meetings on how to "sell" the company.

Nine ways to recruit

1. Your employees. These are your Spanish that say who we are, what we do and what positions we're looking for. We leave a small space for employees to write their names. They can then hand these cards to prospective applicants. We roleplay during meetings on how to "sell" the company.

2. Sports organizations. Recruiting among amateur athletes has proven successful for us. Because landscaping is such a physically demanding job, people involved in sports already have a higher probability of being able to withstand hard physical labor. We will contact league reps and convince them to allow us to make a presentation at their team captain's meeting or

Many ways to recruit the
to have a table at their registration. At these presentations we stress the opportunities available with us. People will willingly help you spread the news about your company if they feel you are providing their members with a good opportunity.

We will make donations to the league for equipment or uniforms, sponsor a company team, or set up a table during their games and offer water bottles, koozies, etc. We do the same for softball teams, little league teams, and other events.

3. Churches / social organizations. We find many of our valued employees share characteristics of being churchgoers and/or being very involved in social organizations. We will approach churches and ask how we can help their social organizations (i.e., make a donation to their social services, hold a canned food drive for their food pantry, etc.). They will in turn put flyers up in their offices, make flyers/information available to their members, and refer people seeking assistance or needing a job to us.

Refugee, legal aid, apartment assistance and other organizations will also provide these avenues to disseminate information to their clients. We have paid for outside lawyers/speakers to make presentations to the group’s members and contributed to their fundraising efforts.

4. H-2B Visas. This program is gaining in popularity in our industry. We have just begun to use it this year. It requires considerable investment of time and money to navigate the system but can be a good source of legal labor from Mexico that can be used to offset the need during peak seasons. We haven’t worked with this program long enough to be able to recommend it wholeheartedly, but it does seem to hold promise.

5. Local schools. We partner with horticultural departments at local community colleges, local vo-tech schools and even with high schools that have a horticultural program. We will encourage our employees to serve as mentors, or sit on advisory committee, or give presentations at these schools.

6. Temporary agencies. We have partnered with a local temporary labor agency that specializes in construction laborers. They send us a few laborers every morning at a reasonable markup rate (due to our volume). We then have the option of using these employees for a week. If any supervisor requests that a job offer be made to a specific temp, we’ll make them an offer. The only requirement is that we have them on the agency’s payroll for one week. Temps know the situation up front, and the temp agency offers an hourly rate just below what we offer starting employees; if they do come on board, it’ll be a raise for them.

7. Radio Stations. An expensive advertising medium but if you can develop a partnership with local Spanish or bilingual stations we have had excellent results. We will sponsor events during major events, like the World Cup Soccer Tournament. Provide concise, upbeat information in a direct manner. Too much info or too many “cutesy” ads diminish your listeners’ ability to understand when, where and why you want them to apply at your company.

8. Flyers. We will pay our crew leaders or a local youth group to put out flyers at places where prospective employees shop or play—local grocery stores, Walmarts, ethnic grocery stores, sports events, or at the park. We do not generate an exceptional number

Make them feel at home. It works!

The best and most costly recruiting system will not help you retain employees once you’ve hired them. At Clean Cut, Inc. we are extremely proud of our retention rate and the number of long-term employees we have. To accomplish this we have stuck to the basics.

- We take time to ensure we select the right people. Post-employment physicals, drug screens, background checks, reference checks, and an evaluation by our trainer are all part of the selection process.
- We take the time to familiarize employees with our company, its standards and its values. This makes employees feel at home from day one.
- We have a lot of meetings. We try to make them fun and informative. But employees really appreciate the fact you keep them informed as to what is going on in the company. Especially one that has as many different offices as we do.
- Every maintenance employee is evaluated at time of hire. We have developed a level system where we detail each job title and the requirements of each level. After an evaluation by our trainer, employees are told what level they are currently on, and what skills/knowledge they need to acquire before they can move to the next level. Then we provide several trainers, training crews, classes, conferences and Saturday training classes to help them move towards their goals. This develops a sense of opportunity and fairness. We’ll bring in property managers, chemical co-reps, experts in peripheral fields to talk to our employees. This shows them we care about their desire to add value to themselves. Plus it makes them more efficient employees.

We offer free English and Spanish classes, thereby stressing that communication is important to us.
We took 1000 and made 6 gre

The New John Deere 4000 Series.

More Power to You.

NEW 4100 20-hp
NEW 4200 26-hp
NEW 4300 32-hp
They're here! The new John Deere 4000 Series Tractors—loaded with the features you've been looking for. More Torque—you can keep going when the going gets tough. More Hydraulic Power—you'll lift more, and keep your power steering. More Hitch Capacity—to handle heavy 3-point implements. Independent PTO—step on the clutch and your PTO-driven implement keeps on running. Optional Reverser Transmissions—change directions at the flip of a lever. Optional Hydrostatic Transmission—the ultimate in speed and direction control. 4-Wheel Drive—extra traction, available on-the-go, at the touch of a lever. New Loaders and Backhoes—two of a multitude of attachments. They hook up in minutes, and work hard all day long. Priced Right—they're more affordable than you think. Plus these new 20- to 43-horsepower tractors come from the John Deere Factory in Augusta, Georgia. The new, and amazing, 4000 Series Tractors—More Power to You.

Visit your John Deere dealer to learn more. Can't find one? Call 1-800-537-8233, or check out our Web site at www.deere.com.
of applicants but it does bring in some applicants and helps us get the word out.

9. General advertising. We round out our recruiting efforts by putting ads in the local newspapers (Spanish & English); in local trade newsletters (TAN, ALCA, TALC); posting job announcements on a year-round basis with the unemployment office, trade schools, and community colleges.

Other suggestions

Give your employee the appropriate tools. Don’t scrimp on equipment or trucks. We have full-time mechanics to maintain equipment in top-notch shape. Not having the right equipment or equipment in good running condition is one of the biggest obstacles to doing high quality work in an efficient manner.

Have fun. We get a lot of excellent quality work done but we also make time for fun - employee picnics, Christmas parties, retreats, all day on-site conferences specialized for our crew leaders or keymen, contests, breakfasts. We make coming to work a fun experience. Plus we build in some surprises now and then just to keep things exciting. Acknowledge employee birthdays and anniversaries; bring in breakfast tacos on Cinco de Mayo.

Make their life as easy as possible. Landscaping, especially in the hot Texas summers is hard work. So we make what we can easier so they can concentrate on the hard part - the actual work on the properties. Have ice ready for their coolers in the morning. Make forms easy to understand and fill out. Make sure payroll checks are accurate and fix mistakes immediately. Provide lockers and cleaning service for uniforms. Ensure employees have someone they can turn to if their supervisor isn’t available. My assistants and myself are all bilingual in Spanish/English, and two of us are always on duty at 6:00 a.m. and at 6:00 p.m. We’re available to listen and help.

Motivation. The most important thing to remember about motivation is that it is an extremely individual concept. So get to know your workers. Talk to them, find out what they like and appreciate. We have a lot of family-focused employees so we offer stuff for their kids - scholarships for their college-age kids; tutoring during the summer; parties for the kids.

Remember people are people. People don’t have the same life circumstances, same ambitions, same experiences, or same skills. But all are people. Culture may help dictate some general characteristics, work ethic, family-focus, but treat employees as individuals. I make it my job to know what motivates Juan Bastista or Guadalupe Castro or Jason Page, not what motivates a Mexican, or a Mexican-American or a Texan. This takes time and effort but it will come back. Investing time in your employees has the biggest return on investment of any business practice I know. It is those employees who will work the extra hours when labor is short, who will convince friends at other companies or other industries to come work for you.

And remember the best things in employee morale are free, really! Say thank-you, inquire about the sick child, congratulate the new father, mention who has accomplished the next level in their training, share customer compliments, listen to their thoughts, ask for their feedback.

Learn their language. If you are in an area of the country that has a lot of Hispanic employees (or Vietnamese or some other group) learn the language. You could get into a deep philosophical debate over who should learn what; but trust me, making an attempt to communicate directly with your employees will go a long way towards establishing loyalty. Also you will serve as a role model for them to learn English, and they will feel more comfortable practicing their English with you.

