

"I treat my employees like they're my kids. We're a family and we trust each other,"

— Diane Lease

Though Lease Landscaping today owns a nice lineup of equipment, it wasn't always that way. Eight years ago, Lease had just left her job as a nurse, and her husband was a sheriff's deputy for Itasca County.

"We got started part-time in landscaping because my husband loved machinery," said Lease.

But work at the sheriff's office was busy, and Diane soon took over the business. It quickly became a full-time passion.

"It was a big learning experience," Lease said. "We started

small, with just a skid steer and a little dump truck, spreading dirt and planting flowers. Fortunately, I hired great employees who brought their knowledge of the industry with them."

The ability to work quickly and efficiently helped her institute a policy she believes all landscape professionals should follow.

"We always start a job and then finish it; we don't jump from job to job to job, leaving the customer unsure of when we'll be back," she explained.

In addition, Lease said, her

business continues to excel because she has loyal employees.

Built on trust

"I treat my employees like they're my kids. We're a family and we trust each other," she said.

"It's important to have the ability to go and be with your family when you need to; we don't have a time schedule. If employees have a baseball game to go to with their children, they leave early, with no questions asked."

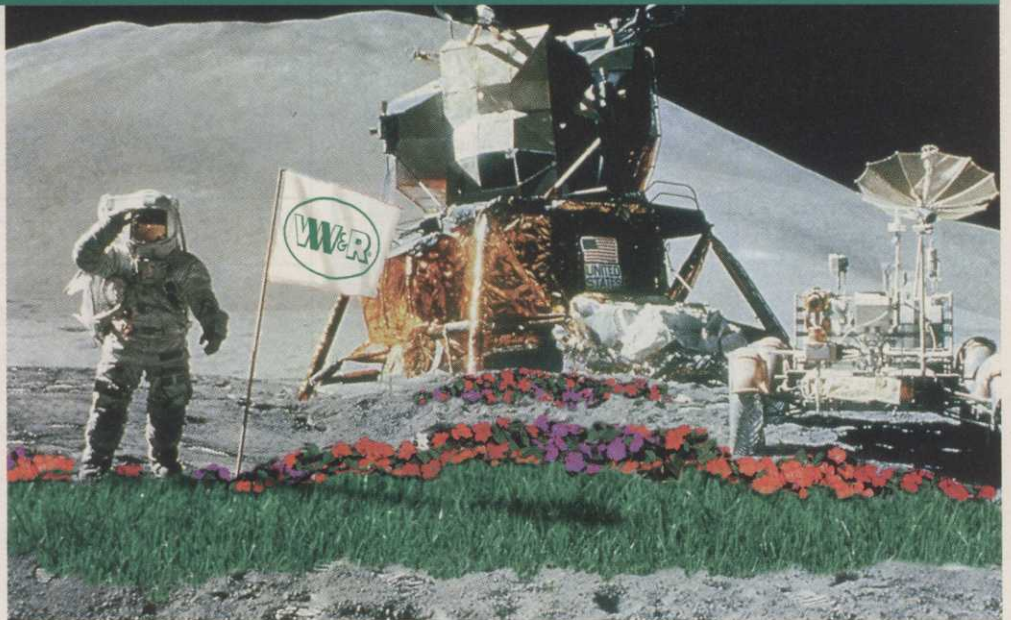
Though Lease said she could continue to grow her business, it may have reached the perfect size.

"I think we might be big enough," she said. "If we get much bigger, I'm worried we could lose some of our personal touch. I think we've reached the right size with the right equipment where we can continue to be great on every job."

— The author is an account executive with Carmichael Lynch Spong, Minneapolis, MN, and can be reached at 612/375-8529.

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Circle 122

The tractor factor

BY CURT HARLER / CONTRIBUTING EDITOR

When Cherokee Plantation head greenskeeper Chris Johnson goes shopping for a tractor, his first priority is matching the unit to the kinds of jobs it will do.

"Will you use it for the PTO, as a forklift, because you need a front bucket?" he asks. "Do you need 4-wheel drive? What kind of tires?" One constant, however, is a diesel engine.

