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> industry field days held this past June to get the latest news on seed industry research, production and seed availability. The seed industry is more active than ever, as science continues to develop genetically enhanced seed varieties.

TERRY MCIVER

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EDITORIAL STAFF

Terence McIver	Editor E-ma
Ron Hall	Mana E-ma
Nancy Stairs	Techn E-ma
Vernon Henry	Group
Lisa Lehman	Art Di
Lisa Bodnar	Grank

-in-Chief (440) 891-2709 : tmciver@advanstar.com ging Editor (440) 891-2636 rhall@advanstar.com ical Editor (440) 891-2623 il: nstairs@advanstar.com Editor (440) 826-2829 irector (440) 891-2785 hic Designer (440) 891-3101

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READER ADVISORY PANEL

Jerry Coldiron	Boone Links / Lassi
Larry Iorii	Down to Earth Lan
Rick Kier	Pro Scapes Jamesvill
David Mellor	Milwaukee Brewer

na Pointe G.C. Florence Ky dscaping Wilmington, Del. NY s Milwaukee, Wise

BUSINESS STAFF

John D. Payne Group Publisher (440) 891-2786 E-mail: jpayne@advanstar.com Brenda Dunlap Administrative Coordinator (440) 891-2734 Karen Lenzen Production Manager (218) 723-9129 Debi Harmer Production Director (218) 723-9325 Karen Edgerton Circulation Manager (218) 723-9280 Candy Hausauer Green Book Coordinator (218) 723-9175

ADVERTISING OFFICES

Headquarters 7500 Old Oak Blud. Cleveland, OH 44130-3369 (440) 243-8100 Fax: (440) 891-2675

Patrick K. Toal

Eastern Sales Manager

P.O. Box 1308 Ponte Vedra Beach, FL 32004-1308 (904) 280-4205 Fax: (904) 280-4206 E-mail: ptoal@advanstar.com

Tom Galligan National Sales Manager

3901 52nd Ave. Kenosha, WI 53144-1830 (414) 653-9523 Fax: (414) 653-9524 E-mail: tgalligan@advanstar.com

John Kiesewetter

Western Sales Manager 859 Willamette St. Eugene, OR 97401 (541) 461-0022 Fax: (541) 461-0044 E-mail: jkiesewetter@advanstar.com

Bill Smith Classified / Market Showcase (440) 891-2670; (800) 225-4569 x670

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he turfgrass seed industry has carved a new profile for itself as it embarks in directions that would have been considered impossible 20 years ago. Those developments are taking place in the business and scientific aspects of seed, and they will change the way turfgrass is bred, grown, maintained and marketed.

Here's a look at some of what we heard during our visit to seed country in mid-June.

The giant that is Agri Bio Tech keeps on growing. But once it buys all the companies it can,

Seed industry makes noise as buyouts, science merge



Deny Tufnu

TERRY McIVER Editor-in-Chief

what's next? ABT was not represented during the Oregon field days, which is unfortunate; but suffice it to say, the company is going to be closely watched by other industry players who have said "no" to ABT's offer to buy, and those who would love to become part of the ABT family.

ABT's goal: acquire the rights to as many of the best varieties as possible, then get li-

censing for gene enhancement from Monsanto or Scotts. Can the company begin to make a return on its considerable investment? At least two major seed company reps say it's impossible; others say they have time to play with before showing big returns. CEO Johnny Thomas reports that the company's "platform is exceptionally strong and it appears we will achieve all the goals we had set for December 31, 2000 by December 31, 1998 - two years ahead of schedule."

ABT wants to build a base of biotechnology patents and then apply those gene characteristics to its acquired turf seed varieties.

Other scientific advancements continue, such as endophyte enhancement in turfgrass, and the ability to make turfgrass herbicide resistant. Jacklin's Sui Chang Sun is doing lots of endophyte work, and Turf-Seed, Inc./Pure Seed Testing, and O.M. Scotts, have made great strides in developing herbicide-resistant turfgrass.

The big question to ask with this kind of genetic manipulation, however, is: will the enhancement be passed on to the progeny of the improved variety?

Fine Lawn Research is excited about the prospects for *Poa supina*, a shade- and wear-tolerant species that's good for athletic turf and tee boxes, with a lightning fast, four- to five-day germination time. Some researchers have ignored this species, due to its lighter color and aggressive growth habit, but *Poa supina* has held up nicely in tests at Michigan State University, where it's survived on 5 percent sunlight, say Dennis Combs and David Lundell of Fine Lawn. And if Trey Rogers at MSU likes it, that says a lot.

(And, how often have you heard a golfer complain about the color of the tee box?)

At press time, Fine Lawn was on the way to becoming an ABT acquisition. Fine Lawn is also doing more research into seeded zoysiagrass as an alternative to ryegrass in hot, humid climates. It's also more cold tolerant.

The seed harvest generally looks good, say people we spoke with, maybe too good. With help from lower wheat prices and fewer renovations due to a mild winter, this year has the largest amount of perennial ryegrass acreage in the history of the industry, which causes some to cast doubt on the industry's ability to continue to withstand overproduction from one year to the next. There's also lots of low quality offshore seed coming in to the US at much lower prices from New Zealand and Australia, and the ban on open field burning is expected to soon catch up with the quality of seed and the yields per acre.

See our report on page 26 for more. LM

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Bermuda vs. Zoysia

I have several meyer zoysia lawns that I maintain which have hybrid Bermuda spots in them. Is there any herbicide that will suppress or eradicate the Bermuda without harming the zoysia?

Bermudagrass competes

-GEORGIA



BALAKRISHNA RAO Manager of Research and Technical Development for the Davey Tree Expert Co., Kent, Ohio

SEND YOUR QUESTIONS TO:

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Please allow two to three months for an answer to appear in the magazine. with zoysiagrass under high light intensity and good cultural management practices. This is a particularly serious problem when establishing zoysiagrass from sprigs and sod-plugs. Bermudagrass invasion can eventually lead to an undesirable lawn or other turfgrass areas. In these extreme cases, one option is to use a non-selective herbicide such as Roundup, Finale or Scythe herbicide to kill everything and start all over again. This is time consuming, expensive, and a last resort.

An alternative approach to suppress or eradicate Bermudagrass from zoysiagrass is also time consuming. Reports from the University of Georgia indicate that the use of selective herbicides such as Acclaim or Fusilade has provided excellent suppression of common Bermudagrass. When the mixed stand was treated for two consecutive years with Fusilade at 0.2 kg/hectare during mid-May and again at 0.1 kg/ha one month later, the common Bermudagrass cover was reduced from 35% to 7%, and the zoysiagrass cover increased from 65% to 85%. Similar results were obtained when Acclaim was applied at 0.2 kg/ha in midMay and repeated at monthly intervals for a total of four applications each year for two consecutive years. These herbicides may discolor both turfgrass types. Zoysiagrass should recover after 10-14 days.

If you have never treated this way before, test it in a small area before doing a large lawn. Refer to the label. Fusilade's label suggests using 3-4 oz/AC with a non-ionic surfactant during late spring, and then repeating 28-30 days later. During the summer months, you can reduce the rate to 2-3 oz/AC.

Fusilade is a systemic herbicide. It is foliar and root absorbed. Therefore, delay watering until the material has had a chance to dry. Repeat applications at one month intervals, 2-3 times or until the undesirable Bermudagrass disappears. Generally it takes about 14 days to see suppression develop.

For best results, avoid treating moisture stressed lawns. If possible, advise the customer to pre-water the lawns prior to treating. This will help improve the end result.

Read and follow label specification for additional details.

Spruce galls are galling

What is the best way to manage pineapple-like galls on spruce? We have had poor luck with this pest. —PENNSYLVANIA

Spruce plants may get two types of galls caused by adelgids. These are commonly referred to as Cooley spruce gall aphids or Eastern spruce gall aphids. They are not true aphids. The Cooley spruce gall adelgid infests the tips of branch terminals and causes the tips to swell, producing the pineapplelike gall you are referring to. The Eastern spruce gall adelgid typically produces galls at the base of shoot terminals.

The nymphs hatch in the spring and feed at the base of growing needles. This causes the swelling which envelopes the feeding nymphs. The resulting galls can be cut open longitudinally to see the chambers and the nymphs. In the midsummer, an opening at the base of the affected needles will allow the nearly-mature nymphs to exit and finish their life cycles.

On occasion, the very young galls may mimic phenoxy herbicide injury symptoms. If it is related to lawn-applied herbicides no insect will be associated with the distorted terminals. However, a plant may have both problems and in that case insects may be found.

Cooley spruce gall adelgids can be managed by cultural means. If the infestation is not severe, selective pruning and/or hand picking the galls and discarding may be sufficient. More severe problems may be treated with Sevin or Merit soil injections. Application of Sevin in March/April and again in November/December or soil injection of Merit insecticide in October should help manage the problem.

Read and follow label specifications for best results. LM lients will almost always want to know why a tree or shrub is looking bad or appears to be dying. You look for signs or symptoms of a disease or a pest but don't see anything that resembles an obvious cause for problems.

You ask about water - too much or too little? Have any chemicals have be applied in the area lately? Any recent construction or landscaping? How long has the problem has existed and the rate of decline. You look at the stem or trunk for damage. You look at other plants in the yard to see if they show any problems. You discuss how long the plant has been in that location.

Sick tree or shrub? Time to get 'in-depth'



hanny Stains

NANCY STAIRS Technical Editor

What are your options? Spray? There might have been something there, right? Fertilize to help increase vitality? Might help, can't hurt?

▶ Prune it? Cut it back?

► More water or less water -depending on what the owner has been doing?

▶ New plant? Could be transplant shock ...

► Old plant? Well, these things happen.

Still have questions? Need a soil test!

Give up and replace it?

Your client wants an answer and you're the expert.

One option, often overlooked, and the source of many landscape problems, is planting depth.

After looking at a declining plant, checking for signs of disease and pests, asking about water and looking at the stem - keep on going right to the ground. Pull out your knife and dig away some of the soil or mulch at the base of the plant. You might be surprised at how often a plant has been planted substantially deeper than it should be. Common enough that depth is one of the first things I look at.

The effects of planting too deep are more serious than most people realize. While there are some plants more tolerant of deep planting, this situation results in additional stress being placed on almost every kind of plant. All plants need to grow properly to live and deep planting does not help. The plants become less able to withstand the stresses of the site and then begin to decline, usually slowly.

Very often, the customer begins to notice a problem well after the initial signs have occurred. The hint of chlorosis or a crown beginning to thin out, with the symptoms usually increasing gradually from year to year, are often over-looked when describing problems and their on-set.

One obvious indication of a tree being too deep is that the trunk appears to be cylindrical where it comes out of the ground. Every tree should have slight to obvious flare at the base. If you don't see the flare, planting too deep is the first possibility, girdling roots the second (a tree with a flare on only one side of the trunk and a flat, straight surface on the other side could be an indication of a girdling root). Both reasons are well worth digging for. (In some cases it may not be a root that is girdling the tree but twine or artificial or treated burlap.) For a shrub, it may be a little more difficult to tell if it has been planted too deep, but if it has multiple stems and you cannot see the point where the stems are attached, you may have a depth problem.

In some cases, if the plant is not too far gone, removing the excess soil and mulch may help, along with some extra care and perhaps fertilizer and a proper watering regimen. For a more severe case of decline, an explanation of the evils of planting too deep and how to plant properly may be in order.

It does happen that even after checking everything about a declining plant, you still can't find a reason for the problem, and you now wish it was planted too deep. Then you may decide to take a soil sample, especially if the owner wants to try and save the plant. No guarantees, though, and there are other possible problems that range from water softeners to dryer outlets, root rots to nematodes, black walnut trees to spraying suckers with Roundup.

Sometimes even careful examination won't give you any answers - but make checking planting depth a standard procedure when looking for a problem. LM

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Industry works through heat, drought

Dallas— Summers on the Southern Plains summer are typically hot and dry—but not so hot and dry so early in the season. This year, tripledigit heat greeted mid spring, and as August approached it hadn't relented. A bigger concern for green industry pros was drought. By mid July some areas of north Texas hadn't seen significant rain in over a month.

"The heat is pretty normal for this time of the year," said Cody Whelchel, Cody Lawn Care, Ft. Worth, TX. "It's just that it got hotter quicker and for longer this year. It's been hard on the people doing the work."

Temperatures in Dallas exceeded 100° F almost every day in July with no relief forecast as the month ended. The same was true in Oklahoma. Wes Hadsell at Hadco Lawn & Landscape in Bartlesville, OK, reported 21 work days over 100° F through mid July.

"Our May and June seemed like our normal July and August," said Hadsell. "We send our guys out with a lot of water. We start early, and the guys have chosen to work a little bit longer days and take Fridays off to recoup."

Ed Herndon at Phillip's Landscape Mgmt. Inc., Ft. Worth, TX, said maintenance crews throughout the city are working in spite of the heat. "Our maintenance schedules are so full, we need a full day to get through it all. We come in at 6:30 a.m. and it's hard to get on any properties earlier than that."

