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scares look old. Shearing results because few species are truly dwarf enough. The best option may be to replace outdated and overgrown evergreens.

Over-sheared evergreen shrubs can be one of the worst offenders, making landscapes look old. Shearing results because few species are truly dwarf enough. The best option may be to replace outdated and overgrown evergreens. The idea that evergreen shrubs provide winter interest is a myth — the junipers turn a drab olive green and the yews turn a dark, almost black-green in winter. These unsightly evergreens add little value to a winter landscape.

One way to add genuine winter interest is with deciduous shrubs that have persistent berries, such as Sprite winterberry or compact highbush cranberry. Another idea is to use plants with colored branches, such as the redtwig dogwood cultivars or the bright green Japanese kerria (Kerria japonica).

Grasses do it all

With the advent of available ornamental grasses, we don't need evergreen shrubs for winter interest. Ornamental grasses...
PARAGON is a new release that has just now been entered into the new 1999 National Perennial Ryegrass Trial. Pre-N.T.E.R. testing at various Universities across the U.S. has already shown PARAGON to be a contender for the title of one of the best new varieties to come along in years!

PARAGON has one of the darkest -- green leaf colors of any Perennial Ryegrass available in the market today. In the University of Florida's 1998-99 Overseeding trials, they found “Overseeded grasses on the putting green that had the darkest green foliage, which averaged 8.5, included Brightstar II and PARAGON.” Pretty impressive when you consider the scale only goes to 9!

PARAGON is also setting new standards for fine leaf texture and disease resistance. This new variety will produce a very dense turf that can be mowed as short as .19” for putting greens or at 1/2 inch in Fairways. Its high level of beneficial endophytes adds resistance to many turf pests.

Be sure and specify this new PARAGON of turfgrass performance for all your Perennial Ryegrass needs.

TURF COLOR
in overseed grasses grown on a ‘Tifdwarf’ bermudagrass putting green and on a ‘Tifway’ bermudagrass fairway during 1997 - 98 at Gainesville, FL.

<table>
<thead>
<tr>
<th>Turfgrass</th>
<th>Putting green Color</th>
<th>Fairway Color</th>
</tr>
</thead>
<tbody>
<tr>
<td>Paragon</td>
<td>4.43</td>
<td>4.89 ab</td>
</tr>
<tr>
<td>Catalina</td>
<td>4.10</td>
<td>4.93</td>
</tr>
<tr>
<td>Roadrunner II</td>
<td>4.10</td>
<td>4.70</td>
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<tr>
<td>Premier II</td>
<td>4.07</td>
<td>4.93</td>
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<tr>
<td>Cathedral II</td>
<td>4.07</td>
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<td>PR Blend 1</td>
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<td>Charger II</td>
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<td>Vivid</td>
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<td>4.77</td>
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<tr>
<td>Ice</td>
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<td>4.66</td>
</tr>
<tr>
<td>Divine</td>
<td>3.87</td>
<td>4.62</td>
</tr>
<tr>
<td>Gator II</td>
<td>3.87</td>
<td>4.36</td>
</tr>
<tr>
<td>Palmer II</td>
<td>3.87</td>
<td>4.73</td>
</tr>
</tbody>
</table>

COLLEGE OF THE DESERT
OVERSEED TURFGRASS TRIALS - 1997 - 1998 SEASON - Palm Desert, CA.

<table>
<thead>
<tr>
<th>ENTRY</th>
<th>MEAN</th>
</tr>
</thead>
<tbody>
<tr>
<td>PARAGON P.R.</td>
<td>6.48</td>
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<tr>
<td>ROADRUNNER P.R.</td>
<td>6.27</td>
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<tr>
<td>CATALINA P.R.</td>
<td>6.13</td>
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<tr>
<td>SEVILLE P.R.</td>
<td>6.00</td>
</tr>
<tr>
<td>BRIGHT STAR P.R.</td>
<td>5.97</td>
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<tr>
<td>ACADEMY P.R.</td>
<td>5.94</td>
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<tr>
<td>VIVID P.R.</td>
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<td>PAGENT P.R.</td>
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<tr>
<td>CITATION III P.R.</td>
<td>5.75</td>
</tr>
</tbody>
</table>

Score 1-10. 1=dead, 5=moderate, 10=most dense.

