first hard frost.

"The technology is being developed, and it's not just in the mowing and equipment areas," Nus admits.

**A short list**—Bill Roberts, a past president of the GCSAA, is superintendent at the Lochmoor Club in Grosse Pointe Woods, Mich. He believes these trends may soon have an impact on course maintenance:

1) Experts predict that, by 2000, more than two-thirds of our entry-level employees will be minorities, immigrants and women.

2) The playing clientele will also change: by 2000, demographers estimate that the over-65 population will be 34.9 million, double that of 1960.

3) As the decade wears on, more professional superintendents will feel the need to embrace the Computer Age, to cope with the volume of information they must process.

4) New technology will give us new products: water-soluble packaging, water-jet aerifiers, turf varieties that need less water and are more resistant to pests, and disease diagnostic kits.

5) There will be a trend toward globalization of golf course maintenance, meaning an increasing opportunity for American superintendents to work abroad.

6) Supers will have the opportunity—even the responsibility—to impact their legislators: developing regulatory awareness, helping to communicate environmental impacts, and achieving regulatory compliance.

"Farsighted superintendents who monitor such trends and prepare thoughtfully for tomorrow will be in the best possible position, for themselves and for their facilities," Roberts observes.

**Regionality**—More specifically, here are some regional trends in golf course maintenance identified by the National Golf Foundation:

1) In the Southeast, subsurface drainage systems have become standard.

2) In the Midwest and Northwest, public facilities are moving away from bluegrass and ryegrass and opting instead for bentgrass on their fairways and tees.

3) In the Northwest, superintendents frequently use sand topdressing programs for fairways to create better surface runoff and thereby improve turfgrass and playing conditions.

4) In the Southwest, most golf facilities being built have continuous cart paths for better traffic control and to save wear-and-tear on the course.

Finally, Hiers thinks, "You're going to see smarter placement of—and less—grass. What I mean by that is that the golf course will fit a typical golfer's game, wider landing areas for 'relaxed target golf' rather than the wide, long fairways we have today."

—Jerry Roche

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**Seeing the future at La Quinta resort**

- Communications, water and the environment, and safety. These are the future of golf course management, according to superintendent Michael Tellier of La Quinta, (Calif.) Hotel Golf and Tennis Resort.

Over the five years that Tellier has been superintendent, there have been many changes, "I'm more involved with communications now," he says. "Because we have a year-round membership and a constant flow of activity connected with the resort itself. I work closely with the pros on staff and with the tournament directors, both of the hotel and of the event. It's necessary to interact in both the planning and execution stages. Make sure the tournament is carried out the way the directors want it to be, and that the condition of the course is consistent with the skill level of the players. The communication helps us deliver what is expected.

"Agronomically, water management is an increasing issue. We're looking at computerized irrigation to increase efficiency and cut costs. We're now operating from individual field satel-..."
must (also) keep accurate, complete records on all of them.

“Safety has also become a key issue. Five years ago, we weren’t doing much on safety. Now we spend more time with initial training of employees and we have weekly safety classes. There’s a safety director for the entire complex who oversees the program. We have 80+ topics identified, and these topics are tailored to meet the needs of the individual departments.”

Tellier is responsible for preparing and conducting the meetings with his staff. “We try to rotate the topics and present them in different ways,” he says. “We bring in medical consultants, mechanics, manufacturing people, and use prepared videos. The videos range from proper operation of equipment to the use of respirators and pesticide handling.”

He also takes every opportunity to serve as hands-on safety trainer for his crews in the field.

“Equipment has come a long way in the last five years,” Tellier adds. “The lightweight mowing options; the trim mowers and the popularity of grooming attachments give superintendents more options and help get the job done better, in a shorter time.”

One of Tellier’s three courses, The Dunes Course, was host to the John Deere Team Championship Golf Tournament two months ago. With 30 five-person teams playing in the modified scramble event, and other guests as well, Tellier had 230+ rounds per day for the one day of practice and two days of competition. The following week, the PGA Tour Qualifying School was held on the same course.

“With everything that’s happened in the last five years, it’s going to be exciting to see what the future will bring,” Tellier concludes.