Cody Whelchel says the grass, particularly St. Augustinegrass, thrived on the heat and had to be regularly mowed on his accounts which were irrigated.

Not surprisingly, irrigation services have been in great demand.

"All of the cities surrounding Dallas are instigating water rationing programs, and we have to go around each and every city and set our customers' controllers to match the cities' rationing programs. It's keeping us hopping," said Herndon. "We have water re-

strictions here in Plano," said Gary LaScalea, owner/operator of Gro-Green. "It's the first time for that since I've been here in 13 or 14 years. Everybody's trying to irrigate and irrigate to keep things alive."

"Any call regarding a sprinkler system is an emergency now," added Doy Geller, general manager TechScape, Inc., Richardson, TX. But, even with those accounts that have irrigation systems, TechScape's crews often have to hand water to save plants, he reported. "Sometimes I have to have guys work on weekends just to water, just to make sure plants that we've recently installed don't die," he explained.

In spite of the best efforts

industry's best efforts, many customers will be losing trees and ornamentals because of the drought. "There's been so much construction in Dallas that we have difficulty in getting trees now," added Geller.

Drought not the only problem

EAST TEXAS— Drought stresses trees, but the damage does not end there. When trees are stressed they are weakened and become less able to withstand additional stresses. In many cases, when a tree fails it is not simply due to a single cause but to a number of stressors which were simply too much for the tree. For trees which survive a drought situation, the additional stress factors include diseases and pests.

One concern is a group of insects, commonly referred to

as "shade tree borers". This group includes, among others, longhorned beetles, metallic wood-borers, cottonwood borers, poplar borers, locust borers and re-headed ash borers. However, once you see the signs of borer infestation, it is too late.

The best method for treating borers is preventive. Maintaining tree health is important and that includes watering. Fertilizing, pruning dead and dying branches are also important steps in preventive tree care. Should borers be a concern in your area, it is important to have correct identification of the pest.

According to Dr. James Robinson, entomologist with the Texas Agricultural Extension Service, trunks and tree limbs up to 0.5 inches in diameter can be sprayed with a solution of lindane or chlorpyrifos, with the first treatment being in April when the insects first emerge. Later applications in late May, mid-July and August are also recommended.

Florida fires devastate trees

PALM COAST, FL— Employees of White Acres Nursery & Garden moved their landscape equipment into an open field and turned on the irrigation to keep the equipment from burning. At their Palm Coast branch they even filled their 700-gallon lawn spray trucks with water to ward off flames. "The fire came right up to the edge of our business," said a company spokesman.

Wild fires devastated over 400,000 acres in Florida, mostly timberland, in June and early July. A lot of the damage occurred in northeastern Florida where, just before the busy July 4 holiday, the entire population of Flagler County (just north of Daytona Beach) was evacuated because of wind-blown fires.

When people were allowed to move back into their homes and tend their businesses more than 40 homes had been destroyed, and, perhaps 10 times that many had been damaged. Landscapes, both trees and turf, also suffered.

"A lot of trees were burned close to people's home and they have to be removed," Danny Barrett of Big Dan's Tree Service, Ormond Beach, tells Landscape Management. In one subdivision alone, Barrett reports taking down about 250 trees because the fire was so hot it burned into the dried muck beneath them. Statewide Florida reported its driest June in 119 years which contributed to the wildfires.

"If it weren't for the firefighters my wood lot (at the intersection of U.S. 1 and I-95) would have burned," says Barrett.

"A lot of trees will probably recover if we keep getting rain. A lot of trees will come out of shock, but a lot of the pines are gone," says Barrett who's been putting in 12hour days. Those not immediately destroyed, but severely stressed, will eventually succumb to beetles and other pests.

"A lot of the large specimen trees may refoliate," speculates Bret Bartlett of Bartlett Landscape in Palm Coast, one of the hardest hit communities. "A lot of the palms should refoliate too, but it's going to take several years. But there's going to be a lot of foundation plantings and a lot resodding because the fires went right up the foundations of houses in some areas."

Also, some landscapes were destroyed when firefighters used bulldozers in some areas to clear firebreaks.

"The real scare happened over a three-day period. We shut down and had to leave the county," says Bartlett who tells Landscape Management that the fires generated incredible amounts of smoke and falling ash for days on end.

Montana State starts turf program

Bozeman, MT— Students can enroll in a new Turfgrass Science option at Montana State University here this fall, thanks, in large part, to a recent addition to the MSU horticulture staff.

Ten students are enrolled in the turfgrass program, with about eight more expected this fall, says Rob Golembiewski, Ph. D., Assistant Professor of Horticulture. The MSU board of regents approved the program in July. It is being promoted to prospective students through groups like the Peaks & Prairies Golf Course Superintendents and the Association of Montana Turf & Ornamental Professionals, both of which have contributed financial support too. Other young people learn of the program through high school career fair days.

The program is significant to cool-season turfgrass research for several reasons, not the least of which is geography. The nearest other significant turfgrass programs are at Colorado State, Utah State or Washington State.

Dr. Golembiewski, Montana State U's only turfgrass expert, will offer courses in Introductory Turfgrass Management, Advanced Turfgrass Management, and Turfgrass Pest Management. Turf students will also take numerous horticulture courses along with small engine instruction.

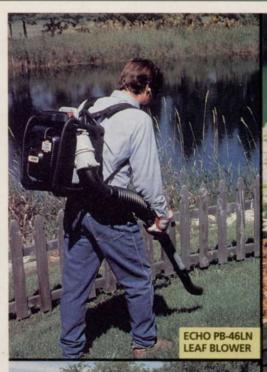
A new three-acre turfgrass research farm is under construction too. It will be the location of NTEP bentgrass putting green and fairway trials along with NTEP fine fescue trials. Other work that's already underway at MSU includes: snow mold and fairy ring fungicide evaluation trials, and a creeping speedwell herbicide trial.

"Upon completing my Ph.D. last year, I never thought I would have the opportunity to go and build a turfgrass program," Golembiewski tells LANDSCAPE MANAGEMENT. "It can be a very solid turfgrass program."

Golembiewski said many people and companies generously contributed both time and supplies to make the program and, particularly, the three-acre research farm a reality.

"The establishment of this farm is an excellent example of how university, industry and turf associations work together to achieve goals never thought possible," said Golembiewski. "This farm will always be an example of how truly unique the turfgrass industry is."

Golenbiewski can be reached at (406) 994-7776.





THE LANDSCAPE MANAGEMENT 1998 EMERALD

WINNERS

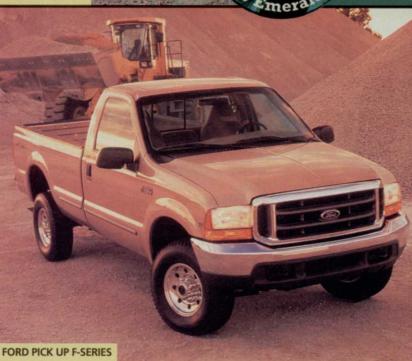
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JOHN DEERE LT100 LAWN TRACTOR

JOHN DEE

LT16

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Dealer service counts with England Award Winners

Quality, price and dealer assistance mean much to these LM readers who entered our annual drawing. by JAMIE PETERS he winners of Landscape Management's third annual Emerald Awards contest are hardworking professionals who insist on testing equipment before they buy and want good quality at a fair price.

George Woodhull, owner of Woodhull Landscaping, Riverhead, NY, claims the top prize of \$500 in LANDSCAPE MANAGE-MENT's Emerald Awards sweepstakes.

> Woodhull "jumped right into it," when he entered the industry to Woodhull Landscaping nearly 20 years ago.

When purchasing his equipment, Woodhull says dealership proximity is a prime factor in the rural area where he works.

"I try to keep everything close and deal with my hometown dealers," says Woodhull.

Woodhull, tests everything on the job to insure

that it meets his standards.

Lesco and Bobcat products are Woodhull's top choice because the name promises quality and reasonable prices, he says. He has six Bobcats and just bought a 52-inch Lesco mower. The Bobcat maneuverability and Kawasaki engines are reasons why he likes that brand.

"I'm tempted to go to a ZTR," says Woodhull. "They're good at catching clippings and other debris. I'm looking at a Walker. From what I hear, that's pretty much the way to go. I have few properties that are big enough to warrant that."

The \$200 second prize winner, Bruce Williams, is well-known golf course superintendent who two years ago moved from Chicago's Bob O' Link to the Los Angeles Country Club. He too relies on trusting relationships with local dealerships when buying top products.

"While manufacturers are important in what they do, the local distributor can make a huge difference in the selection of your purchases," he says.

Williams, who has worked at LACC for nearly two years after 21 years as golf course superintendent at Bob O'Link Golf Club near Chicago, is meticulous in testing products.

"In almost all cases, we request a demonstrator," he says. "And we try to put the demonstrator through a number of different conditions. For example, a mower mowing under wet conditions; mowing under dry conditions."

Toro riding mowers and a recently purchased GMC pick-up truck support Williams' belief that equipment effectiveness takes precedence over efficiency.

"We're not always trying to do things the quickest way—we're trying to do things the most effective way," he says.

Third-place winner of \$200 Chris De-Witt operates Signature Lawn & Landscaping, Inc., in Easly, SC.

DeWitt, who was in computer processing before he started his landscaping busi-



Woodhull: wants dealers close.

Manufacturers tell why products are winners

LM spoke with representatives from some of the companies....

"John Deere has long stood for quality and quality manufacturing," says **Mike Johanning**, product manager for John Deere compact utility tractors, "and our customers know that if they buy a John Deere compact utility tractor, or any other John Deere product for that matter, they're going to have the best product on the market.

"Our new 4000 series CUTs are a prime example of how this works. Due to customer feedback, we revamped our 55 and 70 utility tractor, and the response has been phenomenal."

"For years **Echo** has delivered the top-selling, commercial gas-powered blowers for professional results," reports the Echo company. Echo blowers are easy to start and easy to use and deliver the power and dependability needed to meet today's landscaping challenges. The revolutionary PB-46LN Quiet 1 operates at a low noise level with outstanding performance and emits only 65 dBa.

"Echo trimmers feature a vibrationreduction system, ergonomic controls and a quick start engine to enhance worker productivity. The SB Series trimmers feature a split-boom, which allows the trimmer to be easily converted into other products."

Neal Cleveland, Bayer Corporation's turf and ornamental market manager, says Merit has done what it was meant to do, which makes it a favorite among Emerald Award contestants.

"Now that we're in the fifth year of having product available to marketplace," Cleveland says, "Merit has shown itself to be a proven performer in turfgrass and ornamental insect control.

"Merit's positioning as a broad spectrum grub control product, with a wide

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EMERALD AWARDS, 1998

The following standings represent percent of total contest entrants who told us the winning product was their favorite.

RIDING MOWERS Toro: 23.2% John Deere: 12.6% Walker: 10%

WALK-BEHIND MOWERS Toro: 25% Scag: 9% Deere: 7%

TURF FERTILIZER Lesco: 19% Scotts: 18% Par-Ex: 6%

PREEMERGENT HERBICIDE Surflan: 13.2% Barricade: 12 Dimension: 10 POSTEMERGENT HERBICIDE Roundup: 21% Trimec: 17% Lesco 3-Way: 7%

TURF INSECTICIDE Merit: 20% Dursban: 15% Daconil: 13%

PLANT GROWTH REGULATOR Primo: 19.4% Embark: 6% Scott's: 2%

COMPACT TRACTOR Kubota: 20.3% Ford New Holland: 12% Briggs/Stratton: 1% TURF AERATOR Ryan: 37% Deere:4% Lesco: 3%

PICK UP TRUCK Ford: 35% Chevy: 27% Dodge: 11%

LEAF BLOWER Echo: 30.5% Stihl: 25% Lesco: 6.5%

LINE TRIMMER Echo: 44 Stihl: 16% Shindaiwa: 15%

CHAIN SAW Stihl: 81 Husqvarna: 10% Echo: 9.5% KY BLUEGRASS Baron/Midnight: 4.5% Scotts: 3.5%

PERENNIAL RYEGRASS Palmer: 5.4% Manhattan II: 4.5% Ph.D. 2.3%

TALL FESCUE Rebel II: 5.5% Lesco: 2.8% Bonanza II: 2.2%

TURFGRASS MIX OR BLEND Lesco: 11.6% Scotts: 4.5%

ness nearly four years ago, considers speed, reliability and reputation as important factors when purchasing equipment.

A John Deere 425 riding mower is Signature L&L's most efficient piece of equipment, DeWitt says.

"The productivity is not necessarily the width of the cut, it's the speed of the mower," he says. After a bad experience with a faulty piece of equipment, DeWitt now carefully tests products before purchase.

"When we first started out. . .we got burned with a piece of equipment that turned out to be a real dog, so now we'll insist on a day or two of trial." LM

window of application, one which will satisfy customers, minimize callbacks and eliminate [insect control] worries, makes it a product of choice," says Cleveland. "It's an easy decision to keep with it."

Merit is used to control all white grubs and surface feeders, including cutworms, mole crickets, billbugs, hyperiodes weevil, and a number of ornamental pests, including hemlock woolly adelgid, leaf miners, lace bugs, beetles and scale. Cleveland tells LM that birch borers may be added to the label.