Cherokee Plantation, Yemassee, SC, is a new Donald Steele-designed golf course started in August 1998. Growth occurred the following June, and play began in September 1999.

"I look at the jobs that require a tractor and then try to find as universal a tractor as I can," Johnson says. Currently, they have one large 45-hp tractor and two smaller units in the 30- to 33-hp range that are used daily to pull mowers and perform other typical jobs. He draws a distinction between jobs for tractors and those for carts, tractors being able to do heavy-duty work like hauling dirt or moving sod.

He is particular about tires. Since one tractor was purchased when the course was

under construction, it has off-road tires. But those will be replaced with turf tires to minimize the impact of sharp turns.

Cherokee Plantation uses New Holland equipment. Johnson likes 4-wheel drive and New Holland's Super-Steer feature which allows a zero-radius turn...just as long as the operator is careful not to tear the turf.

AMATEX, INC.

888/988-4453

The Hurlimann 435 Prince with loader is powered by a 35-hp 4-cylinder engine. It comes with 12 forward/12 reverse shuttle-shift transmission and standard 4WD. Marketed in



North America by Amatex, Milwaukee, WI, it is part of a full line of tractors in the 25- to 190-hp range. Also available in the Prince series are the 35-hp 435 and the 45-hp 445. All have 540/1000 rpm PTOs.



7360SS Cub Cadet

What to look for when buying

- ▶ Match tractor size/configuration to the jobs you need it to do
- ▶ Consider four-wheel drive, zero-turn, PTO requirements
- ▶ Tractors are used best to handle heavy-duty work
- ▶ Make sure tires are suited to the types of landscape work you'll do

Im reports

The Eicher 364 from Belarus ▶

BELARUS
414/355-2000

The Eicher 364 is a 39-hp utility tractor with dual-stage clutch to provide live PTO, power steering, a fuel-efficient engine, differential lock and ROPS. Manufactured in India and marketed from Milwaukee, WI, by Belarus Machinery, it has an air-cooled diesel engine, 3-pt. hitch with draft/position control and a lift capacity of 2,213 lbs. Unit has disk brakes.



JOHN DEERE
800/537-8233

www.deere.com

The John Deere 790 compact utility tractor is designed for people on tight budgets. It can handle a variety of projects like

mowing, loader/backhoe, post hole digging or snow removal. It has 30 gross engine hp and 25-hp PTO. It comes in either a 2WD or 4WD version, with power steering and dual-stage dry clutch standard on the 4WD.

Both have a selectable system for rear and mid PTOs, which can be used alone or simultaneously. Sliding gear transmission has eight forward and two reverse speeds.



include three transmission choices. The 4610 is the newest of the series. Pick a fully synchronized main and shuttle transmission for economy and reliability; glide shift transmission gives clutchless shift on-the-go operation; and the Feather-Step hydrostatic transmission reduces amount of foot pressure needed to depress pedals and cuts shock when making sudden stops or direction changes. All units are powered by the Kubota E-TVSC diesel.

MTD PRODUCTS
330/225-2600

www.cubcadet.com

The 7360SS Cub Cadet compact tractor from MTD, Cleveland, OH, is the top of the 7000 line. It features a 36-hp, 4-cylinder, liquid cooled diesel engine; fully-synchronized shuttle shift with two speed ranges, differential lock and 4WD; hydraulically actuated PTO clutch; and hydrostatic power steering. Adjustable high-back seat, back-lit dash panel, and 3-position tilt steering wheel assure operator comfort. Optional back hoe, loader and rear mower are available.

Continued on page 54

KUBOTA TRACTOR
888/458-2682

www.kubota.com

The Grand-L Ten line from Kubota Tractor, Torrance, CA, has been upgraded to



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Im reports

Snapper Turf Cruisers ▶



NEW HOLLAND

717/355-1121

www.newholland.com

Three new models — the 18.5-hp TC18, 21-hp TC21 and the deluxe 21-hp TC21D — mean there now are nine models in the Boomer line from New Holland, New Holland, PA. Units range from 18.5 to 33 hp. The TC18 has a two-range gearbox, while the TC21 has three range — better for operators who tend to run long hours in a single



gear. For infinitely variable speed without clutch or shift lever, a hydrostatic transmission is available. Units have a 540-rpm rear PTO and a live 2000-rpm mid-PTO on models with hydrostatic transmission.

