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OMPUTER

ER (AND NOT) FUTURE

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 diag-

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

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 report itself, I work closely with the pros on staff and with the mament directors, both of the hotel and of the event. It's recessary to interact in both the planning and execution stages. Dake sure the tournament is carried out the way the directors cant 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-



Michael Tellier of La Quinta says computers and safety issues, too, are very much in the future of the golf course superintendent's job.

lites so it's hard to control the system. Computerized irrigation will allow us to save water, make better use of that we do use, and it'll save on pumping costs.

"Overall, environmental issues have become more of a factor. Integrated Pest Management (IPM) has always been a part of my program, so basically, we've made some refinements there. The major changes when you talk about the environment are with compliance, regulatory issues, and ever-increasing paperwork. There are lots of regulations to comply with. You continued on page 12

TELLIER CONTINUED FROM PAGE 11

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.



TURF ROLLING: FAST GREENS WITHOUT TURF DAMAGE ■ 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 turf-grass 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.

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Reel mowers: Getting better every year

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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

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



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





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



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



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



Bunton's fairway mowers have 'cruise control' for steady speed and uniform optimum cutting. (#318)

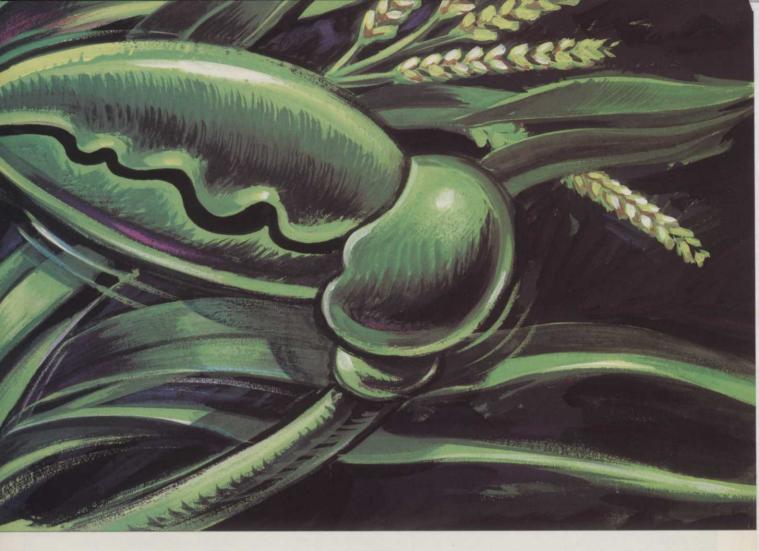


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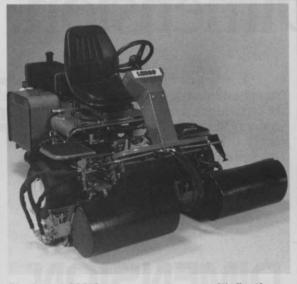
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Circle No. 118 on Reader Inquiry Card

Company	Model	Features
Bunton Circle No. <u>311</u>	Triplex greensmower walk-behinds	18 hp, twin cylinder Onan engine or optional 16.5 hp 3-cylinder water-cooled Kubota diesel engine; hydrostatic closed-circuit drive; anti-vibration engine mounts; 61.5" swath. 19", 22" and 26" greensmowers, with powered rotary brush and thatcher attachments for grain control and healthy turf; non-floating head design, dual-powered drive drum rollers for clean cuts
John Deere Circle No. 312	2243 greens mower walk-behinds	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
Jacobsen Circle No. <u>313</u>	Greens King IV walk-behinds	New 11-blade reels, for a .180" frequency of cut at 3.7 mph; Kohler 16 hp, 4-cycle gas engine or Kubota 16.5 hp diesel; cuts a 62" swath. 22" 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
Lesco Circle No. 314	300/300 D	Now with the 18-hp Kohler V-Twin command engine; choice of float or positive cutting units; 60 % inch swath; six or nine blades; 8 blades on heavy-duty unit; power hydraulic steering
Ransomes America Circle No. 315	TC-28 greens mower	28" 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
Toro Circle No. 316	Greensmaster	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

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





The Lesco 300 Greensmower comes with floating or positive cutting units.