The Toro Co. placed high in the cate-

gory of riding mowers, garnering 42% of the votes. The company's line of Greensmaster riding mowers are "designed to exceed the high demands of today's greens care," reports the company. The mowers are designed to provide the highest in quality of cut, and enhance operator capabilities for the best performance. The Groundsmaster line handles extreme cutting conditions with unmatched productivity, reports Toro.

The Groundsmaster 580-D is a stalwart that cuts a 16-foot swath.

TM

TURF-SEED'S PREMIUM PERENNIAL

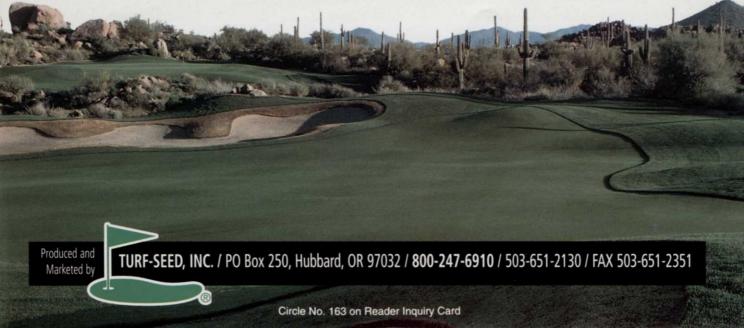
FOR PERMANENT TURF AND WINTER OVERSEEDING

end Characteristics

Alliance Brand BrightStar II (2M3) BrightStar Catalina Chaparral Charger Charger II Citation III Manhattan 3 Navajo Quickstart Roadrunner (2ET) Sunrye (246)

Traffic, heat and drought tolerant / A blend of top quality Turf-Seed perennial ryegrasses A top variety in the 1995 NTEP trials. A unique leafy, decumbent, late maturing cultivar Tops 1994 NTEP ryegrass trials / Extremely dark color / Dwarf growth habit Low growth profile and reduced clippings / 78% endophyte / Tested as GH-94 Very dense, low-growing, dark green turf. Lowest vertical growth in turf. Tested as 2DLM Good low fertility and cool weather performance / Improved disease resistance Dark, dense, dwarf turf ranks high in winter overseeding trials. Experimental code 2QM. Excellent heat and wear tolerance / Improved disease resistance / Rich, dark green color Very dense growth habit / Rich color / Good mowing qualities / Contains endophyte Dark green, disease resistant turf / Excellent for overseeding / Good shade tolerance Heat tolerant / Establishes quickly / Disease resistant / Excellent for overseeding Dark blue-green color ideal for winter overseeding and permanent turf / Contains endophyte Dark green, disease resistant

Turf-Seed, Inc. uses the full recommended rate of Apron® XL™ LS seed treatment. Help your grass seed get a good, healthy start.



From Turf-Seed, Inc.

Wear-resistant wonder grass for home lawns, parks, athletic fields, golf course roughs and roadsides in sun or shade

Confederate blend

For use on home lawns and sod farms in the south. Formulated to resist pressures of high heat, humidity and high nighttime temperatures.

Mowless blend

Ideal for sod farms, golf course roughs and home lawns in the north. Includes lower-growing, dark, dense varieties that reduce clipping removal and fertilizer costs!

Triathalawn blend

Wear-resistant turf for parks and athletic fields! A blend of Tomahawk, Eldorado and other intermediate types to provide dense, high traffic tolerant turf.

Apache II

Lower-growing, dark green variety with improved disease resistance and good summer performance in the east.

Coronado

A dark green, moderately low growing cultivar with improved summer performance due to its excellent drought tolerance.

Coronado Gold

Combines the excellent turf quality of Coronado with improved brown patch tolerance.

Eldorado

0

Dwarf growth habit and dense, dark green color for use on golf courses, home lawns, parks and athletic fields.

Matador (5LMR)

Very dwarf growth habit and dark green color for use in arid regions. A component of MowLess.

Monarch

Very good heat, cold and shade tolerance for home lawns and low maintenance turf areas.

Murietta

Very dwarf growth habit and dark green color for use in golf course roughs, athletic fields and playgrounds.

Olympic II

Excellent spring green-up plus good summer and fall density. A good all-purpose tall fescue.

Safari

A dark-green variety with improved Brown Patch resistance and summer performance due to inherent drought tolerance. Ideal for sod production, home lawns and inclusion in blends.

Silverado

Very dwarf growth habit and dark green color with reduced mowing and water requirements.

Tar Heel

Unprecedented Brown Patch resistance for southeast lawns and landscapes. Contains endophyte for insect resistance. An excellent addition to Confederate brand blend.

Tomahawk

Low-growing, dark green variety with good heat and drought tolerance.

Wolfpack

Upright, dense growth habit make Wolfpack ideal for sod farms and home lawns in the south. Has excellent brown patch tolerance.





Need a big spreader for big jobs? Dakota 440 might be for you.

THE RIGHT SPREADER

Do you need a broadcast or drop spreader? There's a place for both in turfgrass management.

By CURT HARLER

Nothing messes up a fertilizer application as much as a streaky job which leaves behind alternating rows of dark green and yellow-green grass.

Marker wheels or slight overlapping of rows can eliminate the fertilizer streaking problem in most cases. It is a bit trickier, however, when spreading a herbicide. Nothing is more vexing than seeing a sloppy spreading job near a flower bed. The solution is to use the right tool for the right job. A broadcast spreader is fine for jobs where pinpoint accuracy is not required. A flail-style broadcast spreader will cover a lot of ground in a hurry. But it lacks something in accuracy. A drop spreader, while much slower in terms of coverage, is less likely to be the culprit causing less precise application.

Regardless of the type of spreader used, be certain the hopper and other parts which come into contact with fertilizer and chemicals are quite

resistant to corrosion. Be sure spreaders are thoroughly rinsed (and dried) after each use. The boss won't be happy if some residual 2,4-D from last week's herbicide application is applied to the flower beds along with the fertilizer required today.

AGRI-FAB 217-728-8388 Circle No. 270

A full line of tow-behind spreaders are available from Agri-Fab, Sullivan, IL. Broadcast models are available in 75,125 and 175 pound broadcast, and 100 pound drop or broadcast versions. Spread widths range from four to eight feet to 10-12 feet. Smaller unit has a poly hopper, nylon gear drive and one-half inch axle.

BEFCO 800-334-6617 Circle No. 271

The Turbo Hop pendular spreader from Befco, Rocky Mount, NC, is de-



Gandy spreaders feature stainless steel bottoms which snap off for cleaning.



Lely Corp. offers eight models of spreaders, from the budget 9.4 cubic foot unit to the Model 4000 with 75 cubic foot capacity.

There are times when it is critical to know that you're getting the real thing. Like when you're buying Dursban* insecticide. No Dursban wannabe can give you the same level of confidence. performance and support that you get from Dow AgroSciences. Not to mention the superior control of over 140 insects, including worms, ants, fleas, ticks, mole crickets, aphids and chinch bugs. The only way to get the real Dursban is to buy Dursban. So always look for the Dursban trademark on the label, whether you buy from Dow AgroSciences or one of our formulator partners. For more information, call us toll-free at 1-800-255-3726 or visit our web site at www.dowagro.com. Always read and

follow label directions.

fake background

At least she insists

fake Ferrari

on Dursban.





>LM REPORTS

signed for precision application. Swath width can be adjusted from 20 to 66 feet. Has multiple flow settings, with instant on/off control. Hopper is polyethylene and sizes range from 14 to 32 cubic feet. Units require at Cat I or II hitch. Heat treated anti-corrosive paint resists corrosion.

DAKOTA PEAT & EQUIPMENT 701-746-4300 Circle No. 272

The Turf Tender 440 from Dakota Peat & Equipment, Grand Forks, ND, has spread width ranges from six to 36 feet. Spinners are 24 inches in diameter and easily removable for cleaning. Unit requires a 40 hp tractor with 4-10 gallons hydraulic flow. All work is controlled from the tractor. Only one operator is required.

JOHN DEERE 800-537-8233 Circle No. 273

The 40-inch aerator/spreader from John Deere's Commercial Equipment Division, Raleigh, NC, does two jobs at once. It perforates the soil while the calibrated dropspreader follows with seed, lime or fertilizer. It can be adjusted to aeration only, with a 2-inch penetration for aeration.

FINN CORPORATION 800-543-7166 Circle No. 274

The B70 Series mulch spreader from Finn, Fairfield, Ohio, will broadcast up to 7 tons of hay or straw per hour. Powered by a Kubota V1505 33.5-hp 4-cylinder water-cooled diesel engine, it has a range of 60 feet in still air. The blower is a 21inch diameter fan with six blades developing a discharge velocity over 150 mph.

GANDY COMPANY 800-443-2476 Circle No. 275

A full line of drop spreaders from Gandy, Owatonna, MN, includes push-behind and two models. The Model 36 and 24 are 36-inch and 24-inch units which are easy to maneuver around ornamentals and small lawn areas. They hold 120 and 78 pounds respectively, and feature stainless steel bottoms which snap off for quick cleaning. They completely disassemble without tools.

JONATHAN GREEN 800-526-2303 Circle No. 276

New for 1998 from Jonathan Green, Farmingdale, NJ, are two spreaders. Drop model has a 21-inch hopper and 12-inch wheels which provide four-inch ground clearance for fast, uniform application and proper agitation. Rotary spread model has an 8-foot reach with tapered overlay to help reduce striping. Heavy-duty 8-inch hard rubber tires provide stability, traction, and proper impeller plate activation.

GROUNDTEK MFG. 407-877-7473 Circle No. 277

The EBS 100/200 Detachable Spreader Unit from Groundtek, Ocoee, FL, takes just seconds to mount or dismount from most utility vehicles, mowers or tractors. Built on a stainless steel frame, it has a Lexan safety shield on the rear of the spreader to protect the operator and vehicle from the spreading action of the material. The unit hopper holds 100 pounds of fertilizer.

HERD SEEDER CO. 219-753-6366 Circle No. 278

Specially designed for tricky jobs like spreading fire ant bait, the Herd GT-77 broadcaster is accurate enough to handle very small rates like the typical 1.5 pounds per acre used on ants. Made in Logansport, IN, it mounts on an ATV. Hitches for most ATVs and other vehicles are available. The unit's low-amp electrical pull is perfect for vehicles with small charging systems.

LELY CORPORATION 252-291-7050 Circle No. 279

Eight models of spreader are available from Lely Corp., Wilson, NC. Units range from the 9.4 cubic foot Budget model to the 4000, with its 75-cubic foot capacity. In between are 11.5 cubic foot grounddrive or pto drive units and 19, 13.6 and 32.5 cubic foot models. Budget unit spreads to 36 feet.

A.M. LEONARD 800-543-8955 Circle No. 280

Built to the company's standards, this large-capacity push-behind model from A.M. Leonard, Piqua, Ohio, has a spread width of eight to 12 feet. Fingertip controls allow on-the-go adjustment of spread pattern without stopping or stooping. Unit has huge 100-pound capacity polyethylene hopper. Deflector kit or shower cap available.

LESCO 800-321-5325 Circle No. 281

The Mark II Rotary features a three-position handle assembly for ease of use. The 100-pound capacity polyethylene hopper on a stainless steel frame holds more product and saves time. Lesco, Rocky River, Ohio, has added a new 5:1 sealed gear box and two

(JSO)

pattern adjustment slides for even distribution of a wide range of products. Unique cam-operated oscillating agitator sweeps beyond the hole openings in both directions to help Lesco eliminate bridging and minimize product damage.

MILLCREEK MANUFACTURING 909-620-6061 Circle No. 282

The Millcreek

Topdresser/Spreader is perfect for spreading a variety of materials. It is made in Bird in Hand, PA, and distributed by firms like Gearmore. The 75TD holds 33.7 cubic feet and requires a 24-hp pto-drive tractor. Its spread ranges from 8 to 12 feet.

RYAN 800-228-4444 Circle No. 283

The Vicon 888401 spreader from Ryan, Lincoln, NE, has a spread width up to 45 feet with a variety of spouts available. The unit can carry up to 7000 pounds and its rotary agitator keeps sand and other products flowing freely. The hopper is noncorrosive, made of molded, glass fiber reinforced polyester.

SPYKER 800-972-6130 Circle No. 284

Professional model spreader from Spyker is designed for seeding, fertilizing, spreading granular or pelleted pesticides, ice melters, bait, pelleted lime etc. Accuway Spread Pattern Evener assures consistent spread and reduces streaking. Unit has a stainless steel rotary agitator which throws product five to eight feet. This push-behind unit holds up to 40 pounds.

TORO 612-888-8801 Circle No. 285

The topdresser 5000 from Toro, Bloomington, MN, covers large areas fast. It has 50-cubic foot capacity (4,500 pounds) and its large, soft track tires provide a cushioned ride and only 12.9 psi turf pressure when fully loaded. Hopper sides are sloped to ensure free flow of material to

the adjustable metering gate. Spinning disk distributes material at a rate of 1350 pounds per minute over a 15-foot swath.