Seasonal average

GENETIC COLOR
of overseed grasses during transition at Gainesville, FL.

<table>
<thead>
<tr>
<th>Turfgrass</th>
<th>Color</th>
</tr>
</thead>
<tbody>
<tr>
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<tr>
<td>PARAGON</td>
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<td>Citation III</td>
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<td>Catalina</td>
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<tr>
<td>Gator II</td>
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<td>Charger II</td>
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<td>Buccaneer II</td>
<td>8.16</td>
</tr>
<tr>
<td>Navajo</td>
<td>8.16</td>
</tr>
<tr>
<td>Vibrant</td>
<td>8.13</td>
</tr>
</tbody>
</table>

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Pedestrian visibility: Plants around 4 ft.  

Shrub species
- Black chokeberry (Aronia melanocarpa)
- Alpine currant (Ribes alpinum)
- Peking cotoneaster (Cotoneaster acutifolia)
- Japanese kerria (Kerria japonica)

New dwarf shrub cultivars
- Sprite winterberry ('Sprite', I. verticillata 'Jim Dandy')
- Kelsey dwarf redtwig dogwood (Cornus sericea 'Kelseyi')
- Anthony waterer spirea (Spirea x bumalda 'Anthony Waterer')

Ornamental grasses
- Northern sea oats (Chasmanthium latifolium)
- Switch grass (Panicum virgatum)
- Fountain grass (Pennisetum alopecuroides)
- Little bluestem (Andropogon scoparius)

Massing for horizontal lines or automobile visibility: Plants around 2 ft. tall

New dwarf shrub cultivars
- Gro-Low sumac (Rhus aromatica 'Gro-Low')
- Bronx forsythia (Forsythia viridissima 'Bronxensis')
- Dwarf alpine currant (Ribes alpinum 'Green Mound')

Ornamental grasses
- Dwarf fountain grass (Pennisetum alopecuroides 'Hameln')
- Prairie dropseed (Sporobolus heterolepis)

Most reliable perennials
- Happy returns and Stella d’Oro daylily (Hemerocallis ‘Happy Returns’ or H. ‘Stella d’Oro’)
- Siberian iris (Iris sibirica ‘Caesar’s Brother’)
- Autumn joy sedum (Sedum ‘Autumn Joy’)

Sometimes even a new planting is just wrong. These globe arborvitae will never grow together to form a contiguous flowing line and will never look right with this modern building. A planting of Gro-Low sumac would soften the angles and be an attractive complement to this building.

Cont. from page 62

...might be the single best way to update a property, but a token cluster or two around a sign may not be enough. Use them in place of traditional foundation plantings or in large, low beds around signs and entrances. The broad expanses and long lines of ornamental grasses at property or parking lot perimeters are the key to a truly contemporary look. They are very hardy, salt tolerant and best left standing so the golden tan leaves and silvery seed heads can provide winter interest.

There are grasses in a complete range of heights for sunny areas, from the diminutive 15-in. tall prairie dropseed to the many six-foot tall maidengrass species such as porcupine grass (Miscanthus sinensis ‘Strictus’), variegated maiden grass (M. sinensis ‘Variegatus’) or Silver Feather maiden grass (M. sinensis ‘Silberfeder’). Natives standing about five ft. tall include Indian grass (Sorghastrum nutans) and switchgrass (Panicum virgatum). Some good cultivars of switchgrass have recently become available, such as Heavy Metal (P. virgatum ‘Heavy Metal’) and red switchgrass (P. virgatum ‘Rotstrahlbusch’). Fountain grass (Pennisetum alopecuroides) grows to around three feet, while dwarf fountain grass (Pennisetum alopecuroides ‘Hameln’) stays around two ft. tall. Few grasses tolerate much shade, but northern sea oats (Chasmanthium latifolium) is the best, growing to around three ft. tall with drooping seed heads.