Don’t give in to the constant demand for more money. A definite no-no. Once you get in that situation every employee will be demanding more and more money without regard to their skill level or contribution to your bottom line. In the various markets we are in we’ve experienced competitors who over-inflated wages or unlimited overtime during the summer. I’ve found that employee loyalty (they’ll work long hours rather than support a fellow employee using extortion techniques) and a fair compensation system, and the fortitude not to take the easy way out and give in to excessive employee demands, will help you survive any situation.

Make sure management leads the way. Our managers, and oftentimes our president and owners, attend all meetings, meet with their crew leaders every day, take their crews to lunch or breakfast. In a nutshell, they do not delegate the management of their employees.

On a closing note at a recent employee meeting I asked employees to suggest and vote on what quality most separates Clean Cut from its competitors. I expected Customer Service, high standards of quality, award-winning properties, etc., to be the main suggestions (and they were among the top five). But, the quality that most differentiated Clean Cut in the employees’ minds was - the family atmosphere.

Carmen Zayas is vice president of human resources for Clean Cut, Inc., an Austin, Texas-based landscape design and maintenance company with 400 employees.
There's more than fertilizer in this bag.

There's a total resource. One that can help you grow healthy, green turf with a strong root system and a solid base. Turf that's healthy and better able to fight disease, pests and everyday wear and tear. That resource is Terra. You'll find a complete line of Terra Professional Fertilizers – including slow-release sources with primary, secondary, micronutrient and pesticide packages available. Plus, you can count on the support, service, assistance and expertise it takes to select and use the right fertilizer. The product that will do the job for you. For fertilizers, turf seed, plant protection products and a whole lot more – work with Terra. You'll get more.

Terra
Terra Industries Inc.
P.O. Box 6000
Sioux City, Iowa 51102-6000
1-800-288-7353
www.terraindustries.com

Working with you.
The pro’s guide to selling water features

By GREG WITTSTOCK

Selling water gardens is unlike selling any other type of landscaping. Most people have no concept of what water gardens cost, the maintenance they require or how they compliment a landscape design. These misconceptions can make selling a water feature a lot more complicated than selling traditional landscaping. However, once you master the sales and marketing of water features, you’ll notice your entire company will benefit from the additional business water features create.

Qualifying the lead

The sales call starts the moment the phone rings in your office. More often than not, the first question out of the homeowner’s mouth will be, I’m interested in a small water feature. Immediately answering their question about cost is a mistake, but not answering it at all is even a bigger mistake.

The first thing you need to do is build perspective so that you and the customer are talking about the same topic. If you simply state a price off the bat your customer may be picturing a pre-formed tub with a fountain while you’re picturing and pricing a beautiful water garden and waterfalls.

Educating the customer

Compare the investment of installing a water feature to the cost of purchasing a hot tub. After all, a hot tub has a pump, plumbing and mechanical filters. Comparatively, a pond has a rubber liner, stones, gravel, underwater lights, a biological filter, a landscaping berm and often a stream.

Clarifying that a water feature is not just a hole in the ground with a liner, and associating the cost with a familiar expense, such as a hot tub, helps educate the customer about his/her purchase. This also justifies the investment.

Selling the value

If after speaking with the customer about the wonders of water features and educating them about the value, they still do not buy in, wish them luck and hang up!

Set a price based on your costs and overhead, and stick to it. It’s a proven fact that any project that dips below your base cost will cause you more problems than it’s worth.

Once you have qualified a customer by informing them of your base cost for constructing a water feature, they have officially become a worthwhile lead. Now is not the time to let them know how you go about designing a water feature.

Tell the customer you’d be happy to mail them literature (i.e. brochure, video) about the product so they can see for themselves what is involved with owning a water garden.

Take notes about what interests them about water gardening. The customer will reveal valuable insights about their buying motives to you at this time. Explain how you’d be happy to visit them and go over different design ideas. Tell them you’ll come to their house whenever it is convenient for them.

Let them know you’ll explain how to choose the best pumps, filters and even plants and fish based on their unique designs and desires.

Let them know you’ll do all of this for a nominal charge of say $30-$50 (depending on where they’re located and how much you feel your services are worth.)

The consultative process

At Aquascape Designs, Inc. we charge for design consultations. We believe customers who are willing to pay a modest fee for design time are definitely serious about spending thousands of dollars on a water feature. Furthermore, we explain to our customers that this procedure keeps us from charging them for unsuccessful sales calls. We don’t want to penalize our customers for all those who don’t buy. If they hire us, our design consultation is free!
When it comes to service and support, Rain Bird doesn’t monkey around.

Don Ulrich
Head Gardener
Irrigation Technician
Cincinnati Zoo & Botanical Garden
Cincinnati, Ohio

“Rain Bird stands behind their systems 100 percent—nobody can match their level of service.”

Don Ulrich - Cincinnati Zoo

With an irrigation system the size of the Cincinnati Zoo and Botanical Gardens’ system, Don Ulrich doesn’t monkey around—he trusts Rain Bird®. “If I have even the smallest problem with my system, I can count on Rain Bird for support,” Don said.

What else would you expect from Rain Bird’s worldwide sales and technical service support network? Every Rain Bird customer can count on the highest level of service, because every Rain Bird product comes with expert technical support. And if we can’t fix it? Take advantage of Rain Bird’s “No Hassle” warranty. So whether you’re managing the city zoo or a backyard garden, Rain Bird Customer Service is here to help.
When you go on a design consultation, the homeowners often greet you and ask you if you'd like to see the backyard. Let them know you'd prefer to start inside so you can first discuss their waterscape design options.

Building a rapport with your customer should always be the first thing you do on your visit. When you enter their home, resist going directly into your sales pitch. Compliment them on something unrelated to the pond. Small talk with prospective customers will put everyone at ease and will break down initial barriers. Additionally, you may learn some valuable insights that can be helpful for you to close the sale.

When the customer is ready, begin your presentation. Show them your work portfolio and let them know about your business. They may have already viewed literature you mailed earlier, so many of their questions may have been answered before you have arrived. Ask them what their desires are with a pond, continuously thinking about different design styles that would fit into their landscape and fit what they're looking for.

After you've gone through your presentation, talked about your company, water gardening and their expectations, go outside to begin the design.

**Selling your expertise**

Customers who know exactly what they want may not have the best design in mind. For instance, if someone wants you to build him/her a pond in the far corner of their property behind a pine tree, listen to their ideas. When they're through tell them you could build it there, or if they'd prefer for the same cost, you could build it right off their deck, just outside their sunroom.

Explain the advantages and disadvantages of their ideas and the reasons behind different options. Let the customers' comments convince them that you are trying to give them what they want. (They spend most of their time inside the sunroom, so put the pond close to where they live—they'll enjoy it more.) It's good to let customers know it's the same cost no matter where the water feature is placed.

A customer with no ideas on design is just as difficult to sell. Just like the customer who seems to know everything, you will need to educate this customer on his/her options. What you don't want to do is give someone too many options. Too many will confuse your customer and not allow you to suggest the best one.

**Designing the pond**

Few people understand scaled drawings. A garden hose is a perfect design tool. Simply lay out the size pond you feel would look good in the yard and is in line with what the customer described they desired. Almost everyone who sees a garden hose marking out an 11x16 pond is shocked at how little room it actually is.

Laying out a hose is the best way to convey size and shape to a customer. Once the hose is placed, ask the customer to adjust it to their liking. Make sure they make physical contact with the hose! Involving them in the design, however slight it may seem, greatly enhances their feelings of contributions to the project.

After the final adjustments are made, have them view the outline from different areas in the yard and various rooms in the house. Make any final adjustments and spray paint the area around the hose.

**Writing up the contract**

Now that the pond size and shape are determined you can write up the contract. Based on the square footage of the pond you can determine all your material costs for the job. Determining man-hours is difficult. Site conditions will vary from job to job. However, unless a major unforeseen problem occurs, you should be able to factor your typical installation to + 10 percent of the total man-hours required to complete the job. As with anything, the more jobs you do, the faster your crews will become at constructing the water feature.

On average, your typical crew of four to five laborers perfects the One-Day Pond System between their fourth and sixth installation (40-50 man-hours for ponds 200 square feet and under). Aquascape Designs, Inc. charges a flat rate of forty dollars per man-hour and gives the customer a guesstimate of how long it's going to take. If we bid out 50 man-hours and the job takes 45 we make out ahead. If the job takes 55 man-hours we don't charge the customer anymore. Approximating man-hours lets the customer feel the more efficient you are, the better your prices are.