TRYNEX INTERNATIONAL 800-725-8377 Circle No. 286

The SP-575 Mini-Pro spreader from TrynEx, Royal Oak, MI, is designed specifically for light duty trucks, sport utilities and other vehicles. Its low-profile hopper is made of high-density polymer. Form-fitted, dual latching lid protects its 5.75 cubic foot capacity. Direct drive, 12-volt DC motor is part of the exclusive, maximum torque drive assembly. Uses a light weight 10-inch poly spinner. The on/off actuator has a built-in circuit breaker. Optional mountings include a Reese hitch, utility mount, 3-point hitch or fixed mounting. LM

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One Reliable Brand

That brand is Terra[®] With 14 different blends, we've got you covered on golf course fairways, roughs, non-play areas, lawns, landscapes, sports fields, parks, right-of-ways and commercial areas. The best of hearty, attractive bluegrass, perennial ryegrass and fescue varieties – specially blended to provide top performance. Plus, they're backed by in-depth research, agronomic expertise and timely delivery. Terra's high-quality seed and excellent selection of turf care products make Terra the one-stop shopping place for your turf needs. Talk to your Terra Professional Products representative today.



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SEED INDUSTRY sprouts big changes

The seed industry held its field days this past June, and LANDSCAPE MANAGEMENT was there, to get the latest news on what's happening in the world of turfgrass seed research and production. by TERRY MCIVER / Editor-in-Chief



The turfgrass seed industry—which used to move so quietly you could hear the grass grow while you watched it—has, over the course of the 1990's, become a highly competitive arena for product research and development.

Our vistit to seed country in mid-June

was a 400-mile week of field tours, fast lunches and exclusive interviews with seed industry experts who were happy to talk to us about the state of this changing industry. We couldn't include every bit of news, but here's a good sampling of what lies ahead for the industry.—ed. he seed supply is reported to be in average supply for 1998-99, with enough supplies of most varieites, due to supply/demand/carry-over scenarios.

"We're going to see an average crop across the board," says **Dave Nelson** of the Oregon Fine and Tall Fescue Commissions. "Nothing big, however the

quality of the seed is very good. You never have a loss, occasionally you have a bumper crop. It's all relative to what you're comparing it to. We're halfway along combining, nobody's fired up the cleaners yet. We'll know what yields are [by mid-August]. We're running about 10-days behind due to weather."

"I have heard is the price is strengthening for Oregon turf type



Don Woodhull: Industry has to keep pace with, not pass, urbanization.

tall fescue due to Missouri weather," says Nelson.

More perennial ryegrass acreage industry-wide is going under the thresher than ever before, reports **Myron Lightbody** of Jacklin Seed.

"The tall fescue and perennial rye look good," says **Don Woodhull** of Burlingham Seeds. "The fine fescues look average. We're going to have a good year, with a lot of acreage. The industry continues to grow and need more seed, with the march of urbanization," says Woodhull. "We're bound to get into situations where for whatever reason our internal plans have not kept up with urbanization, but this year we've planted more

acres; now we've probably got a few acres too many."

"We're still buidling 250 golf courses a year, and ryegrass overseeding is like a built-in annuity. What's hurt us lately is the lack of weather-related stress in a lot of the high use areas in the midwestern, Atlantic and northeast regions."

"It looks like a big seed crop, but our carryover is really not that great, says Jerry Pepin of Pickseed. "We have such a potentially big crop coming. The fall business will be fine, but the next spring's business, if there's a big carry-over, will have weakening in prices."

"I'm not so sure the perennial ryegrass yields are going to be very high, but there are so many acres, that we're going to have a good amount of seed."

Pepin thinks positively about potential market gluts, and says companies are watching for overproduction scenarios.

"I think a lot of companies have tried to balance supply and demand, rather than thinking there's an open-ended demand out there. We've been pretty careful as far as balancing what we think we can sell."



Jerry Pepin: Nitrogen use increases seed yields.

Comments on industry consolidation:

The business of seed research and the scramble by AgriBioTech to capture market share has brought an added element of anticipation to the seed industry.

It's apparently a buyer's market, and ABT is the only one doing the buying. We asked some seed industry observers to comment on the growth of ABT.

ABT has acquired 26 companies since January 1995. The company wants to acquire 45% of the forage and turfgrass seed market by 2000, with annual revenues of \$500 million.

Q: If Agri BioTech becomes the sole seed industry giant, with a handful of smaller companies, what does it mean for the industry?

A: Tom Stanley, Turf-Seed, Inc.: "I think overall it's healthy for the industry to have this consolidation, to get a great number of seed companies under one roof, and one management. I think it will go a long way to help stabilize pricing. Hopefully we can get out the situation where we have 20 companies overproducing. Some companies plant seed that they don't have markets for. They speculate that they will have a home for the seed down the road. Hopefully a large organization like ABT isn't going to do that, they're going to be responsible with the approach that they will take to seed production, and I think they will."

Bill Rose, Turf-Seed, Inc.: "This venture has reached a size that certainly is to be reckoned with. ABT's path is still not clear, but we hope they can blend the many companies into a unit that is efficient and stabilizing to the industry.

"The future of this industry will see varieties tolerant to herbicide, much greater disease resistance, improved turf performance, all with higher seed yields. With marker genes available and gene transformation, the era of VNS (Variety Not Stated seed) may finally end."

Craig Edminster, International Seeds: "We're all a little surprised that it's happened. We're all wondering when the profitability is going to come. Stockholders need return on their equity. Most of them are looking for 15-16-17 percent, and this seed business has never really managed itself on those kind of margins. You just wonder how it's all going to come out in the wash," says Edminster, reminding that external and internal forces will continue to affect every company, big or small. We've gone through many years



Craig Edminster: Industry price drops could be drastic.

of good prices for growers, and for companies, and you just wonder how long it's going to last." $\ \square$



Dennis Combs, left, and David Lundell: Believe in coming acceptance of *Poa supina* for sports fields, tee boxes.

One new varieties for Pickseed this year is elite Sunshine ryegrass. "It has real high seed production," says Pepin. "It's quality is good, first page NTEP."

"It seems like our growers are constantly using more nitrogen,

KEY (AVAILABILITY):

A=expected surplus; B=adequate supply; C=limited supply.

KEY (PRICE):

H= higher price than last season; S= stable, equal to last season; L= lower prices than last season; NR = no response

CULTIVAR	MARKETER	AVAILABILITY	PRICE
Kentucky Bluegrass	I The second		1.157.1
1757	Lofts	В	S
Adelphi	Advanta	В	L
Arcadia	Burlingham	С	S
Belmont	Lofts	В	S
Blacksburg	Turf-Seed	В	S
Blue Star	Pennington	В	NR
Cannon	Advanta	В	L
Champagne	Lebanon	С	S
Chateau	Fine Lawn/Penningto	n B	S/NR
Cobalt	Turf Merchants	В	S
Cynthia	Advanta	В	L
Eagleton	Lofts	В	S
Fortuna	International Seed	В	L
Gnome	Turf Merchants	А	S
Haga	Burlingham	В	S
Chateau	Fine Lawn Research	С	L
Classic	Peterson	С	S
Dawn	Lesco	В	S
Dragon	Zajac Performance	С	L
Eagleton	Lofts	В	S
Fortuna	International Seeds	С	S
Geronimo	Advanta	А	L
Gnome	Turf Merchants	Α	L
Haga	Burlingham	В	S

to get the yields higher. That's one of the reasons the yields are so fantastically high now. And the varieties have been selected for high seed yields."

"We are pleased to see a really good use of turf-type perennial rye this year," says **Ronnie Stapp**, Pennington Seed. "The supply of seed was very adequate for a strong demand, but we are selling out on most of our top varieties. The acres are there, in Oregon, for an adequate supply again, but with the strange El Niño-driven weather we have experienced, the yields may not be up to par.

"We expect to have a good supply of our Morning Star, Shining Star and Wind Star perennial ryegrasses. Our supplies of our newest varieties, Wind Dance and Sonata, will be less than anticpated.

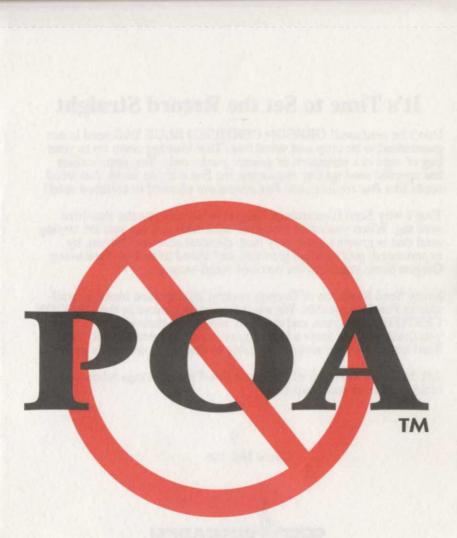
"We have a nice production acreage in of Winterplay *Poa trivialis* which looks good presently, but as fickle as *Poa trivs* are, we will have to wait and see how that one turns out.

"We expect usage of perennial rye and *Poa trivialis* to grow again this year. As a result, the demand for seed will be strong and the expected supply should be about equal to last year."

Rethinking Poa supina

"Poa supina is our big story," reports Dennis Combs, AG, from

CULTIVAR	MARKETER	AVAILABILITY	PRICE
Huntington	Lofts	В	S
Midnight	Turf-Seed	А	L
Misty	Pennington	В	NR
Nassau	Lofts	В	S
Preakness	Lofts	В	S
Princeton 105	Lofts	С	S
Ram I	Lofts	В	S
SR 2000	Seed Research	С	S
SR 2100	Seed Research	В	L
SR 2109	Seed Research	С	S
Unique	Turf-Seed	С	S
Viva	Turf Merchants	В	S
Washington	Burlingham	В	S
Perennial Ryegra	SS	San Barris and	
Affirmed	Lebanon	В	S
Affinity	Turf Merchants	А	S
ASP 400	Advanta	С	S
ASP 410	Advanta	С	S
Blackhawk	Turf Merchants	В	S
Brightstar II	Turf-Seed	С	S
Catalina	Turf-Seed	В	S
Charger II	Turf-Seed	А	L
Churchill	Lebanon	С	S
Derby Supreme	International Seed	В	L
Dimension	Advanta	С	S
Essence	International Seed	С	S
Evening Shade	Turf Merchants	В	S
Exacta	Lebanon	В	S
Excel	Burlingham	С	S
Gator II	International Seed	С	S



 Tested to be Poa-Free using Oregon State Standards for Noxious Weed Exams

It's Time to Set the Record Straight

Don't be confused! OREGON CERTIFIED BLUE TAG seed is not guaranteed to be crop and weed free. That blue tag sewn on to your bag of seed is a statement of *genetic purity only*. Yes, certification has specific seed quality requirements. But did you know that weed seeds like *Poa trivialis* and *Poa annua* are allowed in certified seed?

That's why Seed Research of Oregon is introducing the Poa-Free seed tag. When you order Poa-Free seed with this tag you are buying seed that is grown on the very best, cleanest acres in Oregon, by experienced, professional growers, and tested to be Poa-Free using Oregon State standards for noxious weed exams.

Every Seed Research of Oregon variety, mixture and blend is available in Poa-Free quality. We wholeheartedly believe in the OREGON CERTIFIED program, and continue to support their efforts. But if you demand more from a bag of grass seed, you need to ask for it. Seed test results are always available to confirm a seed lot's purity.

Ask for Seed Research of Oregon's Poa-Free seed tags when you order your next seed shipment.

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27630 Llewellyn Road • Corvallis, OR 97333 1 (800) 253-5766 • (541) 757-2663 • Fax: (541) 758-5305 Fine Lawn Research, Inc. The product, also known as supina bluegrass, has held up well in research in England and at Michigan State University, where it survived under 5% sunlight under indoor stadium conditions. Trey Rogers is counted among supina's major domestic supporters.

Poa supina —first used in the United States in 1989— is becoming more recognized as a viable turfgrass for sports fields. Recommended uses for *Poa supina* include tee boxes, soccer and football fields.

"It's becoming more mainstream," adds Fine Lawn's **David Lundell**. "It's being used more in mixtures that require shade tolerance, wear tolerance and quick recovery."

The most appealing aspect of *Supina* is that it appears to be able to offer both shade and wear tolerance, which you don't often find in a turfgrass, they say.

"Usually, the closer a variety gets to shade tolerance, the more you lose of the wear tolerant characteristic," Combs explains. *Poa supina* is the most shade tolerant and wear tolerant grass that anybody knows of. It's more unique than anything else."