Get back the investment

Updating a property’s appearance is an investment that enhances the building’s modern look and increases the value of the entire property. Work with a designer trained in using contemporary plant materials. As the millennium approaches, a contemporary looking landscape to update corporate properties becomes increasingly important.

The author’s firm, PlannedScapes, specializes in landscape renovation of corporate and housing properties and provides freelance design for landscape contractors and maintenance firms in the western suburbs of Chicago, IL. She can be reached at 630/393-4598.

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Snow & Ice Removal Guide

Top snow removal contractors tell why they prefer to let others push with their own equipment

By TERRY McIVER

Gary Amato’s Burrington Co. is a leading asphalt paving company in Kirkland, OH, east of Cleveland. The 18-year-old company runs 15 trucks for snow removal.

Advantages to using subcontractors, says Amato, include their personal accountability for equipment and stronger motivation to produce.

"The guys tend to take care of their own trucks a little better than they would take care of mine, so they run a little better, are a little more reliable—not to mention the fact that if they are the ones with the expenses, they are more willing to work. They’ve got an investment they have to pay for and maintain, rather than come in for $10 to $12 an hour," Amato says.

Each year Amato must recruit up to three new drivers due to attrition. Qualifying a driver is tough. Amato meets with a prospective subcontractor with the hopes of making an accurate character judgment. Referrals help eliminate the doubt from his mind, and prospects must sign a non-compete agreement. Amato claims paying higher than average wages helps too. He pays by the month.

It’s about the money

"I pay them more than they can get anywhere else," asserts Amato. "That’s the only way to keep the most reliable and most efficient ones. Not only that, they can’t have daytime jobs. Much of the time we’ll start at midnight, by the time we’ve gotten through the entire route, it’s six in the morning. If it’s still snowing, we have to let the cars come in and park, and then hit the aisles. Then we hit them again before lunch, and again before the place empties out. And, we’ll have to come back and do them all up again."

Amato’s accounts are located close to each other, in corporate industrial parks. Many consist of a series of manageable lots connected by a main road. Contracts are for the season or per occurrence at or above two inches.

Subs can reduce costs

Nairs Lawn Care Inc., Medina, OH, began in the landscaping business in 1984, and snow removal has always been one of its service offerings. Jody Gibson, with the company since 1985, is in charge of the snow division.

Gibson finds subs by word of mouth or, after someone applies to push for Nairs, he’ll do a background check, primarily by checking with the applicant’s current or last employer.

"The most important thing for me is to look at their truck," Jody says. The company pays more to drivers with the best equipment. "If all they have is an older truck with an older plow, they won’t make as much as the guy with a brand new truck with wings and a cell phone."

Gibson admits the disadvantages to using subs who are laid off from other jobs is they must leave if they get called back to work.

During a storm, Nairs will have 25 men pushing snow, which combines subs with in-house help. Some of the larger customers want to see a company vehicle on site.

September 1999 www.landscapegroup.com
Nairs picks up its snow business from business accounts, with very few residential pushes. "If anything, I put residential accounts on a flat fee for the year. It's usually a two- or three-minute plowing, and we won't get burned on a set fee. We'll also shovel the sidewalk from the driveway to the front porch."

These few residential accounts are also serviced by Nairs' lawn care division. Customers pay a flat fee per month for all services. "That way, they don't have to worry about how many times we cut or plow," Jody explains.

Mistakes in technique
Technique and safety is everything when pushing snow. Not only must you be aware of pedestrians and other vehicles, you have to move the white stuff to a place where it is no longer a nuisance to traffic. You don't just move it; you move it out of the way.

A common mistake Gibson sees in the field is when drivers push snow up to curbs, but not over the curb. "After about five or six snowfalls, you have snow hanging out into the parking lot. If parking is tight, it makes it tough for vehicles to get around."

Extra effort by drivers is another important trait. "Lots of guys don't like to get out of their truck to clean a walk or around a gas station pump. They get spoiled sitting in the truck."

Elements to success
Gibson says the best snow removal experts: have a plan in effect before the snow hits and have good people and have good equipment ready to roll.

To work the plan, understand the possibility that the phone may ring that night, and the plan must go into effect at once. You must be committed.