A key to justifying the total expense for the job is breaking down all the itemized costs. By including items that only cost a few dollars, you're showing the customer you're thorough in your pricing, while letting them see everything that's involved with putting a water feature together.

**Closing the sale**

You can't close the sale unless you give the customer an option to buy. Additionally, it is often necessary to create a buying dilemma to convince a customer to commit. Every contractor has the ability to create a buying dilemma with their prospects. After you've given them the proposal, and they say they will think about it, tell them to take as much time as they need to feel comfortable making the decision. Inform them however, of your current status with back-order work. If you're booked for two months, let them know you could schedule the job for the first available day after you have finished your current obligations. For example, it is close to the end of the season and you may get a big job or two while they're thinking their project is over. You may not be able to get back out to do their job until next year (unless of course they can give you a deposit today so you can put them on the schedule).
Make winter "pay"

Xmas decorating during the off-season is becoming an attractive add-on service for many lawn/landscape pros.

By JAMIE PETERS

Many landscapers equate the Christmas season with sparse work opportunities and employee layoffs. However, Christmas Decor, Inc., which installs homes with outdoor Christmas lights and decorations, is providing many businesses with the opportunity for a winter add-on service.

Christmas Decor, Inc., founded in September 1996 by Blake Smith and Jim Ketchum, in Lubbock, TX, has expanded from a fledgling, regional business to 140 franchises throughout 40 states, within 20 months.

"In another year or so we feel like we'll be in position in all major cities across the United States," says Blake Smith, co-founder and president. "For the first time ever, companies will be able to have Christmas decorations at all branches provided by one company."

The company sets its franchise prices according to the size of the market.

"This fits the little guys as well as the big guys," says Smith.

As of August, the franchiser charges a base fee of $15,900 for a city market, which includes a minimum of 100,000 persons; and $9,500 for a suburban market, which contains a minimum of 40,000 persons. Royalties are based on gross sales as follows: first year, 2 percent; second year 3.25 percent; third and subsequent years 4.5 percent.

Each franchise attends a two-day seminar at company headquarters in Lubbock, Texas (regional training is available); receives training manuals and videos; Christmas Decor uniforms; personalized business forms and marketing aids; unlimited telephone support; $2,000-$4,000 of lighting, decorating and installation products.

Christmas Decor will also finance a portion of the franchise fee.

But how do you know if Christmas Decor is for you?

The consensus of landscape and lawn services claim the franchise investment is beneficial to their year-round businesses in a number of ways.

Many landscape customers appreciate a service that beautifies their homes for Xmas.
Mike Smith, owner of Smitty’s Lawn Service in Athens, AL, invested in a Christmas Decor franchise so he could hire more year-round employees for his lawn service. “There is a time, during the off season, when a lot of landscapers and their employees are starving for work,” says Smith. “I got into Christmas Decor originally to solve this problem, and it enabled me to hire more employees for my landscaping business. Once I got into the franchise, and could see the opportunity, I concentrated more of my effort towards our Christmas decorating than my landscaping. In other words,” he laughs, “My Christmas Decor is probably going to be supporting my landscaping. It’s pretty amazing.”

Smith, who is approaching the second season with his franchise, says his major first-year problem was finding the manpower to handle the customer demand. “Once we got started it took off on its own,” he says.

Smith plans to increase last year’s part-time crew of four to two full-time crews of three for this holiday season.

Cary Wortham, President of Berkeley Landscape, Inc. in Conroe, TX, says that he would have had to lay off 10 employees, nearly 50 percent of his crew, if it had not been for his Christmas Decor franchise. “I just redirect them into Christmas Decor. And it keeps them in year-round employment, and I don’t go through the training basics every year,” says Wortham. “It’s a great profit center, but more importantly, it’s an opportunity for me to keep quality employees year round. I don’t have to terminate. I don’t have to lay off. The lawn maintenance industry is so seasonal. In fact, we originally got into Christmas Decor for that purpose—as strictly an opportunity for our guys to stay income producing.”

“The only disadvantage that I can see is that all your business comes at once,” says Kevin York, one of the original franchise owners. “I can’t think of a better add-on business for those of you who need an easy, profitable operation to keep your employees busy in your off season...get in as early in the year as possible.” Steve C. Clover, L&L Landscape Services, Inc., Sunnyvale, CA

“Christmas Decor provides a wealth of knowledge for a nominal fee. I can’t say enough good things about this franchise opportunity that enables you to make big off-season profits.”

Dove Dolak, Renaissance Grounds, Inc., Vienna, VA

“A Proven Program with over 140 Successful Franchised Locations

- Comprehensive Training
  - Operations Manuals
  - Training Videos
  - Decorating Workshops

- Name Recognition
  - The Only Nationwide Service
  - Professional Image
  - 140 Franchised Locations

- Purchasing Power
  - Quality Products & Vendors
  - Consistent Supply Sources
  - Below Wholesale Pricing

- Continued Support
  - Non-Competitive Relationships
  - Toll Free Phone Support
  - Free Program Updates

A Proven Program with over 140 Successful Franchised Locations

“I can’t think of a better add-on business for those of you who need an easy, profitable operation to keep your employees busy in your off season...get in as early in the year as possible.” Steve C. Glover, L&L Landscape Services, Inc., Sunnyvale, CA

“Christmas Decor provides a wealth of knowledge for a nominal fee. I can’t say enough good things about this franchise opportunity that enables you to make big off-season profits.”

Dove Dolak, Renaissance Grounds, Inc., Vienna, VA

- Keep Good People Year Round
- Offset Fixed Costs
- Sell to Existing Customers
- Low Start-up Costs
- Protected Territories

DO NOT WAIT! TAKE ACTION TODAY

HOLIDAY AND EVENT DECORATORS
1-800-687-9551
www.christmas-decor.com

DO NOT WAIT! TAKE ACTION TODAY

Circle 118
Besides putting the decorations up for customers, landscape crews will stay busy in January taking them down again.

Place says that whenever he called the company owners for advice and direction on any challenges he encountered, they were inevitably willing and helpful.

"They were really good about giving information out," he says.

In addition to installing the lights, franchises also extend year-round work and increase profits by taking down the lights for the customer in January.

"The take down part is a profit center," says Blake Smith. "It's chargeable. When they mature the business, they get a pretty good bit of business in late October, all of November and December, and most of January. Now you've kept people employed all the way into mid-January. Then you almost need that three to four weeks to refurbish your equipment, your trucks and your trailers; and you get to do it with some money in your pockets."

Many have found Christmas Decor to be a worthy business venture because of its multiple benefits, which include: increased profits and year-round work; the opportunity to keep quality employees year round; and generating new clients for your landscaping/lawn service.

If you think a Christmas Decor franchise may be right service add on for your company, call 1-800-687-9551 for more information. •

Tractor Mounted 42 inch Aerator is designed to install out-front on rotary mowers, or on any small tractor with a three point hitch: category 0, 1, 2 or 3.

Like all Turfco turf equipment, the TM-42 is Advantage Engineered to provide long dependable service with a minimum of downtime for maintenance.

Turf friendly independently mounted Aeration wheel sets allow turning and provide a 5.5" x 8" pattern of aeration up to 4" depths. Heavy 12 ga. steel cover and rugged steel tube frame surround and protect for years of service.

Aerators from Turfco: Tough, Simple, Smart!

Turfco Mfg. Inc. • 1655 101st Ave. NE • Minneapolis, MN 55449-4420 • Ph. (612) 785-1000 • FAX (612) 785-0556

Circle 119

Co-produced by the Professional Lawn Care Association of America (PLCAA); Professional Grounds Management Society (PGMS); and Associated Landscape Contractors of America (ALCA), the 1998 GIE show includes a Green Team Employee Day, which features a special presentation; trade show, lunch; and employee-targeted educational sessions developed through the combined efforts of the three GIE partners. Price for Green Team Day is $35.

PGMS educational topics include: Pitfalls in Sportsfield Construction; Customer Service from the Ground Up; Common Sense Tips for Better Landscape Design; and Growing Good Employees.

PLCAA sessions during Green Team Day include: Six Sure Fire Ways to Make Your Day Shorter; Taming an Ornery Engine; How to Use a Spreader Correctly; How to Reduce Call-Aheads.