"It also recovers from injury better than anything else," says

CULTIVAR	MARKETER	AVAILABILITY	PRICE
Laredo	Turf Merchants	В	S
Manhattan 3	Turf Merchants	А	S
Morning Star	Pennington	В	NR
Palmer III	Lofts	В	S
Paragon	Turf Merchants	С	S
Pennant II	Burlingham	В	S
Phantom	Lofts	С	S
PhD	International Seed	В	L
Prelude	Lofts	В	S
Radiant	Burlingham	С	S
Repell III	Lofts	В	S
Rodeo II	Turf Merchants	В	S
R2	International Seed	В	L
Secretariat	Lebanon	В	S
Sonata	Pennington	В	NR
Shining Star	Pennington	В	NR
SR 4200	Seed Research	В	S
SR 4330	Seed Research	В	S
Precision	Advanta	С	L
Premier II	Barenbrug USA	В	L
Prizm	Zajac Performance	В	L
Riviera II	Roberts	С	S
SR 4010	Seed Research	В	н
SR 4100	Seed Research	В	н
SR 4200	Seed Research	В	н
SR 4400	Seed Research	С	S
Stallion Select	Fine Lawn	В	L
Stallion Supreme	Fine Lawn	В	L
Top Hat	International Seed	В	L
Wind Dance	Pennington	В	NR
Wind Star	Pennington	В	NR

Research reports

Poa annua good

Dr. David Huff, turfgrass plant breeder at Penn State University, is working to improve *Poa annua* (annual bluegrass) for use on golf course greens. (This at the recognized 'home' of many of the best bentgrass varieties.)

Huff is working with the greens-type *Poa annua*, which he describes as "wild and weedy," and the one most superintendents face on golf greens.

Huff wants to produce a uniform commerical product with a good seedhead production.

"We are working to correct this Poa's disadvantages, primarily it's low seed production," says Huff, who spoke at the Advanta Seeds Pacific field day.

"It already has an upright growth and good shoot density," says Huff. "The green-type poas are 10 times as dense as the new bentgrasses. You can find 1300 tillers in a square inch, vs. 200-250 in the new bents. What that allows you to do is mow the greens types Poas very close."

Huff's work has inspired other Penn researchers to take on Poa projects, such as micronutrient uptake and use; herbicide resistance and control; and disease resistance.



Dr. David Huff explains characteristics of bentgrass (top plugs) and *Poa annua* (bottom plugs).

"Golf course superintendents around the state encouraged me. [They told me] if they didn't have it on their golf course currently, they had worked with *Poa annua* at other courses; they are very supportive of the program," says Huff."

Many superintendents don't like *Poa annua* and try like mad to keep it from establishing on their courses. Others will nurture it as they would a creeping bentgrass green, and are very happy with the results. Huff believes superintendents "don't care about color," when it comes to greens management. "A light colored green— which is *poa's* usual tint—is acceptable to them."

Poa annua bad

Poa annua, Poa trivialis and native bentgrass contamination will occur in much of this year's turfgrass seed crop due to mild, wet winters, which favor grassy weed growth. Growers says herbicide failure due to wet weather is another factor. Some weeds have developed resistance to chemical controls, say growers. The elimination of field burning is also a factor.

"1998 is the worst year I've ever seen [for Poa annua contami-

nation]," says researcher Kevin Turner of O.M. Scotts.

Scotts has recently planted several thousand acres of perennial ryegrass in the Columbia basin in Washington and along the Columbia river.

"It's an area where we haven't grown lots of grass," says Turner. "Poa annua and some of the other real problematic weeds don't do well there. We can get better seed quality, free of contamination."

Weed-free seed is best assured through careful analysis of the whit tag on each bag of seed, or you can request a copy of the seed test from your distributor, advises Seed Research of Oregon.

Brown patch resistance improves

Turf-Seed, Inc. reports progress in brown patch resistance in tall fescue. The severe brown patch, heat and drought conditions present at the company's Rolesville, NC location have provided an excellent area to uncover germplasm sources with improved summer turf performance, reports **Dr. Melodee Fraser.** The first variety to be released from this cooperative program is Tar Heel, which has a NTEP brown patch rating of 8+, out of a perfect 9.

"We are also developing varieites of tall fescues for arid areas, such as the Western U.S., where dwarf varieties that are dense and dark are desired," says Fraser.

"Two of these varieties are Matador and 5LMD. Our experience has been that these dwarf varieties will not perform well in severe humid summer climates."

"We now have seed stock increases of two [Roundup resistant] varieties; PST-4RU hard fescue and PST-5DU tall fescue," reports **Crys-tal Rose-Fricker**, research director, Pure Seed Testing, West. "These varieties can tolerate applications of 1 pint of Glyphosate per acre...when the plants are sprayed in the fall. Turf trials with these varieties were also sprayed this spring for weed control with little yellowing and stunting while *Poa annua* was eliminated," says Fricker.

Jacklin's Arabia tall fescue has been bred specifically for disease resistance (net blotch and gray leaf spot). Arid 2 was bred for high resistance to browh patch, reports **Dr. Doug Brede** of Jacklin. The company's Pixie E has endophyte enhancement, and was a top variety in the latest NTEP trials.

Kevin Turner of O.M. Scotts, says the company hopes to have a brand new variety of herbicide resistant bentgrass seed available for the golf course market in 2002. Commercial fields will be planted in 2001. 400,000 lbs. are expected from that first planting.

The company hopes to have herbicide resistant St. Augustinegrass available in 2000; herbicide resistant Kentucky bluegrass in 2002 and herbicide resistant perennial ryegrasss in 2004.

International Seeds continues work in high endophyte hard fescue combining dark green color with high seed yield, says researcher **Steve Johnson.** "We'll have three or four new hard fescue varieties in the upcoming NTEP."

The company's Tiger colonial bentgrass has done well in the latest NTEP trials, with high fusarium patch resistance.

"Tiger's going to go a long way in overseeding and permanent turf," says **Craig Edminster**, director of research for International Seeds. Lundell. "Ryegrass and tall fescue are both bunch-type grasses. You're going to have some tillering with ryegrass, but it's not going to creep out from where you plant it. *Supina* will; if it's not completely beaten down, it will keep coming back."

The species' four to five-day germination rate is also an impressive characteristic.

Its light green color is considered a weak point, and some are afraid *supina* is too aggressive once established.

European outreach

Turf-Seed, Inc. plans to increase its presence abroad with the formation of Turf-Seed Europe, Inc.

Company President Bill Rose made the announcement during Turf-Seed's field day activities in June.

"The world continues to shrink and the seed industry in the U.S. becomes closely tangled with seed production in Europe and the rest of the world," says Rose.

"The structure Turf-Seed Europe is not really set up yet or decided. There are a lot of questions we need to ask ourselves on how it's going to work, what the processes are going to be," says Marketing Director **Tom Stanley**.

CULTIVAR	MARKETER	AVAILABILITY	PRICE
Wizard	Burlingham	В	s
Yorktown III	Lofts	В	S
Turf-Type Tall Fe	scue		
Adventure II	Turf Merchants	В	L
Apache II	Turf-Seed	В	L
Avanti	Turf Merchants	A	L
Aztec II	Turf Merchants	В	L
Bonsai	Turf Merchants	В	L
Bonsai 2000	Turf Merchants	С	н
Coronado	Turf-Seed	В	L
Dixie Green	International Seed	В	L
Duster	Pennington	В	NR
Falcon II	Burlingham	В	L
Finelawn Petite	Fine Lawn	В	L
Finelawn 5GL	Fine Lawn	С	L
Finelawn 88	Fine Lawn	В	L
Houndog	International Seed	В	L
Houndog 5	International Seed	В	L
Marksman	Burlingham	В	L
Masterpiece	Lebanon	В	S
Millennium	Turf Merchants	В	н
Picasso	Lebanon	С	S
Pride	International Seed	В	L
Rebel Jr.	Lofts	В	L
Rebel Sentry.	Lofts	С	L
Rebel III	Lofts	В	L
Rebel 2000	Lofts	С	L
Regiment	Advanta	В	S
Rembrandt	Lebanon	С	S
Renegade	Burlingham	В	L

ERICSSON STADIUM . CHARLOTTE, NORTH CAROLINA



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"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. **LM**

CULTIVAR	MARKETER	AVAILABILITY	PRICE
Penneagle	Tee-2-Green	С	S
PennLinks	Tee-2-Green	В	S
Penn A-1	Tee-2-Green	В	S
Penn A-2	Tee-2-Green	В	S
Penn A-4	Tee-2-Green	В	S
Penn G-1	Tee-2-Green	В	S
Penn G-6	Tee-2-Green	В	S
Seaside II	Tee-2-Green	В	S
Southshore	Lofts	В	S
SR 1019	Seed Research	В	S
SR 1020	Seed Research	В	S
SR 1119	Seed Research	В	S
Tendenz	Fine Lawn	С	S
Tiger	International Seed	В	S
Tracenta	Advanta	С	н
Trueline	Turf Merchants	В	L
Viper	International Seed	В	L
Other Seeded Cultiv	ars	The Manager	Was In
Buffalo Pals	Pennington	В	NR
Cypress poa triv	Turf Merchants	A	L
Del Sol bermuda	Turf Merchants	В	н
Froghair rye	Turf Merchants	В	S
Laser poa triv	Lofts	В	S
Mirage bermuda	International Seed	В	L
Primo bermuda	Seed Research	В	S
Pyramid bermuda	International Seed	В	L
OKS 91-11 bermuda	Seed Research	С	S
Sabre II poa triv	International Seed	В	5
Sahara	Pennington	В	NR
Salty alkaligrass	Lofts	С	S
Savannah bermuda	Turf-Seed	В	S
SR 6000 deschampsia	Seed Research	С	S
Stardust poa triv	Turf merchants	A	L
Sultan	Pennington	С	NR
Supina bluegrass	Fine Lawn	В	S
Sydney bermuda	Pennington	С	NR
Yuma	Pennington	В	NR

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Turf Type Tall Fescues





2 ADIANT



ENNIAL RYEGRASS



DWARF TURF TYPE TALL FESCUE

Turf Type Perennial

Ryegrass

Perennial Ryegrasses



Bluegrasses & Bentgrass





Fine Fescues & Bentgrass



Blends





Chewings Fescue



Symphony Perennial Ryegrass Blend



HAGA

Kentucky Bluegrass



CREERING BENTGRASS

Kentucky Bluegrass Blend

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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

stablishing 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



'Baby Lucia' violas and 'Champagne Bubbles' poppies at a Post Properties location.

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This arrangement combines 'Lemon Chiffon' violas,'Crystal bowl' pansies, golden oregano and 'Bowle's Mauve' erysimum.

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

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 sericia*); Tatarian dogwood (*C. alba*); some Japanese maples (e.g. 'Senkaki')

Fruit - some crabapples (e.g. 'Golden Hornet'.'John Downie'); evergreen and deciduous female hollies (*Ilex* spp.); cotoneasters; Russian olive (*Elaeagnus angustifolia*); sourwood (*Oxydendrum arboreum*)

Deciduous conifers - larch (*Larix* spp.); dawn redwood (*Metasequoia glyptostroboides*); baldcypress (*Taxodium distichum*) Cooperative Extension (*www.hammock. ifas.ufl.edu/txt/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.



Poppies add a bright colorful touch at another Post Property location.

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THINK TANK

PAGE

Many ways to recruit the best

How to sell water features

PAGE

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hese 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

LANDSCAPE/GROUNDS Christmas decoration work pays

[PEOPLE & PROJECTS]

Business school named after Clarence Davids, Sr.

Trinity Christian College has renamed its business department's instructional facility the Clarence Davids, Sr. Business Center. Landscape industry pioneer Davids has served the College since its beginning in 1959. A former member of its Board of Trustees, Davids has supplied the funds for eight business scholarships per year for Trinity business students. The Clarence Davids company is now operated by son Bill Davids, and provides landscape design and maintenance to a number of high profile clients in greater Chicago.

Post Properties founder feted

The Garden Club of America recently presented its Cynthia Pratt Laughlin Medal to John A. Williams, founder and CEO of Post Properties, Inc.. The Laughlin Medal is awarded for outstanding achievement in environmental protection and quality of life maintenance.Post Properties, Inc., is one of the largest operators of upscale multi-family apartment communities in the Southeastern and Southwestern U.S. The Garden Club of America has more than 16,500 members in 40 states and Washington D.C., and made the presentation to Williams at its annual meeting in Virginia.



Professional

driver's seat

cutters in

Konttall

RON HALL Managing Editor

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1

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To help you manage your business, we can put our heads together and our noses to the grindstone.



COMFORTABLY IN COMMAND Circle No. 113 on Reader Inquiry Card Proven ways to recruit, retain and get along with your workforce.

/lany ways

By CARMEN ZAYAS

n 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 sixmonth 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



Have company veterans serve as 'trainers' to help break in new recruits.

a reputation for excellence in your market. If you have taken the time and initiative to foster goodwill among your employees they will be your best recruiters. And if you have reputation for excellence, good employees will come looking for you.

Also keep in mind that nothing beats personal relationships. Advertising helps get the word out but it can never take the place of personal contact. We strongly encourage participation in community, social, athletic and religious organizations by all our employees. It exponentially expands your company's ability to have "personal contact." **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 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

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.

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 votech 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

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.

CZ

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

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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 onsite 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



The author, Carmen Zayas: 'give employees respect.'