SNAPPER

888/SNAPPER

www.snapper.com

The Turf Cruiser from Snapper, McDonough, GA, gives landscapers the choice between gas or diesel engines — a 23-hp OHV liquid-cooled 3-cylinder Kubota or a 21-hp liquid cooled diesel Kubota. Both have electric ignition. Single-lever joystick controls two Eaton hydrostatic transmissions with integrated gear reduction. Chevron-style drive tires provide maximum traction and stability. Attachments are simple with Qwik-O-Nect system.

TORO CO.

800/525-0059

www.toro.com

The Z Master Z350 series from Toro, Bloomington, MN, is based on a tractor powered by either a 20-hp or 25-hp Kohler Command Pro air-cooled engine with electronic key ignition. From there, its Quick-Mount hitch system converts it into a mower with decks from 44 inches to 98 inches; a dozer with 54-in. blade; a two-stage 36-in. snowthrower; a debris blower; or a 47-in. rotary broom. A simple connection allows implements to slide onto the hitch and easily lock in place.

YAZOO/KEES

800/723-9496

www.yazookees.com

The Power King 1600 Series from Yazoo/Kees, Jackson, MS, are shaft-driven, heavy-duty garden tractors. Both are powered by a 22-hp Kohler Command V-twin engine with hydrostatic transmission. The UT622HV includes foot-control tranny, front hydraulic ports and a front PTO to drive snow blower, broom or mower deck. Both have 1-year commercial warranty.

LONG AGRIBUSINESS

252/823-4151

www.longagri.com

The LandTrac 280 and 360 from Long Agribusiness, Tarboro, NC, are both powered by Mitsubishi Indirect Injection diesel engines and have electro-hydraulic PTO clutch operated by a switch on the dash. The 280 is a 28-hp, 91.5-cubic inch unit with 27-hp PTO; the 360 has 36 hp, 107.3 cubes, and develops 33 PTO hp. Both transmissions have 12 forward and six reverses, and a fully synchronized four-speed main gear shift

ask the expert

BY BALAKRISHNA RAO

Mysterious oak blight

What is the blight disease on oak trees in northern California caused by and how do you manage it?

— CA/OH

I've heard about a serious problem concerning oaks in California, but no one knows much about it yet. It's referred to as "sudden oak death syndrome," and it has killed thousands of central California coastal oak trees over the past five years. A University of California scientist reported that the causal agent is a fungus called *Phytophthora* sp., closely related to the one that caused the Irish Potato Famine.

Reportedly, this fungus attacks the bark of tan oak, black oak and coast live oak. Researchers at UC-Davis feel the fungus is a threat to healthy oak trees from Santa Barbara to southern Oregon. Over the last five years, it has killed trees from Big Sur to Napa, Sonoma and Solana Counties. Santa Cruz and Marin have also been hit hard.

This fungus is a water mold that produces microscopic, two-tailed swimming spores called zoospores. These spores can migrate in water but its mode of spread is not understood yet. It's reportedly related to the modern death of Portox ford cedar trees in northern California and southern Oregon, eucalyptus forests in Australia and oak forests in Mexico, Spain and Portugal.

Researchers from the University of California at Berkeley say the first sign of this fungal attack is seeping or bleeding cankers. The disease dissolves the bark and enters the wood. Later, bark beetles bore into the tree, sometimes killing it within a month.

Researchers and extension specialists are asking the public to help reduce the spread

of the disease by not using infected trees from the problem area for firewood. Instead, they should contact the cooperative extension office so the infected plants can be properly disposed. People are also being asked to clean vehicle tires and shoes that have come in contact with the area.

Drought or beetle damage?

We experienced severe drought conditions in 1999 and saw many dead or dying plants as a result of the drought or, in some cases, bark beetles. How can you figure out whether damage has been caused by bark beetles or drought?