ALCA will offer optional seminars on Saturday, November 14. Three pre-conference Saturday seminars will include one on mergers & acquisitions. The Design Seminar is titled Architecture and People, and the focus of the Human Resource Seminar will be retaining employees.

The conference will also feature four focused learning tracks, with information about business, financial management, sales and marketing, personnel management, and technical processes.

The early bird deadline for savings on registration is only a few weeks away, September 30, 1998.

ALCA honors Gary Thornton

Associated Landscape Contractors of America awarded its 1998 landscape Service Award to Gary Thornton, chief executive officer of Thornton Gardens, Inc., Maineville, OH. Thornton served as president of ALCA in 1993, initial chair of the Certification Board of Governors and of the National Landscape Technician Council, chair of the Insurance and Education Committees. He was also a member of the Crystal Ball Committee for over 20 years, and author of ALCA’s Long Range Plan.

IA prepares industry-wide ‘Water Summit’

The Irrigation Association is proceeding with plans for a “Water Summit” for 1999. Many industry associations will participate in an organizational meeting in September.

The meeting is designed to gain the attention of federal and state regulators about the importance of advanced irrigation technology as part of urban and agricultural water management in the future. This is timely because of the approaching discussion of the Clean Water Act by Congress. Irrigation has a significant impact on the quality of life and world food production.

“A comprehensive approach to water management is simply not possible without taking irrigation into account,” explained Dennis Schweiger with Valmont Corporation of Omaha, NE, originator of the Water Summit concept.

“Weather experts tell us that the year after El Nino is characteristically one of drought,” remarked Sue York, president of the IA and Ewing Irrigation based in Scottsdale, AZ. “The time to plan for drought is now.”
ride or walk mow greens? The answer is usually contained in one simple question: Can you afford to walk mow?

Walk mowing is better for greens in many respects. The quality of cut is superior to that of a triplex mower. Walk mowers don't have hydraulics. Compaction is decreased since walk mowers weigh much less than triplex mowers. The smaller size of the walking unit allows it to follow the contours of the greens surface closer. Also, walk mowers cost substantially less per unit.

But, do you have the necessary labor and resources to use walk mowers on your course?

Walk mowing typically cut about 15,000 feet per hour compared to 30,000 feet per hour by triplex mowers. These times represent all factors of loading, mowing and transporting. It will take twice as long to walk mow as ride mow with the same number of operators. To get the same amount done in the same amount of time, you will need twice the number of operators.

Ask yourself, also, if you will have the course ready for play on time if you use a walk mower. Is it possible for all of your first-round tasks to be completed ahead of play? A major consideration here is the rate at which golfers tee off, including occasions when golfers tee off at multiple sites simultaneously or employ shot-gun starts.

But, basically, walk mowing comes down to resources.

Walk mowing a typical golf course with 120,000 square feet of greens at a pay rate of $7 per hour will increase mowing green costs about $10,500 a year. Another problem is finding extra employees willing to work only three hours a day in the morning. Therefore, you need to increase the number of positions on staff. Using this concept at an 18-hole facility with a start on both tees with the $7 pay rate, the actual increase in labor costs will approach $29,000 a year.

Consider all the factors when choosing the type of mower for your course. Do your homework. You are the best judge of which method of mowing will work best on your course. LM

---

The Jim Ager Memorial Junior Golf Course in Lincoln, Neb., will undergo a much needed facelift this month thanks to local superintendents and industry suppliers.

The Nebraska Golf Course Superintendents Association and some of its members are building a practice green for the 33-year-old course. The course is one of a handful of "junior" golf courses in the U.S. It hosts nearly 35,000 rounds per year for children ages 7-15.

The new green will triple the area used for lessons and warm ups. It is designed by Nebraska golf course architect Grand Wencel. Construction will be supervised by a crew from builder Landscapes Unlimited, Inc., Lincoln. The Nebraska Student Chapter of the GCSAA, and Lincoln-area superintendents and crews will do the work.

The Ager Golf Course is almost totally focused on the needs of junior golfers, from preferred starting times and "Juniors Only" tournaments to an extensive lesson program.
Trees can help define fairways, provide shade relief, serve as targets or serve as barriers to noise or unsightly views. Careful placement is important.

By JOHN C. FECH, University of Nebraska

If you ask a group of golfers what they enjoy about the sport, some may mention friendly competition, while others claim exercise, the opportunity to entertain business clients and the challenge of hitting a small white ball into a hole some 400 yards away. The one attribute that golfers mention often is the enjoyment they receive from spending half a day surrounded by lots of green grass and beautiful trees.

The green space that a golf course offers to golfers and the community as a whole is made possible in part by the strategic incorporation of trees. Several University research studies have shown that just being around a healthy landscape is refreshing and provides healing to a frazzled or frustrated person. (We may be able to assume that the effect is similar on a golf course if a player’s game is on that day).

Why trees?

Beyond aesthetics and a sense of maturity and permanence that trees can give, trees serve several practical functions on the golf course. Well-designed tree use and placement can improve the quality of play. First and foremost, trees serve to define the sides of the fairway. Any landscape space needs enclosure at some level, and the golf course is no exception. Depending on the level of maintenance of the course, the rough can be at various levels, normally 2-6 inches. The lower the height of cut of the rough, the more trees and shrubs are needed to mark the fairway, providing a target for the golfer.

Tree placement that helps define the fairway may have several approaches. The ‘layered’ or ‘tiered’ look can be effective, with small to medium-sized shrubs located in the first cut of rough, larger shrubs behind those, with trees of various sizes as a background to the shrubs. Alternatively, masses of small tree intermingled with larger ones can be planted in the deep rough to provide a sharp
mass/void feature. This can be quite powerful, creating interest and functional appeal to the golfer.

In addition to fairway definition, trees can serve to screen objectionable views from adjacent properties. Screening can also be used to reduce noise from other golfers between greens and the subsequent tee box. Screening can also be quite a safety enhancement as well as aesthetic, as plantings between fairways reduce the likelihood of errant golf shots from adjacent holes striking unsuspecting golfers.

Trees can serve to provide a background or backdrop for the green. As a golfer is lining up an approach shot from 150 yards out, trees provide perspective and a contrasting background to the putting surface. The difference in color and texture provides the necessary difference in appearance to aid the golfer in estimating distance and club selection. Small trees and large shrubs can be effectively used for yardage markers. They are generally placed in the first cut of rough to communicate distance to the center of the green.

Trees can also add to the challenge of play (occasionally perhaps not the intention of the design) such as anchoring a dogleg, narrowing a fairway or closing down the approach to a green where a slice or a hook can lead a player astray.

Additionally, a tree canopy over the bench by the cart path can be an accommodating feature of the course on those hot, sunny days. The judicious placement of shade trees in the tee box area provides a welcome respite from the elements in July or August.

Weather can have a negative influence on the golf course as well as the golfer. In winter, cold, drying gusts can dry out the crowns of the turf plants, especially on elevated tees and greens. Evergreen trees placed adjacent to these vulnerable areas can provide protection from drying winds. In some cases, a windbreak effect can be achieved, with reduced wind velocity created on the side opposite the prevailing winds for a distance equaling 3-5 times the height of the trees. The placement of trees on the course also affects the accumulation of snow as well.

Asset or eyesore?

Obviously, trees provide many benefits to the golf course. However, poorly placed or poorly selected specimens can create problems on the course, rather than enhancements. While reduced wind speed may be desirable in the winter, it can be problematic during the growing season. If the foliage is too dense, poor air circulation results. Many turf pathogens are favored by moist, stagnant air including pythium, powdery mildew and dollar spot. If turf diseases are encountered repeatedly, consider

Evergreen trees placed adjacent to vulnerable areas can provide protection from drying winds. In some cases, a windbreak effect can be achieved.

In addition to fairway definition, trees can serve to screen objectionable views from adjacent properties.

thinning the foliage by selective branch removal or removing certain trees altogether.

Tree litter is another problem that can be created by poor placement or selection. Some trees, such as Spring Snow Crabapple (Malus x "Spring Snow") produce only small amounts of tree debris, whereas others, such as Hopa Crabapple (Malus x 'Hopa'), drop large fruits and are susceptible to apple scab, which can result in many of the leaves dropping by mid-summer in a humid year. Other trees such as ash and willow have brittle wood and drop twigs, while honeylocust can drop seed pods, all of which can interfere with maintenance and play. If a tree is observed to be in a state where it causes more negatives for the golf course than positives, remove it or transplant it to another location where it will have fewer negative consequences.