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 thankyou, 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 ways 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 com-

> petitors 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. \Box

Carmen Zayas is vice president of human resources for Clean Cut, Inc., an Austin, Texas-based landscape design and maintenance company with 400 employees.

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Circle No. 140 on Reader Inquiry Card

The pro's guide to selling water features

By GREG WITTSTOCK

elling 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

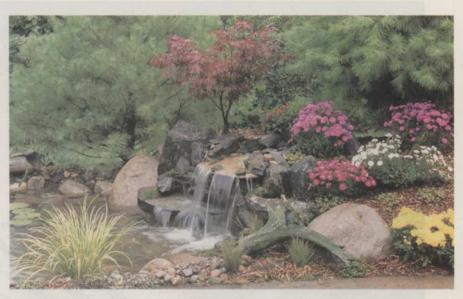
The sales call starts the moment the phone rings in your office. More often than not, the first question out of the homeowner's mouth will be, I'm interested in a small water feature. Immediately answering their question about cost is a mistake, but not answering it at all is even a bigger mistake.

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.



Explain how you'll help them pick out the best size, shape, design, and location in their yard for a water feature.

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."



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.



Don Ulrich-Cincinnati Zoo



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 drāwings. A garden hose is a perfect design tool.

A key to justifying the total expense for the job is breaking down all the itemized costs.

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 \pm 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 manhours 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 individual 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). \Box

—The author is president of Aquascape Designs, West Chicago, IL, and a 16 year veteran of pond design and construction. Their number is 800/306-6227.

Make winter "pay"

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

any 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."

sets its franchise

The company

prices according to

the size of the mar-

"This fits the lit-

tle guys as well as

the big guys," says

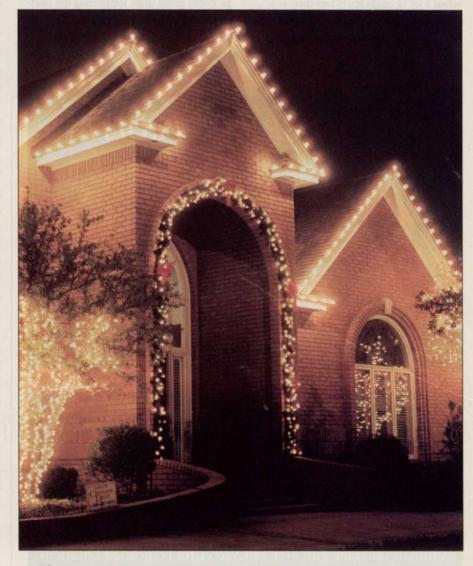


Blake Smith promotes Xmas decorating as a service.

Smith.

As of August, the franchiser charges a base fee of \$15,900 for a city market,

ket.



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 teleMany landscape customers appreciate a service that beautifies their homes for Xmas.

phone 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.

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 man-



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"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."

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- Offset Fixed Costs
- · Sell to Existing Customers
- . Low Start-up Costs
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power to handle the customer demand.

"Once we got started it took off on its own," he says.

Smith plans to increase last year's parttime 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. "There's no way you can meet the demands for the business once you get the fire stoked. It will run you down."

York, who joined Christmas Decor, Inc. as vice-president and treasurer last March, plans to add more crew members to his franchise this year to keep up with customer demand.

"It's been great," he says. "It's exceeded our expectations in almost every way."

York hopes to broaden his franchise's scope to include year-round work such as weddings and other special events.

Rick Place, owner of Lavish Lawn Care in Golden Valley, MN, picked up 15 new lawn accounts last year because of his Christmas Decor franchise.

"You get to advertise for people in the fall when nobody else is advertising," says Place. "They get to see your Christmas lights go up, and they're like, 'Hey, wow! they make a house look really nice!' So you already have this positive experience with them. So it really did help with the spring

Circle 118

marketing. I even had to turn some stuff down."

Because Place's crew frequently works in a sub-zero climate during the holiday season, they had to adapt some of the equipment to the adverse weather conditions.

"We had to play around with some different ways on how to put them [the lights] up because we have to work on ladders instead of working roof lines," he says. "So we did kind of have to revamp. We had to come up with a couple different tricks on how to put them up to adapt to our climate."

One of the necessary changes was warming up the light clips, so they wouldn't become brittle and snap in the cold climate.

Place says that whenever he called the company owners for advice and direction on any challenges he encountered, they



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

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 bene-

fits, which include: increased profits and yearround 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. \Box

1

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GIE '98 includes special employee day

Members of the Green Industry Expo board met recently in Herndon, VA, to finalize plans on the 1998 GIE Lawn & Landscape Conference, Nov. 13-17 in Nashville.

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, Novem-

ALCA honors Gary Thornton

Associated Landscape Contractors of America awarded its 1998 landscape Service Award to Gary Thornton, chief execu tive officer of Thornton Gardens, Inc., Maineville, OH. Thorn ton 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. □



ber 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. \Box

GIE board members met in Herndon, Va. to plan the 1998 Green Industry Expo. Bottom row, from left: John Gillan, PGMS; Debra Holder, ALCA; Eleanor Ellison, GIE show coordinator: Dale Elkins, ISS Landscape Management Services, Orlando; Jerry Grossi, Arborlawn, Lansing, MI; Sam Farison, Farison Lawn Care, Inc., Louisville; Michael Joyce, Novartis. Back row, from left: Roger Braswell, Southern Tree & Landscape/Site Work Systems, Charlotte, NC; Doug Masters, DowElanco; George Gaumer, Davey Tree Expert Co., Kent, Ohio; Tom Delaney, PLCAA; Jeff Bourne, PGMS; David Luse, Arteka, Eden Prairie, MN.

IA prepares industry-wide 'Water Summit'

The Irrigation Association is proceeding with plans for a "Water Sum-

mit" 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."

THINK TANK

ide 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 offers advantages if you can afford it

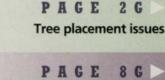
MARK FRONCZEK Indian Hills Country Club

Walk mowers 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



Storm water ponds needed?

PAGE 10G Fore! Here come fake greens!

PAGE 12G Software to track budgets

tees with the \$7 pay rate, the actual increase in labor costs will approach \$29,000 a year.

COLF

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

[SUPERS ON COURSE]

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.

TREE PLACEMENT on the golf course

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

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

lematic 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



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

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

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 thickbarked 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 honey-locusts 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



A tree canopy over the bench by the cart path can be an accommodating feature of the course on those hot, sunny days.

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 at 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. □

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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. \Box

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.

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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

t'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 main-



This pond from a project in Tulsa, OK, is larger than the average storm water management pond. Adding vegetation can help to stabilize pond slopes. Community residents now regularly use the area around this pond for jogging, biking and bird watching. During the initial phase of a sediment forebay construction, biologs are installed which will serve as a filtering system for heavy storm run-off.

tain 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

Other environmental restoration services offered by this arm of Ruppert Landscape Company include:

reforestation

- wetland mitigation and
- lake-edge stabilization
- stream realignment
- dune grass planting
- wildlife control

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.

Once the area is excavated, additional plantings of pickerel weed, lizard tail and cattail increase its filtration capabilities. The sediment forebay allows suspended particles to settle out before reaching the rest of the pond. By using deterrent devices such as this goose exclusion fencing, newly-planted vegetation can be protected until plants are well-established.



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

rtificial 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 golf turf installation 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



Synthetic grass is most popular as putting greens in residential areas, and as chipping turf at driving ranges.

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 man-



Woodhull: likes the nomaintenance feature.

ager 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 Golfscapers. 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 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 maintenancefree landscapes," he says. "The putting green is something I've always wanted to do, but I could never the 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. 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 here," says Woodhull.

In the future, it's likely that golf courses installed with artificial greens will be a com-



The Green Industry is always looking for a new niche to fill. Synthetic golf greens could soon do just that.

"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 mon sight. Thomason says his company is considering installing synthetic turf at a ninehole, 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 :

Golfscapers, 701 Knox Road, Villanova, PA 19805. (800) 560-7888.

Woodhull Landscaping Inc., 307 Riverside Drive, Riverhead, NY 11901. (516) 369-5960.

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

hile 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.

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EQ03530	Reelmaster 5300-0	Mowers,Reel,Ride		1,315	Hr	
EQ07174	66" Rake O-Vac Sweeper	Sweepers		3.015	Hr	
EQ07215-1	Workman 4300 D	Vehicles		2,750	Ht	
EQ07215-2	Workman 4300 D	Vehicles		162	H	
EQ08880	Sand Pro 14 HP	Bunker Rakes		1,466	Ht	
EQ09110	Greens Aerator	Aerators,Walk		94	H	
EQ09501	Fairway Assaltor	Aesators, Towed		167	Hr	
EQ30224	Groundsmaster 224	Mowers,Rotary,Ride		999	Hi	
EQ30580	Groundsmaster 580-D	Mowers, Rotary, Ride		55	Hi	
EQ41105-1	Multi Pro 1100	Vehicles		3,750	Hi	
EQ41105-2	Multi Pro 1100	Vehicles		139	H	
EQ41120	Sprayer Tank-MultiPro 1000	Sprayer		395	Hr	
EQ41150	PA-17 Spreader-MultiPio 1000	Spreader		712	Hi	
EQ41190	Injector Sprayer-MultiPro 1000	Sprayer		2,230	H	
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Computer	Consulting Computer	500	0	0	0	0	
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Suppliers are responding with products that don't require a lot of computer expertise by end users.

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 concern-

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799022	Festilizer	10-19-22 Green	
T00023	Fertilizer	15-0-24 Green	
100024	Feitilizer	18-3-19 Green	1
100025	Fertilizer	10-18-22 Fairway	
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100027	Feitäger	19-2-19 Green	
T00028	Fetilizer	15-30-12 State:	
GC00010	Golf Course Supplies	Specialty A Cup 4***	
3C00011	Golf Course Supplies	Specialty A Cup 6"	
GC00110	Golf Course Supplier	Flag - Regular	
GC00111	Golf Course Supplies	Flag - Tournament	
R00010	Impation	Repair Coupling 3**	
R00011	Inigation	Repair Coupling 4***	
R00012	Imigation	Repair Coupling 6""	

ing 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 &

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Quelant[®]-Ca is norma and may also be a Either way, it is t herbicides, soluble fungicides and plant

developed not only to facilitate absorption by the leaves and roots, but to increase mobility of the calcium within the plant as well.

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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, re-

ports 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.incircuit.com.* The site lists components and system requirements and pricing information.

TM

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

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,

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. \Box



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Based on an article in Golfweek/Golf & Travel, a correlation between highlytrained 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 unmanicured 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 appear 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 longtime frequent golfers.

The outlook, says Beditz, will depend on how many occasional golfers and how many of lasts 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

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."

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."

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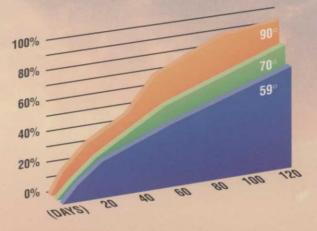
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uring his 20 years as a certified golf course superintendent, Bill Bird thought he had a hectic schedule. Then he became horticulture/park maintenance supervisor for the Oklahoma City Parks and Grounds Division. He now manages a half-dozen sections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

Oklahoma parks crew reduce line trimming

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

Spray technician, Charles Whitlock, applies the herbicide to the roadside as fellow technician, Kevin Johnson, attends to the sprayer.

spraying of some 50 miles of postand-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 mow-

ing 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

> JOBTALK



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

Horticulture/Park Maintenance Supervisor, Bill Bird (left) with William Jensen, spray technician.

with flashing lights while the second walks with the hose and spraver along the fenceline or post-andcable. They also spray the herbicide in a 21/2to 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

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Circle No. 122 on Reader Inquiry Card

Events

AUGUST

19: Michigan Turfgrass Field Day Hancock Turfgrass Research Center, MSU, East Lansing, MI. Contact Kay Patrick 517/321-1660

20: Turf & Landscape Field Day University of California Bay Area Research & Extension Center, Santa Clara, CA. Contact Dr. Ali Harivandi 510/639-1271

20: Indiana State Lawn Care Association Summer Field Day Oak Hill Mansion, Northern Beach Park, Carmel, IN. Contact Robert Andrews 317/846-7131

24: Central New York GSCA Poa Annual Golf Tournament Oswego Country Club, Oswego, NY. Call NYSTA: 800/873-8873 or 518/783-1229

26: Ohio Turfgrass Foundation Turf Research Field Day OTF Research and Education Facility. Call 888/OTF-3445

28: Washington Association of Landscape Professionals Annual Golf Tournament Mount Si Golf Course, Snoqualmie, WA. Call 206/524-7888

31: Metropolitan GSCA Poa Annual Golf Tournament Rock Spring Club, West Orange, NY. Call NYSTA: 800/ 873-8873 or 518/783-1229

SEPTEMBER

10: Palm Tree UCR Extension Seminar UCR Extension Center, Riverside, CA. Call 909/787-5804; email sciences@ucx.ucr.edu; or website www.unex.ucr.edu/ns/ns.html

10-11: 21st Annual Southwest Horticultural Trade Show Phoenix Civic Plaza, Phoenix, AZ. Call 602/966-1610

11-13: Flordia Nursery and Allied Trades Show Orange County Convention Center, Orlando, FL. Call

407/295-7994 or 800/375-FNGA

15: Turfgrass Research Conference and Field Day UC Riverside, Riverside, CA. Contact Susana Vélez at (909) 787-4430 or e-mail susana@ucr acl.ucr.edu

16: Landscape Management Research Conference and Field Day UC Riverside, Riverside, CA. Contact Susana Vélez at (909) 787-

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4430 or email susana@ucr acl.ucr.edu

18-19: Washington Landscape Trade Show and Field Day King County Fairgrounds, Enumclaw, WA. Contact Peter Dervin at (800) 833-2186

22-24: Turf and Landscape Field Days Virginia Tech Campus, Blacksburg, VA. Contact David McKissack at (540) 231-5897 or email turfl@vt.edu LM

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SUPPLIERS CORNER

Visit the new **AgrEvo** web site at www.agrevo-green.com which contains information about the company's complete line of products, MSDS and specimen labels, field trial data, product applications and recommended use rates. Sales and technical support is also available.