— NY

Most problems caused by boring insects occur during the year of a drought and the following year. During these periods, monitor the drought sensitive or already affected plants. Look for sawdust or sap.

All bark beetles are in the Scolytidae family. True bark or engraver beetles feed between bark and hardwood (cambium region), and ambrosia or timber beetles bore into the heartwood. The latter feed on fungi which grow in the galleries created by ambrosia beetles.

Adult true bark beetles tend to attack stressed trees. Smaller elm bark beetles and native elm bark beetles can transmit Dutch elm disease. Other beetles can attack weakened trees and may degrade timber value.

Adult bark beetles are about 2- to 8-mm long, reddish-brown to black, and shiny. The head of most species is bent downward. They make tiny holes in the bark to enter and make galleries. Sawdust or sap flow on the trunk or branch is a good indication of

beetle infestation. Drought-affected plants have early fall coloration, discolored leaves, and wilting, and turn green to yellow to brown and defoliate prematurely. Depending upon the extent of drought, plants produce dieback and, in some cases, die.

Female beetles make galleries in the cambium layer and lay eggs. Larvae hatch and chew outward at right angles to the parent gallery.

Reports show that during drought stress years, plants such as pine, spruce, elm, basswood, ash, redbud, serviceberry, dogwood, cherry, purple sandcherry, crabapple, hickory, willow, arborvitae, and chamaecyparis are susceptible to bark beetle attack. Affected plants show wilting and severe foliar discoloration. There are small holes (1 to 8 mm) in branches or the stem's bark. Galleries appear under the bark with small "C"-shaped legless larvae with tan heads. Stressed trees show these symptoms sooner than healthier plants.

The best way to manage a bark beetle attack is to keep plants healthy with proper cultural practices. This includes mulching, watering, fertilizing and pest management. Periodically, scout for bark beetles in drought-stressed trees. Infested trees should be promptly removed, and remaining healthy trees should be protected through insecticide treatment options. An insecticide application should help manage the problem. Depending upon the kind of bark beetle, the number and timing of treatments may vary.



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

SEND YOUR QUESTIONS TO: "Ask the Expert" Landscape Management; 7500 Old Oak Blvd.; Cleveland, OH 44130, or email: sgibson@advanstar.com. Please allow two to three months for an answer to appear.

products

TECH CENTER



More cutting power

Echo's CS-3400 chain saw is a top-handle unit with a 33.4 cc, double-ring piston engine and plenty of horsepower and torque. Equipped with a standard 14-in. bar, it's also easy to handle at only 7.6 lbs.

For more information contact Echo at 847/540-8400 or www.echo-usa.com or circle no. 250.

Productive collection

A new commercial vacuum from BlueBird International makes mid-mount zero-turn radius (ZTR) mowers more productive as operators can use a dump from seat mechanism. The V190Z's 90-gal. capacity container has a sight window to allow the operator to view the level of debris. A 7-in. inlet with deflector reduces clogging. Its custom hitch, custom boot and front weights are compatible with most ZTR mowers.

For more information contact BlueBird at 303/288-5880 or www.bluebirdintl.com or circle no. 251.

Overseed with ease

Turfco's new lawn overseeder covers a 20-in. swath and allows an experienced operator to overseed up to 30,000 sq. ft. an hour. Its 1.5-in. blade spacing works with all types of grass seed, and its micro-screw depth adjustment permits accurate

setting of cutter blades from 1.5 in. above ground to 1.5 in. deep. Powered by a 5.5-hp Honda engine, the overseeder also has 10-in. pneumatic tires for easy operation over rough terrain. Its low center of gravity makes it operable on sidehill surfaces, too.

For more information contact Turfco at 800/679-8201 or www.turfco.com or circle no. 252.

Generating power

John Deere's G5500KE generator features an 11-hp electric start engine with recoil backup,



spin-on oil filters and full pressure lubrication. A fuel capacity of 8 gallons means that users can rely on up to 13.5 hours run time at half load. The sound level at full load is 72 dba at 50 feet. The Kawasaki-powered OHV engine delivers 5,000 watts and has automatic idle control.