All trees require maintenance, some more than
Tree details to consider

When planting or retaining trees on a golf course there are a few aspects to consider. Suitable tree species characteristics should be considered when locating trees:

► The likelihood of a tree being hit by a ball. Any thin-barked trees, such as birch, cherry, beech or mountain ash, are not suitable choices in locations where they can be repeatedly struck by golf balls. Though thick-barked trees may be more resilient, even they will be affected by repeated hits. Any trees in such locations should be considered as candidates for fertilization to help the trees withstand the additional stresses.

► The flowers, fruits, twigs and leaves. Trees which have flowers or fruits which may affect play or require cleanup should not be situated near greens or bunkers. Trees which have brittle twigs or heavy leaf fall should also be avoided in these locations. The cleanup and potential for disruption of play should be minimized. These types of trees are better situated in areas where they will not have such a significant effect on play or increase maintenance, such as along fairways, for screening, etc.

► Diseases and pests in your area. Some disease and pest problems affect the health and appearance of the trees. Anthracnoses of sycamores and dogwoods, apple scab on many crabapple varieties, Japanese beetle on Prunus spp., or the many pests of honeylocusts are only a few possibilities. Being aware of the common problems in your area can help you select trees which will not be more of a liability than an asset.

► Growth habit and spread. When planting trees it can be difficult to envision the impact of the tree when mature. A spreading tree near a tee or green may be attractive but a number of them, or trees planted too closely, can shade the turf or impinge on play, requiring pruning which reduces their aesthetic appeal. Consider the mature size and spread of the tree and the desired impact when planting; a number of smaller or narrow-crowned trees, or only one or two wide spreading individuals may be more appropriate.

► Maintenance requirements. Selecting trees which have lower maintenance needs includes trees with few pest problems and trees with strong wood. Branching habits are also important as some species have narrow branching patterns and/or very heavy dense crowns. Not only does a dense crown shade turf but it may also be more prone to breakage due to the poor branching habits. Breakage affects both the appearance of the tree as well as the structural stability (and safety) of the tree.

► How the tree affects turf and play. While all trees will have some impact on turf, select trees which are less prone to causing additional problems. Shallow rooted trees, such as Norway maple and littleleaf linden, should be avoided in most locations, particularly anywhere a ball in play could be affected. Trees which have suckers or root sprouts (such as some of the poplars) can also cause problems.

► Visual impact. Unusual species or dramatic specimens can be an asset to a golf course. However, planting too many of them together or around the course can dilute their impact. Using too broad a variety of distinctive or unusual trees can also reduce the impact of the trees. Consider the setting, the impact of the trees when mature and when you think you want to add 'just one more', don't.

► Protect and plan for the future. The loss of a mature tree can have a serious impact on a hole, whether affecting play or aesthetics. Protecting valuable and historic trees should be considered to reduce potential of breakage of large limbs or damage by lightning. Trees by water, trees standing alone and a larger tree within a group of smaller trees are potential lightning targets and installation of lightning protection should be considered. Large spreading trees or trees with co-dominant or multiple trunks are only two situations where cabling and bracing should also be considered. Not only is the tree health affected but possibly the structural stability of the tree as well.

Nancy Stairs
THE PROBLEM IS COMPLEX.
The temperature rises. So does the humidity. And you've got a problem, because conditions are perfect for algae and turf diseases like Brown Patch and Pythium Blight. If the health and vigor of turf are your responsibility, you really feel the heat.

THE SOLUTION IS SIMPLE.
The solution is Fore®. The active ingredient in Fore creates powerful synergistic action with products like Subdue®, Aliette®, and Banol®, to control a wide spectrum of your worst summer challenges. Mixtures that provide a simple solution to some tough problems.

FORE®...ALL THE RIGHT REASONS.
And there's more. Like the way Fore controls over a dozen fungus diseases. Easy-to-use packaging combined with cost-effective, broad-spectrum turf protection make Fore your best solution for complicated problems. Call 1-800-987-0467 to get more information.
Trees which have flowers or fruits which may affect play or require cleanup should not be situated near greens or bunkers. Others. When a tree’s condition deteriorates, increasing the level of care required, the superintendent needs to re-evaluate its contribution to the course. Depending on the importance of a particular tree, increased treatments or pruning may be justified. On the other hand, the function of the tree may not be critical, or it may be more cost effective to remove the tree and replace it.

Historic or memorial trees can be problematic, due to family or “friends of the course” who have a vested interest in retaining the tree, as well as a desire to enjoy playing the course as intended. When a memorial tree begins to fail, a special problem is created, because what is required for the health and vigor of the tree or for the playability of the course may not get done, for fear of upsetting club members. Superintendents may want to consider bringing these concerns forward to the Greens Committee to establish a standard operating policy concerning tree health and justification for judicious pruning, pest control and removal.

A good open line of communication is helpful for tree maintenance, just as it is in greens maintenance.

Trees can be an asset or an eyesore. The challenge for the superintendent is to routinely monitor trees for pests, consider the relationship of the canopy, bark, roots, fruits, and silhouette of the tree with that of the turf, and evaluate the proper balance of trees and turf on the golf course. A consulting arborist or horticulturist can provide valuable insights and perspective, and should be utilized periodically to keep the golf course a valuable part of the recreational green space.

Conflict resolution

Trees and the turf compete on several fronts. Turf roots, due to their sheer density, have the advantage for nutrient uptake. But trees get more of the sunlight.

This has been the cause of many headaches for golf course superintendents. Shade can create poor turf conditions, but tree removal can be a source of disagreement and conflict with club members.

Wholesale tree removal is not always required to increase light on an over-shaded tee or green; the removal of selected branches may be sufficient to increase the light in a particular area. But making that decision with any degree of success can be difficult.

One method that can assist in this process is a system which uses sun location as a basis for determining appropriate pruning or removal. The SunSeeker system identifies the position of the sun at any time of the year for any geographic location. Using calculations which take into account the latitude and longitude of the golf course, the spin of the earth, and the angle and rotation of the earth around the sun, the computer program is able to calculate the position of the sun throughout the day.

A superintendent can identify when a shaded area requires more sun and the programmed transit can use those times to determine where the sun will be. Based on this information, the actual locations where the pruning or removals will have maximum effect can be identified. Not only does this system minimize tree removals while increasing sun exposure but it also simplifies the decision process and justifies tree pruning and removal to a concerned membership or Greens Committee.

The benefits of the SunSeeker include: improvement of turf conditions, minimal loss of healthy trees, minimal disruption during peak golf season, simplification of tree management decisions and increased accuracy for pruning and removal decisions.

ArborCom Technologies, the company which markets this product, also provides training and consulting services. ArborCom can be reached at 888-786-5628 or at http://arborcom.on.ca for more information on their products and services.

Nancy Stairs
Can Your Urea-Based N Sources Compare to Nitroform®?

There is a difference in nitrogen sources. Unlike the others, Nitroform® is released throughout the growing season by soil microorganisms. Nitroform® feeds organically. It supplies both carbon (energy) and nitrogen (food) for microbial absorption and utilization in the soil. The carbon in urea-based fertilizers is chemically converted to CO₂ and lost to the atmosphere...a waste of energy.

Increased microbial populations hasten the decomposition of organic residue. In turf, this reduces the potential for excessive thatch formation while accelerating the production of humus, nature’s ultimate and perfect growing medium. Nitroform® promotes vigorous rooting and development of root tissue. The effect is even more pronounced when Nitroform® is incorporated in seedbeds or sodbeds, in container soil mixes, or following core cultivation.

Because the N in Nitroform® is released by soil microbes, it is resistant to leaching and runoff...even in sandy soils under heavy rainfall and irrigation. What is your choice?

• Nitroform® Provides Season-long Feeding
• Nitroform® Enhances Microbial Activity
• Nitroform® Promotes Rooting and Root Formation
• Nitroform® Protects the Groundwater
Storm water management ponds: Asset or Liability?

Water quality within the retention pond is key to an aesthetically pleasing pond.

by AMY SNYDER, Ruppert Landscape Company

It's out there probably in the back of your property, where it is out of sight. Storm water management ponds are large basins engineered to retain sediment, water, trash, leaves and other storm runoff.