—This article was written by Suz Trusty of Trusty & Associates, a consultant to the horticulture trade, in Council Bluffs, Iowa.

According to Pat O’Brien of the U.S.G.A. Green Section, rolling greens may become popular in the near future.

“Rolling has been pretty much abandoned because we have such good green mowing equipment,” he says. But the demand for fast greens—especially for professional tournament play—has forced superintendents to mow low and thus place so much stress on the turfgrass plant, that rolling might be making a comeback.

“Just about every PGA Tour course rolls its greens now,” O’Brien notes. Baltusrol, for instance (site of the 1993 U.S. Open), had pre-roll stimpmeter readings of about 8’3”. After they were rolled with a Salsco unit, they stimped out at 11’5”.

“The stimpmeter is the main reason for the demand for fast greens,” O’Brien observes. “And the roller will increase green speed without having to mow lower.”

Rolling will also help the green’s putting consistency, eliminating footprints, divots, spike marks, diseases, weeds and dry spots, especially in the “lumpy donut,” that one- to 12-foot radius around the hole. Putts can “hiccup” when they hit lumps in that area, where the ball is rolling slowest and most likely to be influenced.

O’Brien suggests that superintendents who are interested in rolling greens should experiment with it. The best time to roll is before special tournaments or early in the golfing season when the greens are bumpier. Supers should not roll, however, after irrigation or rainfall, after topdressing or fertilization.

Two manufacturers of greens rollers include Salsco (1-203-271-1682) and Cultural Turf Technologies (1-800-793-7655)

—J.R.
Reel mowers: Getting better every year

Work smart with lighter, quicker reel mowers. Shop around. You’ll find one with something new.

- Budget cuts and time constraints make your reel mower the most important piece of equipment you own.

You want a mowing unit that’s durable, so you don’t waste your time repairing it.

You might want a versatile machine, one that comes with many attachments, so you don’t have to buy multiple equipment. Some mowers mulch, sweep, remove snow and have broom attachments.

It’s easy to become jaded when talking about mowers. They all seem alike, with little change from year to year. But while it may seem that mowers change little over the years, it all depends on what you want the unit to accomplish, and the time you’re willing to invest in shopping around.

And if you’re brand loyal—like so many of you are—don’t worry about not shopping around. Your regular supplier has no doubt been busy adding a new time-saving innovation to your old favorite.

Here’s a rundown of the major greens and fairway reel mowers for 1994.

—Terry McIver

Ransomes TC-28 greens-mower cuts 2,240 sq. ft. of turf per hour. (#315)

National 68” Triplex is compact, productive. (#324)

Kubota’s Verti-Reel triplex easily converts to a vertical cutter or core buster. (#322)

John Deere’s 2243 greens mower. (#312)

Jacobsen’s Greens King IV now has 11-blade reels. (#313)

Bunton’s fairway mowers have ‘cruise control’ for steady speed and uniform optimum cutting. (#318)
You'll be happy to know you can now get the superior crabgrass control of Dimension® turf herbicide at a lower cost per acre. So you don't have to be afraid of the cost of using Dimension ... unless you're a clump of crabgrass!

That means now is the most affordable time to step up to Dimension. And if you're already treating your tees and greens with Dimension, why not start using it on your fairways and roughs, too? It's safe for most turfgrasses and completely non-staining, so you can apply it with confidence anywhere on your course.

Dimension fits easily into any turf management program. It controls crabgrass in both pre- and early postemergence stages, giving you the widest application window of any turf herbicide. Plus, you can get Dimension in either a liquid formulation or as fertilizer granules. No other herbicide gives you so much flexibility.
Join the growing number of satisfied golf course superintendents who've switched to Dimension. We'll be happy to give you the name of your distributor rep and our FREE guide, "Ten steps for keeping crabgrass (and your budget) under control." Just send in the attached coupon or call: 1-800-276-1811.

I'd be happy to get a copy of the FREE guide, "Ten steps for keeping crabgrass (and your budget) under control," plus the name of my distributor rep for Dimension® turf herbicide.