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Company	Model	Features
Brouwer Circle No. <u>317</u>	PTO mowers	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.
Bunton Circle No. <u>318</u>	BT5138-48KD	All traction turf mower, with a unique hydraulic controlled weight transfer system for variable weighted traction. Kubota 48-hp engine; cruise control for steady speed and uniform cut ting; two-wheel/four-wheel hydrostatic transmission. Bunton also makes 3- and 5-gang hydraulic hitch mowers.
John Deere Circle No. <u>319</u>	3215/3235	Lightweight fairway mowers feature "Rotate For Service" cutting unit suspension 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.
Jacobsen Circle No. <u>320</u>	LF-3810	This is a lightweight mower for fairways and roughs. High-torque reel motors and 38-hp liquid-cooled engine; great traction; 26-inch diameter tires, less than 12 psi ground pressure. ST-5111 A five-gang hydraulic mower; 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 GreenSentry Oil System Monitor for leak alerts.
King O' Lawn Circle No. 321	4093 Series	A walk-behind mower for trimming; 21" swath; 5 or 7 blades; Briggs & Stratton engine. Cuts % to 2-½ inches.
Kubota Circle No. <u>322</u>	VR3700	The Verti-Reel Triplex expands the capabilities of the F-Series tractors. 24-hp or 20-hp Kubota engines, 70-inch swath anc heights ranging from .375 to 3 inches. Converts from a reel mower to vertical cutter or core buster in a matter of minutes.
Lesco Circle No. 323	ST 212	28-hp Kubota diesel engine and newly-designed hyraulics features a longer steering column, a padded, tilt steering wheel, and deluxe seat. A control valve allows the operator to pre-set mowing speed up to six mph to match the cutting situation.
National Circle No. 324	68" Triplex	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.
Ransomes Circle No. 325	300/350D	The Model 350D fairway mower has the engine over the drive wheels for better hill climbing ability. 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 The 300 is a light, midweight yet productive fairway reel mower with a 38-hp diesel engine; features hydrostatic 4-wheel drive.
Roseman Circle No. 326	Hydra-Plex 370	Includes a 22-hp engine; 25" cutting heads; 7-psi ground pressure; 70" swath; high floatation frame; variable reel speed.
Toro Circle No. 327	Reelmaster	New version of the Reelmaster debuts at January's GCSAA show in Dallas. Watch for details in February's LM.

Smart scheduling

Versatility, like using diversified roving crews, is the key to this superefficient 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 made up of 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

Outfront zeroradius riding mowers are the primary mowers in the highvisibility and high-use tracts. These are equipped with cutting decks ranging from 52 to 72 inches.

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 those 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."

GAINESVILLE (GA.) PARKS & RECREATION AGENCY

aintenance schedule

Task

Aeration — — — — — — — — — — — Oct. and Nov.

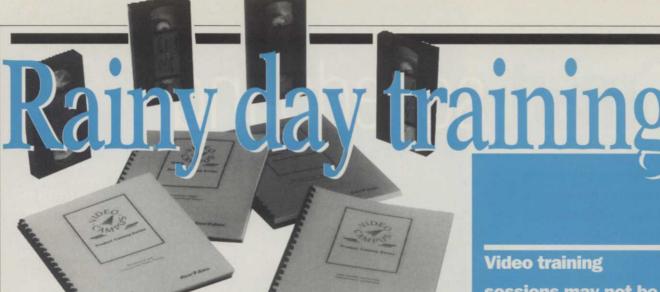
Controlled burn-off — — — — — — late Jan. thru Feb.

Fertilization — — — — — — — — spring and fall

Mowing — — — — — — — March thru mid-Nov.

Pre-emergence weed control — — — Dec. thru Feb.

Seeding — — — — — Oct. and Nov.



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static rather than dynamic process, you must remember that the medium supports-not replaces-instruction. Encourage the trainee to interact with the medium.

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 - be accessible to everyone;
- feature close-up photography demonstrating exactly how to do a parcontinued on page 25

sessions may not be as entertaining as **ABC-TV's 'Tool Time,'** but—when properly conducted—are much more informative.

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continued on page 24