Although functional, they are generally unattractive and can be costly to maintain due to the need for occasional algae control and dredging or demucking. In the near future, these costs are likely to grow as increased regulations on water quality management and inspections of storm water management ponds continue to rise.

Fairly simple solutions exist for turning this liability into an asset, most of which require minimal planning and budget. Four strategies employed by Ruppert Landscape Company's environmental branch include:

Water quality enhancement

Maintaining the water quality within the retention pond is the key to having an environmentally conscious and aesthetically pleasing pond. Sediment, the particles that settle to the bottom after being washed into the pond, accumulates and decreases water quality. In time, dredging and de-mucking will be necessary to maintain the specified water holding capacity.

Constructing a small basin area, known as a sediment forebay, near the in-flow area will help to reduce the water's velocity during heavy storms. This section is separated from the rest of the pond which allows suspended particles to settle out before reaching the pond, and it can be cleaned at a fraction of the cost.

Erosion control

Combating erosion is another important step in increasing a retention pond's value. When not monitored, erosion can carve unsightly chunks out of feeder streams and alter the appearance of slopes and pond edges. The reasons for erosion are many, but two factors are large contributors:

Inadequate drainage capacity. Ongoing land development causes an increase in storm water run-off. Feeder streams (and many ponds) do not have the capacity to handle the excessive run-off without eroding themselves, which adds to the problem. Recent advances in bio-engineering techniques, such as biodegradable fiber
blankets and logs, can be employed to strengthen stream banks and maximize their ability to handle drainage without producing further erosion.

**Lack of vegetation.** Having little or no vegetation in and around stream and pond banks greatly increases erosion. This problem can be remedied by planting stream banks and slopes and seeding lawn areas. Geese, however, can often hamper these efforts by denuding these areas in their quest for food. By designating areas where employees and visitors can feed and enjoy the geese, and setting up deterrent devices to discourage them from nibbling on turf and plants, this situation can be effectively controlled.

**Wetland plantings**

Installing wetland vegetation and native grass mixes provides three main advantages:

**Stabilization.** Plant installation effectively stabilizes the slopes and prevents erosion and siltation of the pond. This leads to decreased pond maintenance costs.

**Beautification.** Emergent aquatics, rushes, sedges and flowering shrubs can greatly enhance the attractiveness of this area. Plants can be installed on the pond floor, on shallow shelves created in the embankment, or on the pond's edge to help create a buffer zone.

**Water quality improvement.** Many storm water structures are deluged with oil, chemicals and other pollutants from urban areas. Over time, increased nitrogen levels cause the pond to become choked by unsightly algae growth. Installing emergent plants can fight these imbalances by absorbing excess nitrogen and improving water quality, reducing the need for chemicals to control algae. This environmentally sound solution really treats the underlying problem and not just the symptom.

**Wildlife introduction**

Introducing wildlife varieties can be useful for the water quality in the pond as well as for the surrounding area. Within the pond, snails, catfish, white suckers and rosie red minnows help by either eating decaying plant material and algae, or feasting on mosquito larvae. By providing vacant houses, bats, blue birds and wood ducks can be enticed to move into the neighborhood in and around the pond. These species, along with many varieties of fish, are an environmentally friendly way to control the insects that frequently call a pond home. These welcomed tenants can also provide bird watchers and nature enthusiasts with plenty of new viewing subjects!

Is your retention pond a visual and economic problem, or will it become one as government mandates on water quality become more stringent? These up-front investments should pay for themselves while making your storm water management pond the property's prize, not its problem.

Amy Snyder is a public relations specialist for Ruppert Landscape Company, a nationally-ranked full-service commercial contractor.
The lowdown on fake golf grass

Artificial golf greens greet a growing number of golfers both on the course and in backyards. The secret to good results is proper installation.

By JAMIE PETERS

Artificial turf has long been in use in the football, baseball and soccer industries; but golfers have strongly rejected the use of synthetic turf as a replacement for real grass. Skeptics claim that fake grass can't possibly equal the subtle contours of real turf the game demands. Lately, however, the demand for synthetic turf has increased because of technological improvements, skilled installation procedures and a general rise of interest in golf.

At the moment, artificial greens have found their niche among homeowners and small business owners, who see them as a viable option in place of spending the money required to maintain natural greens. The synthetic grass is most popular as putting greens in residential areas, and as chipping turf at driving ranges.

SynTenniCo's artificial greens feature a resiliency like that of real grass, offering a similar bounce and spin, says Allan Lemay, senior account executive of Fieldturf, a division of SynTenniCo, Inc. in Georgia. "It duplicates and mimics the properties of grass a lot closer," Lemay says of the turf, which is used for putting, target and chipping greens.

Grass Tex, Inc. designs synthetic grasses to fit an environment's climate and a customer's needs, says Lee Thomason, golf products manager of Georgia-based company. "We can make a slow putting green, or we can make a fast putting green, depending on what the customer wants," says Thomason.

While technological improvements have made many of the turf types more resistant to heat, chemicals and water; the installer still remains the crucial part of the turf's quality.

"The magicians are the people in the installation business," says Jay Cohen, President of Golfscrapers. The company, with offices in California and Pennsylvania, represents SynTenniCo's golf division. The quality of the golf area is dependent on the installer's skill, says Cohen, who recently installed a six-hole, three-par golf course in New Jersey with artificial greens. "It's built with different layers of stone as opposed to a real golf green, where they put in a drainage base, and then they use a USGA soil mix," he says. "We do the same thing. We put in a drainage layer of stone, and a drainage system in, like a real golf green. And then after that we build the rest of the green with layers of different rocks depending on where the climate is.

Woodhull: likes the no-maintenance feature.
and the drainage of the property. And then we apply the turf once that's done."

The drainage system is similar to a real golf green's, says Cohen. "In a synthetic green, the way it's done is you put the drainage base in, and you use the pea-gravel type of rock so water doesn't sit around in the bottom; basically you're almost building a concrete box in the gravel. It's not really that, but it's a simulation of that. So what you do is you take a drainage system, and you build it around the perimeter of the green right up at the surface using a French drainage system and even some surface drains to drain into that. The water that hits the turf will roll off of it, into the system, and so there won't be any mildew and anything created around the green itself. The dirt doesn't get fungus in it. The grass doesn't thin out, and that's how you keep it healthy looking."

Much of artificial turf's appeal lies in the minimal maintenance required, which saves the owner time, labor and money. "You don't have to mow it; you don't have to fertilize it; and there's no maintenance," says Thomason.

George Woodhull, owner of Woodhull Landscaping in Riverhead, New York, started installing residential putting greens in March as an add-on business. Woodhull, who has a contract with Old Pro Putting Greens in Georgia, installs the greens for $7.50 a square foot. "I'm trying to focus on maintenance-free landscapes," he says. "The putting green is something I've always wanted to do, but I could never justify the costs of the fungicides and pesticides involved with a putting green in someone's back yard. But now with this synthetic turf from Old Pro, I can do that. It's not cheap. But you look at the maintenance-free aspect of it, and it's worth it."

Woodhull, who uses a four-man crew to install a 12 ft. by 30 ft. putting green, edges out the area's grass and places the green below the grass' grade, to create the appearance of a fairway that leads to the green. Although there is a growing acceptance of artificial turf in the golf world, many golfers still view the artificial greens as impure and low-quality.

"It's still a relatively skeptical business to golfers," says Cohen. "The golfers are skeptical because they don't believe in their minds that anything artificial could be good."

Golfers were wary of the artificial course in New Jersey, at first, says Mat Buonomo, property management director of Village Green Apartments, where the turf was installed. "In the beginning, it was new; so when people heard about it, they were like, 'Well, that's not going to be the same'," he says. "But we have more people out there now than we have had in many, many, many years. So it's usable now, and that's what we're looking at."

The consensus among the installers is that artificial turf will never replace real grass, but there are markets for both. "Grass is grass, but it's hard to maintain," says Lemay.

A growing interest in golf is also conducive to the market. "There's really a golf craze going on, so hopefully I can jump on the bandwagon now," says Woodhull. In the future, it's likely that golf courses installed with artificial greens will be a common sight. Thomason says his company is considering installing synthetic turf at a nine-hole, three-par golf course in Michigan. "The sport is growing so fast that there is no telling where it will go," says Thomason.