"Because you never know where or when it's going to hit, you must make sure your people are aware of the possibility of having to come in; stress that as much as possible. Have them ready, especially on a Friday or Saturday night," says Gibson.

"I tell them to make sure they're available at 2:30 in the morning," says Gibson, "and that they make sure their pagers are turned on."

Additionally, Jody has established a set route for each driver to eliminate confusion and questions.

Subs for success
Alan Steiman is a straight-talking pro who battles the snow and ice from his offices in Northboro, MA. His snow business is run entirely with subcontractor services.

"I'm a strong believer in subcontractors; I don't recommend anything else," advises Steiman, who uses a minimum of 50 subs during a season. "I have 15 or 20 of my own personnel managing the subcontractors. They (subcontractors) are the ones that are carrying all the burden."

"If their engine goes, their rear-end goes, their transmission goes—call the next guy, and hope the other one comes back."

He qualifies prospective subs by "running them through the mill," to see how flexible they are to last-minute changes.

"If a guy calls wanting to plow for me, I say, 'Okay, meet me on Tuesday at 4:20 p.m.' He shows up and I say, 'I can't meet with you now, come back Sunday at 7 a.m.' If he shows on Sunday, I know he wants to work, and is flexible. Right away you weed out the bad from the good operators."

He also seeks referrals when looking for a sub, whether it be from an existing sub, or a friend or relative.

Pay them well
Steiman tries to pay his subs an unbeatable wage. "We try to pay them more than anybody else, by about $5 per hour, so that we get them before somebody else. In return, we try to charge our customers slightly more than everybody else. Our reputation, he says, "is that we're very good, but we're a little expensive. I think that's a good reputation to have."

"If you can get all of your old customers signed up for the new season, you're in a much better position than if you wait till Halloween to wonder who you need, and what you're supposed to do. If a big call comes in, you're already set, and it's easy to decide if that new account is something you can handle."

If you think you need to raise your prices, says Steiman, early prospecting gives a snow professional a chance to replace those who won't accept the price hike.

"It's about peace of mind," says Steiman. "Snowplowing is a very stressful business to be in. The more you can do now to reduce your stress later is a good strategy. It's also a lot nicer to be working on equipment in July rather than November."

Can you say backorder?
Early planning also lets a snow specialist review equipment needs, and get guaranteed delivery before equipment stocks are gone.

"There is an expensive piece of equipment I believe I need to purchase, says Steiman. 'I called the supplier this morning. He was on vacation, with another week to go. I told him I needed this machine; he said, 'you better order it today because you won't have it until December.'"

"Had I made that call in September, I would have been out of luck," he says. "Don't think that machine is just sitting in
Use tough trucks, equipment

Picking the right truck for the kind of plowing you do can prevent problems down the road.

Begin by asking yourself: What kind of plowing situations are you likely to encounter? Will you be plowing small or large lots, driveways or roads? Is it likely that your business will expand and your need for bigger equipment will increase?

Residential or small business plowing situations don't usually require large areas to be cleared. You'll likely spend less than two hours plowing during any storm. In this case, a smaller truck, such as a half-ton pickup with a standard size plow, should serve you well.

Gary Amato, Burrington Co., Kirkland, OH, says three-quarter-ton pickups work well at many of his accounts. They're maneuverable, can turn in tight circles and can work around loading docks and other obstructions.

"If you do have a big lot, 400 to 500 feet by 800 to 900 feet, I'd have an F-700, a single-axle truck similar to city trucks, to pick the bulk off. Then we'd get pickups in there and clean it up," he says.

Jerry Richter, Garden Ridge Nursery, Defiance, OH, likes bigger equipment like farm equipment. These large, 4-wheel-drive tractors have been modified to push and pull 12-foot blades.

"We can buy a 20-year-old, large 4-wheel-drive farm machine for about $6,000 to $8,000," Richter reveals. "They're obsolete for farming purposes, but yet they are 200-hp machines. We can get this for less than half the price of a used, late-model pickup. Then we put a 12-foot plow on the front, get it equipped with a hitch and we have a unit that basically is less than $10,000."