Name ____________________________
Title ____________________________
Course __________________________
Address __________________________
City ____________________________
State ____________________________ Zip ____________________________
Phone ____________________________

1. What crabgrass product are you currently using?
   A. Dimension  B. Barricade  C. Pendimethalin  
   D. Team  E. Other

2. How satisfied are you with your current crabgrass program?
   F. Very Satisfied  G. Satisfied  
   H. Dissatisfied  I. Very Dissatisfied

3. How many acres do you treat for crabgrass? _______ acres

Mail coupon to: Dimension Golf Guide
P.O. Box 410143
Charlotte, NC 28241-0143

DIMENSION® Turf Herbicide
by Monsanto

The toughest thing to emerge since crabgrass.
# Greens Mowers for 1994

<table>
<thead>
<tr>
<th>Company</th>
<th>Model</th>
<th>Features</th>
</tr>
</thead>
<tbody>
<tr>
<td>Brouwer</td>
<td>Big 5-gang PTO driven</td>
<td>Brouwer's big 5-gang PTO driven mowers have a 'floating-mowing-unit' design that works well on wet grass. (#317)</td>
</tr>
<tr>
<td>circle No. 311</td>
<td>Triplex greensmower</td>
<td></td>
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<tr>
<td>Circle No. 311</td>
<td>walk-behinds</td>
<td></td>
</tr>
<tr>
<td>John Deere</td>
<td>2243 greens mower</td>
<td>18 hp Kawasaki 4-cycle, V-twin engine; 1270 lbs; 5-inch reel diameter; reel-to-bedknife adjustment; hydrostatic drive; 0-4 mph mowing speed. Model 22 and 22R walk-behind mowers, with aluminum traction rolls and internal differential drive within the rolls</td>
</tr>
<tr>
<td>Circle No. 312</td>
<td>walk-behinds</td>
<td></td>
</tr>
<tr>
<td>Jacobsen</td>
<td>Greens King IV</td>
<td>New 11-blade reels, for a .180&quot; frequency of cut at 3.7 mph; Kohler 16 hp, 4-cycle gas engine or Kubota 16.5 hp diesel; cuts a 62&quot; swath. 22&quot; standard greens mowers with 2- or 4-cycle Honda or Jacobsen engines and Turf Groomer greens conditioner The Greens King 422 has a new clutch design 4 hp Honda engine</td>
</tr>
<tr>
<td>Circle No. 313</td>
<td>walk-behinds</td>
<td></td>
</tr>
<tr>
<td>Lesco</td>
<td>300/300 D</td>
<td>Now with the 18-hp Kohler V-Twin command engine; choice of float or positive cutting units; 60 3/8 inch swath; six or nine blades; 8 blades on heavy-duty unit; power hydraulic steering</td>
</tr>
<tr>
<td>Circle No. 314</td>
<td>TC-28 greens mower</td>
<td>28&quot; cutting swath; cuts 2,240 sq. yds/hour; split drive roll with differential, for easy turning; easy to adjust height; easy pull start; 5.2 hp Kubota engine</td>
</tr>
<tr>
<td>Circle No. 315</td>
<td>Greensmaster</td>
<td>The company reports the new version of its Greensmaster mower debuts at the January GCSAA show in Dallas. Read all about it in February's LANDSCAPE MANAGEMENT</td>
</tr>
<tr>
<td>Toro</td>
<td>Greensmaster</td>
<td>The Lesco 300 Greensmower comes with floating or positive cutting units.</td>
</tr>
<tr>
<td>Circle No. 316</td>
<td></td>
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</tr>
</tbody>
</table>

Brouwer's big 5-gang PTO driven mowers have a 'floating-mowing-unit' design that works well on wet grass. (#317)
GRASSHOPPERABILITY

Make all the moves you need to mow.

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

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

Customize to your grooming needs.