For more information contact John Deere at 800/537-8233 or www.deere.com or circle no. 253.

Rockin' water features

Castart's Ventana Granite rock and water features consist of several building block components that can be mixed and matched to create variations of designs and sizes for rock water-



falls or other retaining wall projects. Most features can be installed in less than a day.

For more information contact Castart at 800/871-8838 or www.castartinc.com or circle no. 254.

Swift snow removal

Hiniker Company's new C-Plow combines conventional plowing and backdrag plowing systems. It's operated as a conventional plow in the forward plowing mode, with the normal hydraulic angling and spring-trip moldboard functions. For backdragging, the upper 3/4 of the moldboard is hydraulically folded over, creating a rear facing backdrag blade. A second cutting edge fastened to the top of the moldboard becomes the contact point with the ground surface. The C-Plow is 8 ft. wide and fits most domestic 3/4- and 1-ton 4WD trucks.

For more information contact Hiniker at 507/871-8838 or www.hiniker.com or circle no. 255.

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- 04 285 Irrigation Contractors & Consultants
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- 05 290 Sports Complexes
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- Other Grounds Care Facilities (specify) _____

SUPPLIERS AND CONSULTANTS

- 08 355 Extension Agents/Consultants for Horticulture
- 09 360 Sod Growers, Turf Seed Growers & Nurseries
- 10 365 Dealers, Distributors, Formulators & Brokers
- 11 370 Manufacturers
- Other (please specify) _____

2. Which of the following best describes your title? (fill in ONE only)

- 12 10 **Executive/Administrator** - President, Owner, Partner, Director, General Manager, Chairman of the Board, Purchasing Agent, Director of Physical Plant
- 13 20 **Manager/Superintendent** - Arborist, Architect, Landscape/Grounds Manager, Superintendent, Foreman, Supervisor
- 14 30 **Government Official** - Government Commissioner, Agent, Other Government Official
- 15 40 **Specialist** - Forester, Consultant, Agronomist, Pilot, Instructor, Researcher, Horticulturist, Certified Specialist
- 16 50 **Other Titled and Non-Titled Personnel** (please specify) _____

3. SERVICES PERFORMED (fill in ALL that apply)

- 17 A Mowing
- 18 B Turf Insect Control
- 19 C Tree Care
- 20 D Turf Aeration
- 21 E Irrigation Services
- 22 F Turf Fertilization
- 23 G Turf Disease Control
- 24 H Ornamental Care
- 25 I Landscape Design
- 26 J Turf Weed Control
- 27 K Paving, Deck & Patio Installation
- 28 L Pond/Lake Care
- 29 M Landscape Installation
- 30 N Snow Removal
- 31 O Other (please specify) _____

4a. Do you specify, purchase or influence the selection of landscape products?

58 Yes 59 No

4b. If yes, indicate which products you buy or specify: (fill in ALL that apply)

- 32 1 Aerators
- 33 2 Blowers
- 34 3 Chain Saws
- 35 4 Chipper-Shredders
- 36 5 De-icers
- 37 6 Fertilizers
- 38 7 Fungicides
- 39 8 Herbicides
- 40 9 Insecticides
- 41 10 Line Trimmers
- 42 11 Mowers
- 43 12 Snow Removal Equipment
- 44 13 Sprayers
- 45 14 Spreaders
- 46 15 Sweepers
- 47 16 Tractors
- 48 17 Truck Trailers/Attachments
- 49 18 Trucks
- 50 19 Turfseed
- 51 20 Utility Vehicles

5. Do you have internet access? 52 A Yes 53 B No

5A. If so, how often do you use it?