Richter has also purchased used equipment at auction from the city highway department. He says you can't beat the price and the equipment is in good condition usually. For Richter, the pickup truck is not up to snuff mechanically. "We have all ton-and-a-half and 2-ton trucks that we do all our landscape work with and they become our smallest snow removal units," he says.

With payloaders and Bobcats (which he also uses in his landscape business) and a Steiger tractor capable of cutting a 36-foot swath, thanks to three 12-foot plows mounted one in front and two in the rear, Richter says, "Let it snow."

Contractors, landscapers and municipalities often have the need to use their equipment for long periods of time, sometimes as much as 24 hours straight. That's why plowing equipment must not only be rugged but not too hard on the operators either.

When buying a truck for plowing snow, keep the following in mind:

- Buy the biggest truck you will need for the current or anticipated job.
- Get the heaviest front-end capacity you can. This should include heavy springs, axles and sufficient tires (see point #5).
- Many of these are available in trailer towing or camper packages as well as snowplow prep packages.
- Get the largest battery and alternator available. This is critical since most plows today operate off the vehicle electrical system. Prolonged use can run down a vehicle battery in a short time when used in combination with heater blowers, lights, radios and salt/sand spreaders.

Again, these may be available as part of a trailer towing or camper package.

- Most plow applications require 4x4 trucks, ideally with positive locking differentials, V-8 engines, and automatic transmissions for driver convenience.

- Every plow truck needs good aggressive tread tires with sufficient weight rating to handle the weight of the truck and the plow on the axle. Care must be taken to make sure these tires have the correct tire pressure to meet the rating on the tire.

- The use of ballast (weight placed rearward of the rear axle) may be required to prevent overloading the front axle. Ballast will also improve traction while counterbalancing the weight of the plow.

Source: Terry Mclver and information from Western Products Service Department

a parking lot waiting for you to buy it in September"

Steiman attacks the re-enlistment process early. Don't assume that the customers that you had last winter will re-up, or that they have not been called on by a competitor. It's tough to get them thinking about snow removal in mid-summer, but it must be done.

"They'll say, 'I won't be ready to talk about snow removal until October.' I say, 'Maybe you can be ready to talk in September because I'm talking to you in July."

Steiman uses four types of contracts: seasonal, by the inch (or increment of inches), hourly and a combination of several of them.

"It isn't always up to us which contract we go with, depending on the [size of] the account," says Alan. "Therefore help them make a rational decision."

Off-season cash flow

Jerry Richter of Garden Ridge Nursery,
Defiance, OH has been in the snow removal business about eight years as a way to keep money coming in during the landscaping off-season, as many landscapers do.

Richter's nine in-house machines hit the road to handle commercial lots. Its only residential business is done for owners of commercial accounts, another common practice.

"You're dealing with too many people in a $25 to $50 price range," with distance between each stop, perhaps a block or two, explains Richter. "Charging $25 to $50 to do a residential driveway is probably not bad money, but unless you've got 15 to 20 of them side by side you have too much drive time."

Richter says subs are not a part of his world, in a town with a population of about 25,000.

"There are not a lot of places to get work for many companies. We have a total of 60 acres of asphalt that we manage," Richter explains, "and we are equipped to do that 60 acres in 7 to 8 hours."

**Contract common sense**

Richter has been pricing all his snow removal work by the hour, but says that will now change, after he learned some things at the last SIMA conference.

"Some accounts will be on a 'per push' basis," Richter says, "because with the big equipment, we're getting things done much faster than the competition could, and we find that our billing rates are not high enough to bring in the value.

"The more efficient we get with the equipment, the faster we can manage the snow; but then it leaves some cash on the table, which the customer perceives as value. It builds loyalty, but it doesn't build as much profit opportunity into the work as it could," Richter says.

Richter says he will scout around new businesses looking for more accounts, even though he has never lost a customer, and is careful not to over extend his capabilities.

"So far, we've been able to maintain existing customer satisfaction, and we use that to build new accounts that move in next door, across the street, whatever," Richter explains. "When we specialize in very large lots, there just haven't been a lot of people who have shown the ability with the backup equipment to come in and handle the big lots," he adds.