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

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

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YOUR NEXT MOWER

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Circle No. 107 on Reader Inquiry Card
# Fairway Mowers for 1994

<table>
<thead>
<tr>
<th>Company</th>
<th>Model</th>
<th>Features</th>
</tr>
</thead>
<tbody>
<tr>
<td>Brouwer</td>
<td>PTO mowers</td>
<td>The standard mowers have fixed units. The fairway models have a “floating-mowing-unit,” for quality cut, even in wet conditions. All models have positive height of cut adjustment, optional quick-height adjusters and Whiele Rollers. In 5- or 7-gang units, with 4- to 8-blade reels.</td>
</tr>
<tr>
<td>Bunton</td>
<td>BT5138-48KD</td>
<td>All traction turf mower, with a unique <strong>hydraulic controlled weight transfer system</strong> for variable weighted traction. Kubota 48-hp engine; cruise control for steady speed and uniform cutting; two-wheel/four-wheel hydrostatic transmission. <strong>Bunton also makes 3- and 5-gang hydraulic hitch mowers.</strong></td>
</tr>
<tr>
<td>John Deere</td>
<td>3215/3235</td>
<td>Lightweight fairway mowers feature <strong>“Rotate For Service” cutting unit suspension</strong> for easy service to cutting units. 3215 has a 25.5-hp engine and the 3235 has a 32-hp engine. Both are liquid cooled diesels.</td>
</tr>
<tr>
<td>Jacobsen</td>
<td>LF-3810</td>
<td><strong>This is a lightweight mower for fairways and roughs.</strong> High-torque reel motors and 38-hp liquid-cooled engine; great traction; 26-inch diameter tires, less than 12 psi ground pressure. <strong>ST-5111 A five-gang hydraulic mower:</strong> 11-ft. cut; rear-wheel power steering for close trimming. 1,500-hour warranty; 51-hp liquid-cooled diesel engine. Other models include 5-and 7-gang hydraulic rangers and Tri-King Triplex mowers; and LF-100 lightweight fairway mower. Ask about the <strong>GreenSentry Oil System Monitor</strong> for leak alerts.</td>
</tr>
<tr>
<td>King O’ Lawn</td>
<td>4093 Series</td>
<td>A walk-behind mower for trimming; 21” swath; 5 or 7 blades; <strong>Briggs &amp; Stratton engine.</strong> Cuts ¾ to 2-½ inches.</td>
</tr>
<tr>
<td>Kubota</td>
<td>VR3700</td>
<td>The Verti-Reel Triplex expands the capabilities of the F-Series tractors. 24-hp or 20-hp Kubota engines, 70-inch swath and heights ranging from .375 to 3 inches. Converts from a reel mower to vertical cutter or core buster in a matter of minutes.</td>
</tr>
<tr>
<td>Lesco</td>
<td>ST 212</td>
<td>28-hp Kubota diesel engine and <strong>newly-designed hydraulics</strong> features a longer steering column, a padded, tilt steering wheel, and deluxe seat. A control valve allows the operator to <strong>pre-set mowing speed</strong> up to six mph to match the cutting situation.</td>
</tr>
<tr>
<td>National</td>
<td>68º Triplex</td>
<td>This mower goes almost anywhere, says National. It fits through 38-inch gates; groom a half-acre in 15 minutes with less than half the fuel of a comparable riding rotary mower; 60 blade reels; 4mph top speed.</td>
</tr>
<tr>
<td>Ransomes</td>
<td>300/350D</td>
<td>The <strong>Model 350D fairway mower</strong> has the engine over the drive wheels for <strong>better hill climbing ability.</strong> Available in two- or four-wheel drive models; 42-hp, 4-cylinder, water-cooled diesel engine. Wide cutting width of 11.5 feet. Max cut speed 9 mph. <strong>The 300</strong> is a light, midweight yet productive fairway reel mower with a 38-hp diesel engine; features hydrostatic 4-wheel drive.</td>
</tr>
<tr>
<td>Roseman</td>
<td>Hydra-Plex 370</td>
<td>Includes a 22-hp engine; 25” cutting heads; 7-psi ground pressure; 70” swath; high floatation frame; variable reel speed.</td>
</tr>
<tr>
<td>Toro</td>
<td>Reelmaster</td>
<td><strong>New version</strong> of the Reelmaster debuts at January’s GCSAA show in Dallas. Watch for details in February’s <em>LM.</em></td>
</tr>
</tbody>
</table>
Versatility, like using diversified roving crews, is the key to this super-efficient maintenance agency.