For more information about artificial golf turf:

Golfuscapers, 701 Knox Road, Villanova, PA 19085. (800) 560-7888.


Grass Tex, Inc., Dalton, GA 30720. (800) 544-0439.
Tracking your budget

Superintendents discover that software is a powerful tool in monitoring and managing not only their programs, but their costs.

By RON HALL/Managing Editor

While today's superintendents must be sharp when it comes to agronomics, it's equally vital that they understand golf course budgeting too. They're increasingly required to track and manage maintenance expenses. This is a daunting task with maintenance budgets, on many courses, exceeding seven figures.

A relatively recent tool to help them manage their programs, and especially to blend their maintenance programs with their costs, is industry-specific software. More superintendents are embracing this technology in an effort to give them more control over organizing, monitoring and managing their programs. It gives them up-to-the-minute snapshots of their programs (and costs), and more complete information of specific aspects of their programs at the touch of a "mouse" should they need that too.

One big reason why many turf managers are just now beginning to embrace golf course maintenance software, which has been available in one form or another for about a decade, is its increasing ease of use.

Software developers know that if the learning curve for their products are too steep, busy professionals—and that certainly includes superintendents—won't use them. These suppliers are responding with products that don't require a lot of computer expertise by end users. Suppliers are also increasing technical support for their software products. Both are resulting from user feedback. Turf managers are becoming increasingly vocal concerning the improvements that they want to see in their software products.

Gene Dommer, CGCS, is probably like a lot of other superintendents who don't exactly look forward to preparing the annual golf course maintenance budget. Dommer says the process used to take several weeks of pencil-and-paper calculations. But budgeting, he says, is easier now because of computerization.

"When I did this year's budget I just entered my figures into the computer, putting in the percent in increase of costs for everything, including labor. Then I compared it with last year's budget and for the last five years, and it was basically done," says Dommer, superintendent at Peach Tree Golf &
Calcium Deficiency Corrector

Addition of calcium to the soil by traditional means is not usually efficient or effective in treating the calcium deficiency of turfgrass. Once applied, the common forms of liming materials can rapidly change to compounds that are insoluble in water and not readily available to the plant. Continuous applications over long time periods are necessary to effect even modest improvements in calcium uptake.

Quelanr-Ca is a newly available amino acid chelated calcium product that corrects calcium deficiencies in turfgrass upon application. Quelanr-Ca provides readily available calcium chelated with amino acids so that it is easily absorbed by the leaves and/or the roots of the plant regardless of most soil and water conditions. The unique formulation of amino acids used for chelation was developed not only to facilitate absorption by the leaves and roots, but to increase mobility of the calcium within the plant as well.

Quelanr-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.

Best of all, Quelanr-Ca is economical to use and it protects the environment.

Quelanr-Ca — a true systemic. It’s new...it’s unique...and nothing else works quite like it!

For more information about Quelanr-Ca call Nutramax Laboratories at: 800-925-5187
More about GCS

GCS for Windows covers every aspect of turf site operations and can be installed and operated with absolutely no computer experience. The program can also be used by parks and recreation managers or stadium managers.

All functions are described by InCircuit as "extremely intuitive." All functions are accessible by a simple 'point and click' of the mouse. The system integrates several management functions, including chemical/fertilizer applications and record keeping, budgeting and forecasting, equipment maintenance, inventory control, work orders, personnel records and much more. Help buttons appear on every screen to guide you through each operation.

GCS takes full advantage of Windows advanced graphics and easy-to-use qualities. You can scan in photos of employees, inventory, equipment and your turf site.

Printed reports are professionally formatted and customized with your company logo. The system also interfaces with a fax modem so purchase orders, reports and other forms can be faxed directly from the application. File utilities allow you to share information with common applications such as MS-Excel, Lotus, Quicken and virtually any other business software.

Standard package lists at $1995. The Network Node version sells for $395. Support plans are also available for $495 or $295.

For information about GCS 3.10 for Windows, contact InCircuit Development Corporation, 515 Capital of Texas Hwy., Suite 225, Austin, TX 78746. (800) 963-1925. Visit their web site at www.incircuits.com. The site lists components and system requirements and pricing information.

Country Club, Marysville, CA.

"We track the budget every day," he adds, "and I put together a weekly report. I can tell to the dime how much I've spent on things like electricity, labor, fertilizer or any of the departments."

Dommer says the software that he uses is GCS 3.10 for Windows. (GCS stands for Grounds Care System.) Basically, he says, the software allows him to manage just about every aspect of his course's maintenance with a lot less paperwork and guesswork. "It's like having a private secretary," he says.

This particular program is divided into sections, called modules: Chemical, Equipment, Financial, Grounds, Inventory, Personnel, Weather, Work Order. All are fully integrated.

Jim Wier is the chief mechanic at Iron Horse Golf Course, Ft. Worth, TX. He uses the GCS 3.10 for Windows program to track "all of my maintenance on all of my equipment."

Wier must keep 53 pieces of maintenance equipment in top running order at the 18-hole, high-end municipal course. He said the first step in converting to the program was to enter information about the equipment into the program.

"Setting up the program took about four or five fairly intensive days," says Wier. "I'm not in a position where I can just sit here and enter data for four or five hours at a time. I'm constantly being called out of the office."

With some technical support from the supplier, Wier says computerization has greatly simplified the tracking of his preventive maintenance program. "We set up service intervals for each piece of equipment, and the program will tell you what maintenance is required for each piece of equipment."

But is computerization for your course? That, of course, depends upon several factors, not the least of which are expense, and also the ability and willingness of the users of the software program to input the necessary data, and then update it as needed.

A small, low-budget course may be able to manage its maintenance programs by hand with a traditional ledger.

Larger courses with more tasks, people and equipment to manage might find that the initial cost and time needed to get the computerized system up and running is a small price to pay for increased control and efficiency. □
In a single stroke, professional golf course superintendents can control dollar spot, leaf spot, spring dead spot, melting out, brown patch, crown rot—in fact, more than 15 tough diseases in all. They do it with Eagle® fungicide, one of the tools every pro should have in his bag of tricks.

The test of a real pro comes under pressure. It's the same with a turf fungicide. When the disease pressure is heaviest, when the heat and humidity are highest, that's when Eagle really performs. And its low use rates make it cost-effective wherever you use it—from tee to green and in between.

As part of a 14-day protectant schedule, Eagle offers unbeatable disease control, exceptional turf safety, and easy handling. With performance like that, it's no surprise so many pros Eagle every hole.

Call 1-800-987-0467 for more information.

ALWAYS READ AND FOLLOW LABEL DIRECTIONS. Eagle® is a registered trademark of Rohm and Haas Company. ©1997 Rohm and Haas T-O-229

For top-flight performance.
ASGCA members designing top-ranked courses

Based on an article in Golfweek/Golf & Travel, a correlation between highly-trained architects and top-ranked golf courses can be identified. Of the 100 best modern courses designed since 1960, 88 of them have been designed by members of the American Society of Golf Course Architects.

The stringent membership applications process also ensures a high level of professionalism and skill. For initial membership consideration the applicants must have been engaged in the practice of golf course architecture for at least five years and have designed at least five courses, from preparing plans and specifications to observing the construction and completion. In addition, applicants must be responsible and ethical.

In the meantime, the ASGCA continues to focus on designing affordable and accessible golf facilities for the increasing demand. One way to promote affordable golf is through the use of less-expensive local materials for bunkers, greens and other features of the golf course. Not only does this reduce costs but may actually add to the challenge of the course. For example, the use of local sand materials can increase the challenge of bunkers due to the different characteristics from a more standardized, and more expensive product. Reducing irrigated turf areas and increasing natural areas also contribute to more affordable but challenging golf.

One difficulty in keeping golf course design affordable is the demand by golfers for perfect playing conditions.

According to ASGCA president Bob Lohmann, "we need to get back to the roots of the game, when varied lies and un-manicured turf were understood as part of the challenge and charm of the game. Not demanding perfection would contribute to our ability to provide affordable facilities."

Past-president Judy Bell agrees, saying "the bounces, runs and swales are part of the game".