**You're the expert**

"A common mistake I see other people make is that they don't really go after the business," and sell themselves as the expert, says Richter. "They have contracts with some accounts, but they let the customer dictate to them what there snow removal needs are instead of taking control.

"You have to tell customers: 'We're going to manage your lot. We're going to keep your liability down. We are the manager,' he stresses.

Richter says a snow removal customer has to agree to have the lot salted, for reasons of safety and profit.

"If a commercial account doesn't want salt, then I usually don't pursue them," Richter explains, "because we're in a market where we push now maybe six to 10 times per year. But then we have another six to 10 snowfalls where it's a half-inch to an inch-and-a-half that turns to ice. So half of our potential market is in the deicing business, where we manage the slippery conditions."

It's a funny business when you consider what some people think of doing business: Richter says the little competition he has may not even plow in less than an inch-and-a-half conditions.

"So we try to manage each event as opposed to doing strictly snowfalls; we're doing more snow and ice management," Richter says.

**Educate the client**

As the expert, it's important, says Richter, that you bring to the client your experience and wise counsel when it comes to liability issues.

"If a restaurant owner has never been sued or faced with a liability issue, he will not see (deicing) as necessary," Richter explains. "We've had several accounts that didn't want salt, but we held on to them for their snow removal business. They had a 'slip and fall' and all of a sudden, they realize what it's like to have an employee out of service, pay workman's comp or face potential liability costs. They've been loyal deicing customers ever since."

The key, then, to getting customers to accept deicers, is to educate them on the potential for liability and let them know that you can provide that preventive service that perhaps smaller competitors can't.

**Educate the crew**

Richter's crew training begins with an all-day meeting and a tour of customer properties, usually in late November.

"We rent a bus or van and drive to each account and show the drivers where we do or don't push snow and where we pile it. Then we stake (with four-foot long, steel fence posts) the islands and any plazas that don't have trees, so we can mark where the curbs are," Richter says. The stakes are sprayed with fluorescent paint.

Other tips Richter offers snow professionals: Be prepared and focused on customer liability and use it to sell your service. Have enough backup equipment, parts and people.

"It takes a lot of support to keep all that going."
Deciding when to call in a snow plow operator is a lot like being a third base coach. As the runner heads for the bag, you've got to determine whether or not to send the player home or have 'em hit the brakes — in an instant. While the coach contemplates things like the outfielder's arm strength and the runner's speed, the snow crew chief must quickly and accurately assess when a snow storm will hit, how long it will last and how much snow will accumulate before calling in an operator.

Luckily for snow plow crews, unlike the baseball coach, forecasting the weather is not based on 'gut' instinct alone. Today, there several forecasting tools and resources available — resources that make winning the battle against the elements a little easier.

Take your pick
Jody Gibson, Nairs Lawn Care, Medina, OH, keeps it simple when it comes to weather forecasting. He tried a computer forecasting tool, but finds the 10 o'clock news can also be effective. He also keeps a weather eye to the sky. "No matter what the forecasters say, I still get up at 1:30 a.m. and look out the window," he explains.

Three other employees living to the north, south and east keep track of weather conditions in their respective areas.

While the Weather Channel on television has its share of devoted watchers among snow and ice professionals, others rely on more sophisticated tools, including the Worldwide Web.

Mike Conley, owner and president of K&M Service Co., Bridge Port, WV, is one of the Web's proponents. "The Weather Channel has a Web site just for our region of the country. It has an updated satellite photo every 15 minutes and it's free," says Conley.

With the aid of his personal computer, Conley is able to maximize the Weather Channel's satellite renderings. "With my PC, I can calculate how fast a storm is moving by backing up the pictures and then putting them in motion."

Joe Ball, assistant director of campus services and facilities at Buffalo State College, Buffalo, NY, has to keep the roads and walkways clear for the school's 12,000 students and faculty members. During the winter months, he assigns a groundskeeper the specific task of watching the weather. In turn, the groundskeeper relies on the college's campus police to monitor the weather and provide him with constant updates. "The campus police use a combination of local weather forecasts and the Weather Channel on the internet for information. We've had pretty good success with this setup," he says.