Century Rain Aid has two new Florida locations: Magnolia Park and Santa Rosa Beach. There are now 19 Century locations in Florida. The increased Century presence is intended to offer more convenience and an expanded product line in addition to the introduction of new professional training and buying programs. Data Transmission Network Corporation has purchased Kavouras, Inc. for a cash buyout of \$22,650,000. DTN, previously an information and communication provider for the low end of the weather market, is now positioned to target all markets with the acquisition of Kavouras which has been a provider to the high end markets.

Encore Manufacturing celebrated its 10 year anniversary is high style, including high winds and high rain. That didn't stop the company and distributors from celebrating and previewing the new mowers for 1999, including new designs for Encore's walk-behind mowers and several new riding mowers.

LESCO is to be the exclusive supplier of the **Trugreen** brand of consumer lawn care products. LESCO will supply products through its network of fertilizer and seed-blending facilities and distribution centers. Trugreen products are carried nationally in a number of retail stores.

Medallist Troon Golf Management is set to address every aspect of the upscale golf experience in Asia, Australia and the Middle East. A partnership between Medallist Golf Developments (itself a joint venture between Macquarrie Bank and Great White Shark Enterprises) and **Troon Golf** will expand a global vision of golf course development and management.

Plant Health Care, Inc. will be working with Griffin Industries, Inc. for research and development of unique microbial biofungicides and biofertilizers designed specifically for the commercial turf and horticulture markets. The first product, a multi-purpose biofungicide, is presently in field trials.

J.R. Simplot Co. has combined its grass seed and professional turf and horticulture fertilizer businesses. Jacklin Seed and Best fertilizer will now operate as Simplot Turf and Horticultural Products. The labeling merger is intended to coordinate marketing efforts and will not impact brands, labels or production facilities.

Tanaka Power Equipment

has the first two-cycle engine to comply with the new California Air Resources Board's Tier II emission standards. The new line of 40cc PureFire engines are 30 percent more fuel efficient with an improved combustion process and emissions well below required standards. Their 26cc engine has recently passed the standands as well.

Dr. T. Don Taylor is the new executive director of the **Tift 94 Growers Association**. Taylor, formerly Southeast Regional R&D Manager for Novartis Speciality Products, now represents the exclusive producers of TifSport certified Bermudagrass, Tifton. **LM**

VIDEOS AND LITERATURE FOR THE GREEN INDUSTRY

MAINTENANCE EQUIPMENT TRAINING VIDEOS... ALCA has released a new series of nine landscape equipment training videos. Each video, which is 15 to 20 minutes long, demonstrates how to safely, efficiently and professionally operate and service basic landscape maintenance equipment: backpack power blower, large front deck riding mower, mid range mower, power edger, power hedge trimmer, string-trimmer, 21" trim mower, ZRT mower and safety overview. Available in English and Spanish, each video includes a training outline and test. Videos may be purchased individually (mem \$50/non-mem \$75), as a set (mem \$400/non-mem \$650)or, if purchasing both language sets at one time, a special offer of 50% off the Spanish set

SPANISH TRAINING COURSE... Get up to speed with a home study course to improve your communication with Spanish-speaking personnel. Georgia Center for Continuing Education has a course for the Green Industry (#360910) which costs \$225 for US residents with discounts for same time, same company enrollments. You can fax (706) 542-7537 or you can register on-line at www.gactr.uga.edu/IS/

SPANISH TRAINING SERVICES... For people who want a more hands-on approach to learning Spanish, consider a two day seminar. There are seminars to address the specific terminologies of your business: Turfgrass Management, Landscape Contractors and Nurserymen, Construction Contractors etc. English as a Second Language seminars are also available. Flash cards, catch phrases and other methods are used to increase program effectiveness. Call Spanish Training Services at (800) 491-0391.

PRODUCT REVIEW

Bobcat skid-steer loaders

The F-series skid-steer loaders have had some product improvements for increased performance, power and productivity. The Bobcat 751 and Bobcat 753 have, respectively, a 38 hp and 43.5 hp Kubota diesel engine and a rated operating capacity of 1,250 and 1,350 lbs, as well as a stronger one-piece tail-



gate. The 751 also has a bigger starter and battery and a slower engine RPM. The 753 has a larger tilt cylinder and more rollback power, more hydraulic flow and faster travel speed (up 10%

to 6.6 mph).

For more information contact Bobcat at (701) 241-8700; fax (701) 241-8704; website www.bobcat.com; email infocenter@bobcat.com; or

Circle No. 250

Palmer's Pride seed line

Lofts Seed intoduces Palmer's Pride Premium Grass Seed for 1998. The six grass seed products are available in 3, 5, 10, 25 and 50 pound bags: Captain's Choice Tall Fescue - The Rebels turf-type tall fescues which are very heat tolerant for

sun and shade and traffic tolerant; Sun and Shade - a mixture for partial sun to full shade for most soil types; Shady Lawn - for shady areas needing a dense, dark-green lawn; Par 3 Perennial Ryegrass - for rapid germination and establishment; Rapid Grow - for patching and seeding damaged lawns; and Full Sun - for sunny areas providing a dense, dark-green lawn.

For more information call Neil Meyers at (336) 659-5461 or

Circle No. 251

Quick attachment coupler system

Woods Equipment Company introduces the first two models of the new 1000 series of front-end loaders. The 1020 and 1027 models feature a quick attachment couple system, allowing the loaders to accomodate most skid-steer attachments, including pallet forks, angle brooms, 4-in-1 buckets and scrap grapples. The 1020 and 1027 have, respectively, a lift height of 120 and 126 inches and a lift capacity of 2,275 and 2,700 pounds. With increased dump and roll back angles, the four-bar linkage allows buckets to carry more. The heavy-duty, mid-mount frame permits a shorter turning radius

and eliminates the need for side rails to accomodate bigger tires.

For more information contact Woods Equipment at (815) 732-2141, fax (815) 732-7580, or



Circle No. 252

50 watt floodlight

Intermatic Malibu offers a commercial quality floodlight, the Intermatic Malibu LT1. Black-tinted and made of non-corrosive aluminum, the LT1 has a five-year warranty. The adustable head allows accurate positioning to control lighting in landscape foliage and architectural surfaces.

For more information contact Intermatic Malibu at (815) 675-2321; email intermatic@intermatic.com; website at www.intermatic.com; or

Circle No. 253

Versatile John Deere skid steers

With a skid steer product line that has a suitable size and capacity for virtually any operation, all John Deere skid steers have a low center of gravity and a long wheelbase, a vertical-lift design that improves visibility, and the ability to use than 50 attachements using the JD Quik-Tatch

mounting plate. The product line ranges from the narrow, 2,100 pound JD3375 with a lift capacity of 700 pounds; through the JD4475 and JD5575 with SAE lift capacities of 1,360 and 1,410 pounds, respectively; to the heavy-duty JD6675 and JD7775 with respective operating capacities of 1,410 and 1,705 pounds; and the JD8875 with a ground speed of 12 mph and a two-speed transmission.

For more information call Jennifer Harrington at (919) 877-0877 or

Circle No. 254



>PRODUCT REVIEW

Rubber-Track system for Case XT skid steers

A new rubber-track system for XT skid steers is designed to increase performance on chal-

Many new SkidTools for landscape market

Woods Equipment Company introduces 13 categories of SkidTools for the landscape market. The product line provides contractors with a variety of utility, material and multi-purpose buckets, scarifiers, pulverizers,



lenging ground conditions. Better floatation and increased traction allows the XT's to continue working when soft ground conditions or ground pressure is an issue. The new rubber-track system from Case fits over dual wheels and tires for each axel with a counter guide lug on the middle of the track that helps the track stay on the the most slippery conditions. The design also helps keep the inside of the track free and clear of mud or other debris and decreases the likelihood of track slippage over the tires, reducing damage to the surface. The Case rubbertrack system fits all three models of XT skid steers, the 85XT, 90XT and 95XT; requires 2 people to install; does not require special tools; and can be done in two hours or less.

For more information call Cindy Brugioni at (414) 636-6772 or

Circle No. 256

scrapers, rakes, toothbars, snow blades, utility forks, backhoes, post-hole diggers and Skid Diggers. A special TH3000 three-point hitch is also available for easy conversion of cate-



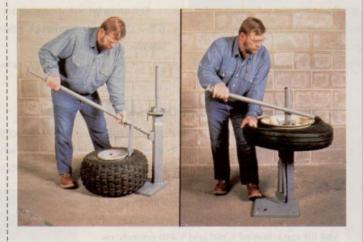
gory 1 three-point attachments to skid steer loader attachments. For more information contact Woods Equipment at (815) 732-2141, fax (815)

732-7580, or

Circle No.255

Tire changer saves on downtime

The easy-to use manual Tire Changer from Gempler's is a USA-made changer which can handle tire sizes from eight inches to light truck size and floatation tires up to 12.5L16. The changer comes complete with a mounting pedestal, bead



breaker, mount/dismount bar and a tire repair wall chart. Additional accessories available include; a small tire tool for smaller turf-type tires, an ATV bead breaker and a tire spreader to inspect and repair tire damage.

For more information contact Gempler's at (800) 382-8743; fax (800) 551-1128; email gemplers@compuserve.com; or Circle No 257

Soil mix for the landscape

BACCTO 'Landscape Mix' from Michigan Peat, Houston, TX, is a soil mix specially formulated to provide an optimum growing environment for perennials and woody ornamentals. Carefully screened for uniform consistancy, the mix is a combination of sphagnum, bark, dolomitic limestone, gypsum and other organic ingredients and comes in 40 quart bags.

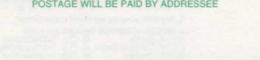
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1994	1994
Curb Appeal Landscaping, VA	Weed Man, ON, Canada
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>PRODUCT REVIEW

E-Z-Go turf utility vehicle great for light duty

The newest member of the E-Z-Go Turf line is the Workhorse 800, ideal for light duty applications for golf courses, sports complexes or grounds maintenance. Available in both gasoline and electric powered models, the Workhorse has a 46"x35"x10" cargo bed and an 800 pound payload capacity.



The unit also has rack and pinion steering and a heavy-duty cargo bed-liner. Optional equipment is also available, such as, a cab with doors, flatbed, lights, power dump bed, all-weather enclosure etc. The gasoline powered version has a 9 hp, 295 cc, twin cylinder, overhead cam engine; an automatic, continously variable transmission and a six gallon fuel tank. The electric version has a heavy-duty, 36 volt, high efficiency motor for quiet, powerful operation.

For more information con-

Tough two-way radio is 'world's smallest'

Global Wireless now sells the Vertex VX-10 as a small yet full-powered and cost-effective two-way radio. The VX-10 is a five watt 40 channel (102 channel capability with optional key pad) synthsized radio with scan modes the user can choose to

Secure spreaders onto truck beds

The new Allgro Cart Securing Hold Down! secures Lescotype rotary spreaders to truck beds, cargo van floors or trailers, and prevents movement in all directions. Stainless steel construction is a key feature. Made to allow quick and easy removal



and replacement. The Allgro Co. company says the Hold Down! prevents rust build-up on equipment from spilled fertilizer, and prevents lost money from lost product.

For more information, contact the company at (316) 264-3766 or Girde No. 260



lock out or avoid busy channels. The unit can handle digital and analog private lines and an automatic receive and transmit batter save feature.

The VX-10 is built to military specifications. It comes with an extra long-life battery, antenna and spring-loaded clip belt.

For more information, contact the company at (800) 220-5174 or

Circle No. 261

tact E-Z-Go at (706) 798-4311, website www.ezgo.com, or Circle No. 259

NIBCO Inc.'s latest irrigation sysyem

The Turf Bubbler Wick irrigation system is the latest in low-flow technology for turf irrigation. Designed for residential, commercial and municipal applications the Turf bubbler can save up to 70 percent of water consumption compared to traditional spray systems. This patent-pending system applies water through a series of outlets in the turf, just below the cutting height. Water is applied directly to the root zone using the wicking and baffling action of the turf thatch for precise application of low water volume over a short period of time, which avoids loss of irrigation water due to evaporation. The Turf bubbler uses PVC lateral pipes and fittings, installation time is about the same as other PVC-based systems and the cost of a complete Turf Bubbler system is comparable to a traditional spray system.