1997 golf participation up 7, 15 percent

According to the National Golf Foundation, in 1997 the game of golf had its first significant increase in participation in seven years. The last time the numbers looked so good was in 1990 when the number of golfers increased by 15 percent and the number of rounds by 7 percent. Unfortunately the numbers decreased the following year by a nearly equal amount and stayed there.

In 1997 the number of golfers increased by 7 percent and the number of rounds by 15 percent. The increase appears to be fueled by significant increases in beginning golfers (51%) and junior golfers (34%). Increases in avid and moderate golfers, 6 and 30 percent, respectively, are also promising as these player segments account for a majority of the spending in golf. The next step, according to NGF President and CEO Joseph Beditz, is to make sure the industry retains as many of the new golfers as possible and ensure that they become long-time frequent golfers.

The outlook, says Beditz, will depend on how many occasional golfers and how many of last year's beginners stay in the game. Beditz believes that the new player development initiatives being undertaken by the USGA, World Golf Foundation and other golf associations will be instrumental in maximizing the potential for continuing increases in the years to come.

"Only time will tell," says Beditz, "whether golf is ready to resume the steady climb it was on in the late 1980's. As always, what happens in rounds played will be dictated largely by the weather and so far this year play is down overall due to El Niño's disastrous impact on playing conditions throughout the Sun Belt."

NGF's new market research program

The new market research program for the National Golf Foundation is expected to enhance its measurement of golf participation levels and rounds played in the United States.

The American Golfer Survey is the largest effort of its type by the NGF or any other golf industry research organization. The program will involve 300,000 households and 30,000 golfers each year. Each month 25,000 nationally representative households will be screened to measure golf participation and rounds played. In addition, 2,500 randomly selected golfers will be surveyed to determine their spending on, awareness of and preferences for specific products and services.

Another useful feature of this survey methodology is the inclusion of a customized monthly research element which will allow NGF member companies to collect golf consumer and market data that is of specific interest to them.

Joseph Beditz, NGF President and CEO, is confident that the new program will be useful. "In addition to providing a new constant stream of timely and nationally projectable data on golf participation and rounds played, this program will enable us to systematically measure spending as well as other important golfer behavior and attitudes."
As sure as the sun will rise

NEW TERRA • FERTILIZERS WITH GOLDCOTE™
Predictable, Controlled Release

Predictability – that’s exactly what you want and need from a controlled-release fertilizer. And that’s exactly what Terra’s GoldCote™ polymer technology delivers.

Terra’s GoldCote nutrients are released based on soil temperature. As turf root activity and nutrient requirements increase with soil temperature – the release of nutrients from Terra’s new fertilizers with GoldCote also increases. Your turf has what it needs – when it needs it.

Plus, since temperature is the key, the GoldCote release rate is virtually constant for all levels of soil moisture, soil pH and microbial activity.

Here’s how GoldCote works.
As the soil temperature increases, water vapor from the soil passes through the multiple coatings. The resulting condensation and pressure within the fertilizer granule causes a precise and predictable release of nutrients.

In fact, as this chart shows, nutrient release from Terra fertilizers with GoldCote can be accurately predicted based on temperature. That means you’ll get the performance you expect – when you expect it. You can count on it.

GoldCote Release Rates
% Released/Days/Soil Temperature
Consistent, Superior Nutrition

You know exactly what you want and what your course needs. From urea to monoammonium phosphate (MAP) to potassium nitrate, there's a Terra controlled-release fertilizer with GoldCote that will meet your demands.

And if you demand the best, Terra's potassium nitrate fertilizer with GoldCote is what you want. It provides a balance of potassium and nitrate nitrogen for good blade and root growth. Terra's potassium nitrate fertilizer with GoldCote:
• improves turf quality and color;
• promotes steady, consistent growth;
• eliminates growth spurts and fluctuations;
• minimizes waste and potential pollution caused by leaching and volatilization, and
• reduces the salinity and potential burn common with the use of many fertilizers.

One thing is as certain as you seeing the sun rise each morning -- all Terra GoldCote fertilizers have been formulated with the highest quality nutrients and developed to deliver the results you want.

Fewer Applications

You know better than anyone that there's never enough time -- or manpower -- to do everything that you need to do. Terra GoldCote reduces the amount of application time your people have to spend compared to conventional fertilizers. Plus, consistent nutrition means consistent growth. There are no growth spurts. No fluctuations. And, as a result, no extra mowings. You can use your people where you really need them.

Talk to Terra about the entire line of fertilizers with GoldCote. You'll get predictable release and superior results with fewer applications.

You can count on it.
There's a Terra fertilizer that's right for your course.

There's a Terra fertilizer that can help you grow healthy, green turf with a strong root system. Turf that's healthy and better able to fight disease, pests and everyday wear and tear.

At Terra you'll find a complete line of professional fertilizers with virtually everything that you need — including primary, secondary, micronutrient and pesticide packages. Plus, Terra's GoldCote technology now delivers consistent, high-quality nutrition with a predictable, controlled-release rate. Your turf gets the nutrients it needs ... when it needs them.

Plus, you can count on Terra for the support, service, assistance and expertise it takes to select and use the fertilizer that's right for your needs ... right for your course.

Terra Industries Inc.
P.O. Box 6000
Sioux City, Iowa 51102-6000
1-800-288-7353
www.terraindustries.com

Working with you.
During his 20 years as a certified golf course superintendent, Bill Bird thought he had a hectic schedule. Then he became horticulture/park maintenance supervisor for the Oklahoma City Parks and Grounds Division. He now manages a half-dozen sections dedicated to improving and maintaining green areas of the city. Bird is busier than ever.

"I probably criss-cross the city two or three times a day checking on various projects and crews," says Bird, who worked at four golf courses in the Oklahoma City area before joining the Parks and Grounds Division in March 1997. "Our employees plant about 700 trees each year, maintain all parks and playground equipment, operate a greenhouse for all plantings, do tree trimming, and plant all flower beds—to name a few things. I also oversee all park chemical spraying and operations."

Since Oklahoma City has more than 100 parks covering about 6,000 acres, Bird handles spraying of some 50 miles of post-and-cable and fencelines every six weeks. His crew also sprays around the bases of trees so that mowing crews don't have to mow right up to tree trunks.

"Our goal is to reduce the amount of time it takes for the mowing crews to get through," says Bird.

Before Bird began managing the spraying operation, the spray crews were using Roundup for all trimming procedures. The mowing crews then would come into an area two weeks later, allowing time for Roundup to take effect. Generally, the crews would mow any vegetation still growing.

"In the spring of 1997, temperatures were cooler than usual and that delayed the effect of Roundup, which has to be translocated within the plant," explains Bird. "So, before the herbicide could get into the plants, the crews were line-trimming the vegetation and we were losing the effect of the Roundup. It also cost a lot more in manhours for the trimming."

While still a golf course superintendent, Bird first used Finale Herbicide for spot spraying dallisgrass in closely-mowed turfgrass areas. He liked the herbicide's mode of action and speed of activity. Soon after he began working for the city, he submitted a proposal requesting that his spray crews begin using the herbicide in all line-trimming operations. The city approved his proposal.

"Once we changed over to Finale, the mowing crews could see exactly where the chemical was sprayed within two or three days," says Bird. "The beauty of the product is its fast action. Instead of a two-week wait, we moved the trimming operation up to four or five days. The trim crews also weren't cutting areas they weren't sure about anymore. Vegetation turns a bright yellow after Finale is sprayed, so the crew can definitely notice
which areas have been sprayed."

Five two-person spray crews apply the product at the rate of 2 ounces per 1,000 square feet with John Bean sprayers. One person drives the truck with flashing lights while the second walks with the hose and sprayer along the fenceline or post-and-cable. They also spray the herbicide in a 2½- to 3-foot radius around trees to control vegetation without having to girdle the tree by trimming too closely.

The herbicide "changed things overnight for us," says Bird. "Once we started using it, we had everything back on schedule within three weeks. It was a trial program last year, but it worked so well that we switched the whole line-trimming operation to Finale for this year."

Bird also oversees a 35-acre arboretum where the greenhouse is located. In addition, he oversees the AmeriCorps program, which trains young people to trim trees, and plant and care for more than 100 trees a year in blighted areas of the city.

"All of my departments are busy at different times of the year," says Bird. "I haven't experienced any downtime since taking this job. Fortunately, I like staying busy." LM