Storm trackers
An increasingly popular forecasting system used by plowing professionals and landscapers is the StormSentry PC, a severe weather tracking service developed by DTN Weather Center, Omaha, NE. "It can pay for itself in one day by not requiring a snow crew to sit around doing nothing," says Kurt Wullsleger, DTN's director of marketing.
The company claims the service takes all the guesswork out of storm tracking, allowing contractors to be more proactive. The company stresses you don’t have to be a meteorologist or computer whiz to operate the equipment.

“It takes about 30 minutes to set up the satellite dish. And it works on a PC Windows environment. All you have to do is point and click your mouse to get current information,” says Wullschleger.

The latest ‘scoop’

“Our radar screen updates every 15 minutes, so in the middle of a storm you know when it’s time to back off some crews and send them home,” says Marty McKewon, a staff meteorologist at DTN.

The service is also a valuable tool once a snowstorm has ended. “Often, you need documentation to prove to a customer why you plowed. It gives you the ability to print out time-stamped data that shows radar screens and climatological data like wind speed and precipitation. This is particularly useful in areas where lake affect snow occurs,” says McKewon.

How accurate and reliable is the service? McKewon says to ensure quality control, DTN employs 50 meteorologists and has over 600 forecasting locations across the country.

“Every state in the country has at least five locations and most have five to 10 sites,” McKewon says.

Those pinpoint forecasts quickly translate into big savings according to John Allin, president of Allin Companies, Erie, PA, and the board president of the Snow and Ice Management Association.

Says Allin, “I have a million-dollar plowing business and it (DTN Weather Service) saves me about $100,000 a year. We have lots of lake affect snow and the weather can change very quickly. With the system, we can better follow storms. We keep the screen on constantly and get updates every five minutes.”

Why does the 21-year snow industry veteran place so much trust in the system? “Most local weather forecasters only work six to eight hours a day. Sometimes, their forecasts are 12-hours old and they tend to forecast for a larger area. I need a forecast just for my area. Plus, the National Weather Service has had a 30% cut in personnel over the past few years.”

Robert Wilton, president of Clintar Groundskeeping Services, Toronto, Ontario, has been a subscriber for over five years. His company has nine offices throughout Ontario and keeps around 100 pieces of equipment operating during a snowstorm.

“Snow is very important to our business. We take it seriously,” says Wilton. “From November 15 to April 15, we have crews available 24-hours a day and there is always someone in the building. We can see the development of a storm with DTN long in advance and we can see the size of the storm.”

Wilton says area snow plow suppliers have also created and installed a local snow plower’s hotline. “It’s a free service and if you don’t mind listening to a few commercials, it can be helpful, because it’s local in nature.”

Bob Kinnucan not only serves as president and owner of the Kinnucan Co. in Lake Bluff, IL, he also makes the company’s snow calls. He too relies on DTN for precise ‘local’ information. But for the long-term big picture, he looks to the west.

Looking to the west

“What happens on the Pacific Ocean today will be in Chicago in about four days. I check out the full-page weather map in our local newspaper and it shows the jet streams,” he says. Kinnucan, also a licensed pilot with weather training, uses his meteorological experience to help monitor emerging weather patterns.

“Once the storm comes into Minnesota or Iowa, I’ll start watching it hour by hour on the monitor in our office. The screens offer a tremendous amount on information. I look for lows, barometric pressure trends and temperatures. I can even put a storm in motion on the system to show ground speed,” says Kinnucan.

Is a subscription weather service for every snow and ice professional? Not necessarily. Many operators do quite well without one.

But, knowing how much snow will fall and when it will fall allows the contractor to prepare his equipment and drivers. It’s a big advantage for the contractor who can predict it.

—The author is a freelance writer who lives in Cleveland and often writes about the green industry.
The Cub Cadet 4x4 Snow Thrower combines the technology of 4-wheel drive with a Regency OHV engine. The Cub Cadet 4x4 also includes fingertip-controlled power steering, heated handgrips and single-handed operation that frees the left hand to operate the 4x4’s electric chute rotation.