54 A Daily 55 B Weekly 56 C Monthly 57 D Occasionally

101	113	125	137	149	161	173	185	197	209	221	233	245	257	269	281	293	305
102	114	126	138	150	162	174	186	198	210	222	234	246	258	270	282	294	306
103	115	127	139	151	163	175	187	199	211	223	235	247	259	271	283	295	307
104	116	128	140	152	164	176	188	200	212	224	236	248	260	272	284	296	308
105	117	129	141	153	165	177	189	201	213	225	237	249	261	273	285	297	309
106	118	130	142	154	166	178	190	202	214	226	238	250	262	274	286	298	310
107	119	131	143	155	167	179	191	203	215	227	239	251	263	275	287	299	311
108	120	132	144	156	168	180	192	204	216	228	240	252	264	276	288	300	312
109	121	133	145	157	169	181	193	205	217	229	241	253	265	277	289	301	313
110	122	134	146	158	170	182	194	206	218	230	242	254	266	278	290	302	314
111	123	135	147	159	171	183	195	207	219	231	243	255	267	279	291	303	315
112	124	136	148	160	172	184	196	208	220	232	244	256	268	280	292	304	316

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106	118	130	142	154	166	178	190	202	214	226	238	250	262	274	286	298	310
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108	120	132	144	156	168	180	192	204	216	228	240	252	264	276	288	300	312
109	121	133	145	157	169	181	193	205	217	229	241	253	265	277	289	301	313
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products

Dandy dozer

New Holland's new 140-hp DC150 and 180-hp DC180 dozers are smooth running and easy to operate. The engine is matched to a torque converter and powershift transmission featuring automatic kick-down and automatic shifting to speed the loading and return cycles. The automatic transmission also speeds production



cycles by automatically shifting from forward to 2nd reverse when reverse is selected. Fingertip steering and transmission controls require little operator effort. Wide-opening service panels, diagnostic test-port panel and other features reduce maintenance time.

For more information contact New Holland at www.newholland.com or circle no. 256.

Suspension options

Ferris Industries' new line of mid-mount Z's, the 1000 Z (48- or 52-in.), the IS 3000 Z (61-in.) and the IS 4000 Z (61- or 72-in.), come with two suspension options: four-wheel independent suspension on the IS 4000 Z, and two-wheel independent suspension on the IS 3000 Z.

The front wheels on the IS 4000 Z move independently due to two suspension arms attached to each wheel, which results in increased comfort, speed, stability and mower life.

For more information contact Ferris at 800/933-6175 or www.ferrisindustries.com or circle no. 257.



Chip and rip

Vermeer's TG525 tub grinder is powered by a 525-hp CAT 3406E electronic fuel-injected engine and equipped with a triple-disc, non-pilot bearing 18-in. clutch. Standard features include a 27-ft. loader offering a choice of grapples with openings up to 84-in., a 370-degree rotating cab and 3,000 lbs. of working payload. An optional knife screen can grind materials like palm fronds, stumps and wet leaves. Carbide-tipped HammerTooth teeth rip apart heavy logs, snag lightweight material and reduce bridging.

For more information contact Vermeer at 888/837-6337 or circle no. 258.

Vroom vroom

Tecumseh Products' twin-cylinder engine, Enduro VT, is 42 cu. in. and available in 18, 20 and 22 hp. It features a 90-degree V-twin design with a fully pressurized lubrication system including a spin-on oil filter. Adjustment free dual carburetors assure smooth running. An optimized air intake system and high efficiency fan produce low operating temperatures for reduced engine wear. Harmful contaminants are kept out by a foam pre-filter and a paper element with 500 sq. in. of usable filter surface area.

For more information contact Tecumseh at 414/377-2700 or circle no. 259.



Residential controller

With preset options for quick and simple programming of common watering schedules, Rain Bird's new Ec controller includes a schedule specifically for the establishment of new residential lawns. Available in 4-, 6- and 9-station models, the controller installs quickly and provides programmability under battery power, allowing setup months prior to AC hookup on job site. Other features include a test program, global water budget for seasonal adjustments, repeating day cycles, full-year calendar, battery-powered 24-hour backup and default program in case a power outage outlasts memory protection.

For more information call 626/963-9311 or circle no. 260.



Fine trimmin'

With a pivoting head, Ariens' 6-hp string trimmer can get at places that a walk-behind mower can't. A trimmer with a 5-hp Tecumseh Centura engine is also available. Both trimmers come standard with .155 diameter trimmer line.

For more information contact Ariens at 800/678-5443 or www.ariens.com or circle no. 261.

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