For more information contact NIBCO at (219) 295-3000 or

Circle No. 262





No more wheelbarrows! Add speed, efficiency, productivity and profit to your landscaping and erosion control projects with an

Blows organic mulch with a range of up to 350 ft with a flow rate of up

- to 55 cu. yds. per hour.
- One man operates the system by remote control for "on demand" adjustments in flow rate.

Features automatic feed & dust suppression systems (patents pending).

Remins

Circle No. 123

For product information: expressblower.com

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LANDSCAPE MANAGEMENT August 1998 51



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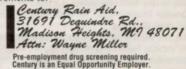
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Lisa Zastawnik, Job Code: NSM, 13600 Broadway Ave. Cleveland, OH 44125. FAX: 216-581-4712 e-mail: garick@garick.com

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Teas Landscape Services, has openings for Project Landscape Architects. Work with each client from inception through job completion. Supported by a Design Group using AutoCAD. **Requirements**: Degree in landscape architecture, good client relation skills, self-starter, knowledge of plants, construction details, and irrigation. Professional fees plus incentive compensation, health care, paid holidays, and car furnished.

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Commercial Manager All American Turf, Inc. has and immediate opening in Central Iowa for a Manager in the Commercial and Irrigation areas. Candidates need to have a strong desire to work in the lawn care industry and have experience in the same. Sales and presentation background is essential. We offer a competitive salary, plus a variety of benefits including ESOP. Send resumes with salary requirements and references to: All American Turf Beauty, Inc., Box 260, Van Meter, IA 50261-0260 or fax to: (515)996-2263. 8/98

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MAINTENANCE MANAGERS & SUPERVISORS The Brickman Group, Ltd., one of the nation's largest and fastest growing full service landscape companies, has an immediate need nationally for maintenance managers and supervisors. Brickman seeks energetic, team oriented college graduates with proven leadership, communication and interpersonal skills. Brickman offers full-time positions, excellent advancement opportunities and exceptional compensation and benefits with an industry leader building on a 59-year tradition of uncompromising customer service. For immediate confidential consideration, please send or fax your resume with an indication of your geographic preferences and willingness to relocate to: The Brickman Group, Ltd., Corporate Office, 375 S. Flowers Mill Road, Langhorne, PA 19047, 215-757-9630, EOE. 12/98

EXCITING CAREER OPPORTUNITIES FOR **VEGETATION MANAGERS** Rapidly growing Vegetation Management Company is looking for experienced Division Managers to work out of our regional and branch locations throughout the U.S. Must have a minimum of two (2) years experience in Vegetation Management and/or a degree in horticulture/aboriculture/urban forestry or related field. Must be self-motivated, decisive, creative and have strong organizational skills. WE OFFER: -Excellent starting salary, -Company paid health insurance, -Excellent working environment, -Bonuses, -Vacations, -401 K Program. For career opportunity and confidential consideration, send or fax resume, including geographic preferences and willingness to relocate to: DeAN-GELO BROTHERS, INC., Attention: Paul D. DeAngelo, 100 North Conahan Drive, Hazleton, PA 18201, Phone: (800)360-9333, Fax: (717)459-5500. EOE/AAP M-F 9/98

Ornamental/turf spray technician must be familiar with all aspects of applications, some sales work possible. Category 24 license preferred but not essential. Clean driving record and valid license required. Mandatory drug testing. Year-round work. Some benefits. Send resume to: Empire Tree and Turf, 2704 Gordon Highway, Augusta, GA 30909. 706-854-0926, 706-651-1648 fax. 8/98

Experienced climber, must be familiar with all aspects of removal, pruning, cabling work and equipment operation. Valid driver's license, mandatory drug testing. Some benefits. Send resume to: Empire Tree and Turf, 2704 Gordon Highway, Augusta, GA 30909. 706-854-0926, 706-651-1648 fax. 8/98

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LOCATE IN ONE OF FIVE GREAT CITIES! Tell us what city you prefer! We are a leading lawn care company that has been in business for 30 years with locations in Cleveland, Fort Wayne, Indianapolis, Pittsburgh, and St. Louis. We are accepting resumes for branch managers and branch manager trainees. Our trainee packages average \$35,000 to \$40,000 per year and our branch manager packages average \$75,000 to \$80,000 per year. Both trainee and branch manager benefits include generous salaries, health benefits, new personal vehicles and a large year end bonus. Join a fast growing company that "really cares" about its employees! Branch manager applicants should have managerial experience, and trainee applicants should have assistant manager experience. Send or fax resume to: Kapp's Lawn Specialists, Michael Markovich, 4124 Clubview Dr., Fort Wayne, IN 46804. Fax: 219/432-7892. 10/98

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Landscape-Lawn Maintenance-Garden Center: Gulf Coast. Largest/Oldest in rapidly growing resort area. Large high-end customer base. \$485,000. The Reed Group, Inc. 1-800-952-2515. www.thereedgroupinc.com 9/98

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Two year AAS degree program in Golf Course Maintenance Operations, Landscape Contracting, and one year Golf and Grounds Certificate. Fully accredited, VA approved, expanded learning facilities, new equipment. Graduate placement assistance available. Contact Golf Course Operations/Landscape Technology Dept., Western Texas College, Snyder, TX 79549. 915-573-8511 ext. 305 12/98

EQUIPMENT FOR SALE

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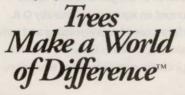
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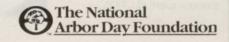


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Grab Bag

Consumer buys in Green Industry grew in 1997

With a robust national economy and a strong national housing market as a backdrop, more than 22 million U.S. households spent \$14.6 billion on professional landscape/lawn care/tree care in 1997, reported a recent Gallup survey--a one million increase in the number of households using these services and a \$600 million rise in spending over 1996.

The study also estimates that 24.4 million households plan to purchase these services in 1998, a two million (nine percent) increase. Since 1993, more than 22 million households have spent over \$14 billion annually on professional landscape, lawn care and tree care services.

► Homeowners in the West led in total spending on these services, accounting for 38 percent of all expenditures.

► Total homeowner spending for tree care showed the largest increase, rising by 50 percent to \$2.4 billion. This category also saw the greatest growth in average amount spent (38 percent to \$434) and household participation (21 percent to 5.6 million).

► Lawn and landscape maintenance accounted for the largest dollar volume (\$7.6 billion) and the greatest household participation (14.3 million) while landscape installation/construction represented the largest average amount spent (\$1,772).



Willamette Valley facts

Seed crops of over 573 cultivars from 17 grass and legume species are grown on 440,000 acres in the Willamette Valley.

The annual farm gate value of Willamette Valley grass and legume seed exceeds \$180-200 million annually, with total gross value to the Oregon State economy in excess of \$800 million.

The Willamette Valley seed production industry is dominated by 800 families on farms that range from 200 to 5,000 acres. Corporate offices of international, national and regional seed companies are located in the Willamette Valley. Many of these firms specialize in specific market niches. Some companies focus on domestic sales while others may market as much as 30 percent of their production outside the U.S. Some maintain research and development facilities and are actively involved in cultivar development.

Seed brokers continue to provide a service to the industry in matching buyers with sellers of common and publicly available cultivars.

Sowing seed for sport

Seed Research of Oregon and O.B. Sports have announced an agreement whereby O.B. will buy turfgrass seed for overseeding and new projects from SRO, based in Corvallis, OR. The agreement includes superintendent education, help with grass selection, and assistance with all aspects of turf management. O.B. Sports has 126 holes of golf, and is growing in two courses in Port Orchard, WA and Tucson, AZ. Bob Marshall of O.B. Sports and SRO's Mike Robinson say the agreement will be one to benefit both companies.

Grab Bag features brief observations and prognostications throughout the green industry. If you have an unusual photo or comment you'd like to share with us, please send it in...

Our new BP 6200 lets you move along at an amazing clip.

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You're cutting through thick, dense wood like it's butter and this pruner is a weightless extension of your hand. You're aware of its keen edge and smooth cutting performance. Its extra strength and stability on larger cuts. Superb fit and balance. And comfort like

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the BP 6200 Series features a forged hook for extra strength and Coronium[™] steel forged alloy blades that are fully heat treated to hold a precision edge after resharpening.

The **BP 6200 Series** professional bypass hand pruner by Corona. Take it for a test drive and feel the difference for yourself. Available in 1/2°, 3/4° and 1° cutting diameters.



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What they're saying about **The New Penn Pals**

"Penn A-4 enhances the game of golf. It is my personal feeling that Penn A-4 is one of a number of significant contributions to the game of golf by Dr. Joe Duich." "Awesome."

> Cutler Robinson, CGCS, Supt. Bayville GC, Virginia Beach, VA

"Simply stated, everyone who has played Bayville comments the greens are 'the best they have ever putted.' This grass allows our members to experience 'tour' quality putting and green speed without jeopardizing fairness and enjoyment. Properly managed, Penn A-4 is, in my opinion, the best grass to date and has set a new standard for excellence."

> Dean Hurst, PGA Professional Bayville GC, Virginia Beach, VA

"Even though summer temperatures can reach 115-120°, we've cut our Penn A-4 at 7/64" for more than a year with no problems."

> Doug Anderson, CGCS, Supt. The Vintage Club, Palm Desert, CA

"For me, the lower the cutting height, the better the management (Penn G-6)."

Pete Gerdon, Supt. Grandfather Golf and CC, Linville, NC

"Because of the short season at our 7,500 ft. elevation, we sodded our rebuilt greens with 42" wide rolls of Penn A-4 from West Coast Turf in California.

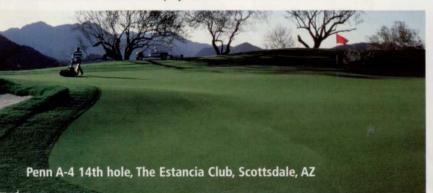
There, we found a source for rootzone sand that closely matched our own, and the long, wide rolls minimized seams. We re-opened 5 weeks after sodding, and dense, fibrous roots reached 10-12" in a matter of months."

> Kevin Ross, CGCS, Supt. CC of the Rockies, Edwards, CO

"Quality of the Penn A-4 putting surfaces at The Estancia Club is beyond comparison. Ball roll and the pace of the greens are excellent. I would not hesitate using Penn A-4 again."

> Carl Rygg, CGCS, Supt. The Estancia Club, Scottsdale, AZ

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"Penn A-4 Greens do not cost more. While they do need more topdressing and aerification, they require significantly less water, fertilizer, and pesticides."

> Ted Hunker, Supt. Tartan Fields GC, Dublin, OH

"We've overseeded Penn G-6 into our Poa/bentgrass greens after aerifying a total of five times. We fill the holes within 1/4 to 1/8" with sand, seed with one lb. per 1,000 sq. ft., then topdress. When the Poa stresses under heat pressure, Penn G-6 will re-populate that area."

> John Lof, Supt. Michelbook CC, McMinnville, OR

"Penn A-4 greens do not mean more work, more trouble, and do not cost more money to maintain. In fact, just the opposite may be true. We have found that they require fewer cultural practices such as vertical mowing and brushing.

In two years of managing Penn A-4, we have not observed any brown patch or dollar spot, and greens require limited amounts of fertilizer."

> Kurt Thuemmel, CGCS, Supt. Walnut Hills CC, East Lansing, MI

"I overseed our 18 old greens with 1/4 lb. per 1,000 sq. ft. of Penn A-4 each time we aerify. Now, with single cut and roll, our green speeds are consistently fast at 12 to 12-1/2'. Where ball marks tend to tear older bents, they just make dents in Penn A-4."

> Pat Franklin, Supt. Plum Creek CC, Fishers, IN

"We resodded high stress areas in our PennLinks fairways with Seaside II, and are very pleased with its performance. I selected Seaside II with improved dollar spot disease resistance and salt tolerance to address two major turf challenges; the coastal influence and potential sodium buildup from irrigation.

We find Seaside II a strong ally to our PennLinks fairways, and in the future, will slit seed with Seaside II where needed to enhance turf quality."

> David Major, CGCS, Supt. Del Mar CC, Rancho Santa Fe, CA

"We have 36 putting greens and 4 practice greens that have been converted from Toronto C-15 to Penn A-4 Creeping bentgrass.

When the greens were placed in play the spring after conversion, comments from our golfing membership were very positive even though turf maturity had not been reached. Putting trueness and turf appearance were among the positive remarks most often mentioned. Now that the putting surfaces have additional development, comments are the greens are superior to anything they've played."

> Bill Byers, CGCS, Supt. Des Moines G & CC, West Des Moines, IA

"Comments from golfers have been extremely positive (Penn G-2)."

Jeff Hill, CGCS, Supt. Pinehurst Resort and CC, No. 8, Pinehurst, NC

Penn A-1
Penn A-2
Penn A-4
Penn G-1
Penn G-2
Penn G-6
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