- Keeping 450 acres of rolling parklands beautifully manicured is a challenge in itself. Include high-use athletic fields and the challenge increases dramatically.

That is the task performed daily by the Gainesville (Ga.) Parks and Recreation Agency. Assistant director Roy Hammond is responsible for coordinating the labor schedules and equipment needs to meet the challenge. "There are no 'Keep off the Grass' signs here," Hammond says. "We encourage people to enjoy our beautiful parks...and our mild winters and warm summers draw people to the parks year-round."

For maximum efficiency, the city is divided into four main areas of responsibility. The high visibility areas, such as the 55-acre City Park in the center of town, are assigned to a team of one supervisor and three part-time helpers.

Three teams make up one supervisor and two part-time workers are assigned, respectively, to the wilderness trails, small neighborhood parks around the city, and as a "roving crew." The roving crew moves throughout the city to take care of various odd-sized areas of land owned by the city and provides support for the other crews when needed.

"We try to do most of our cutting from 8 to 11 a.m., especially in the high-use areas," says Hammond. "We have a crew go in with two of our Grasshopper riding mowers and they are able to cut these areas quickly, before we get too many visitors."

In addition to day-to-day scheduling considerations, however, seasonal scheduling is a year-round proposition. The annual schedule (see box) helps Hammond's agency maintain one of the most cost-efficient and successful maintenance programs in the country.

Choosing and maintaining durable equipment is important when staying on schedule. Outfront zero-radius riding mowers are the primary mowers in the high-visibility and high-use tracts. Mower cutting decks range from 52 to 72 inches. Some walk-behinds are also used in places inaccessible to larger equipment.

Areas that need a specially manicured look, such as the 50 acres of athletic fields, are cut shorter using the Quik-D-Tatch Vac grasscatching systems.

In addition to cutting and landscaping, many of the agency's personnel can perform electrical work, welding, bricklaying and other valuable tasks. That way, when it rains or during the off-season, the teams can build pavilions, shelters and picnic tables.

"When the operators know they are part of a team and that they have a say in the entire Gainesville park system, they take a lot of pride in their work," says Hammond. "That pride is evident in the many compliments we receive from our citizens."

Hammond points out that during 25 weeks of the year, 60 to 100 softball teams enjoy the grass infields of the city's ball diamonds each weekend and 60 to 70 teams play on the fields each weeknight.

"But activities take place in all of our parks throughout the year," says Hammond. "We can't let up our guard any time of the year."

<table>
<thead>
<tr>
<th>Task</th>
<th>Time of year</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aeration</td>
<td>Oct. and Nov.</td>
</tr>
<tr>
<td>Controlled burn-off</td>
<td>late Jan. thru Feb.</td>
</tr>
<tr>
<td>Fertilization</td>
<td>spring and fall</td>
</tr>
<tr>
<td>Mowing</td>
<td>March thru mid-Nov.</td>
</tr>
<tr>
<td>Pre-emergence weed control</td>
<td>Dec. thru Feb.</td>
</tr>
<tr>
<td>Seeding</td>
<td>Oct. and Nov.</td>
</tr>
</tbody>
</table>

GAINESVILLE (GA.) PARKS & RECREATION AGENCY

Outfront zero-radius riding mowers are the primary mowers in the high-visibility and high-use tracts. These are equipped with cutting decks ranging from 52 to 72 inches.
Because they provide the ultimate in flexibility, video programs are invaluable as training tools in the golf/landscape markets. Outdoor maintenance tasks are dependent on varying weather patterns, so video training can be conducted on days when the weather precludes normal maintenance schedules.

Videos are also an inexpensive way to get the message of a recognized expert. They are one-way, instant and highly visual educational tools.

However, because video viewing is a static rather than dynamic process, you must remember that the medium supports—not replaces—instruction. Encourage the trainee to interact with the medium.

To be most effective, the video should:
• be used at or near the working area;
• be accessible to everyone;
• feature close-up photography demonstrating exactly how to do a part;
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