Other features include: single-handed operation to keep the left hand free to use the electric chute rotation for controlled snow positioning; heavy-duty reversible skid shoes; 13 x 4-in. Sno Hog tires; 26-in. clearing width; 20-in. intake height.

For more information, contact MTD at 330/225-2600 or www.cubcadet.com. Circle No. 291

**BOSS adds to snowplow lineup**

The Poly Power-V Snowplow, new from BOSS, is the only Poly Power-V Plow in the industry, says the firm. The plow features a self-lubricating, 3/8-in. UHMW polyethylene moldboard which is impregnated with color so scratches don’t show. The plow is also resistant to ultraviolet rays, which helps prevent fading, cracking and deterioration.

Best of all, says BOSS, the moldboard has an ultra-low friction coefficient which allows snow to slide off and not stick to the moldboard.

The Poly Power-V Plow also comes with SmartHitch as a standard feature. The SmartHitch automatic removable mount system makes it possible to hook and unhook a snowplow in a matter of seconds, not minutes.

For more information on this or other BOSS products, call 800/2286-4155, or visit the company Web site at www.bosspow.com. Circle No. 292

**Henderson’s new midrange plow**

Henderson Manufacturing has a new reversible snow plow for the new midsize trucks.

The SNOFOE III features a rolled moldboard that is virtually self-cleaning to reduce back-up and drifting for improved driver visibility. Its unique rolled construction eliminates “break” creases to help move snow and ice to the side, thereby reducing wear on the vehicle.

Twin Nitrided hydraulic cylinders are double-acting for heavy-duty power reversing under extreme load. Three position angle adjustment (5°, 10° and 20° approx.) meets varying snow and ice conditions.

For more information, contact Henderson at 319/927-2828 or Circle No. 293

**Pellets generate heat**

Garon De-Icer pellets are noncorrosive, tiny, white, crystalline pellets that create a powerful, radiant heat unleashed spontaneously upon contact with ice and snow. The Garon company says these pellets are 24 times more effective than rock salt and are effective down to -60° F, an extreme temperature where even rock salt is ineffective.

These OSHA-compliant pellets can be applied shortly after snowfall to prevent heavy accumulation. For more information, contact the company at 800/631-5380 or Circle No. 294

**New broom attachment from Snowman**

The snowman “multi-hookup” works all year. The 7 ½-ft. Grotech Broomer is available as a complete unit or as an attachment to Snowman plows. A straight or angle broom system is available. Easy installation of the complete unit is complete in under three hours.

For more information, contact Snowman at 888/766-6267, visit the Web site at www.netins.net/showcase/snowman or Circle No. 295

**Snow attachments from Woods**

Woods Equipment Co. offers a range of snow handling attachments that have been carefully engineered to meet demanding...
The MDV spreader was designed by Meyer to bridge the gap between 15,000 GVW and 20,000 GVW trucks. Offered in two sizes (9-ft. and 10-ft.) and made in two different materials (steel or stainless steel), the MDV is perfect for medium-duty vehicles, according to the company. The spreader is built to withstand the toughest weather conditions with high quality materials and advanced manufacturing procedures.

For more information, contact the company at 216/486-1313 or www.meyerproducts.com, or Circle No. 297

**Snow Wolf is for skid steers**

Snow Wolf is a snow plow designed for skid steer machines, with blade features and frame construction that maximize the greater snow-pushing strength of a skid steer, says the company.

The Snow Wolf blade meets the surface at a 45° angle, so it scoops the snow rather than pushing it, and sends the snow rolling up the blade. Because Snow Wolf has also increased the blade’s angle of deflection, the snow continues to roll, moving off the blade faster and keeping the skid steer in better control.

A spring-loaded trip cutting edge is another special attraction. The blade is rigid, and only the bottom 6 in. trips forward if an obstacle is hit on the pavement. Since only the bottom edge trips, the operator isn’t thrown forward and the weight of heavy, wet snow pushing against the blade won’t cause false tripping. The trip mechanism only on the cutting edge permits a heavier, dual pivot, A-frame construction.

For more information, contact the company at 800/905-2265, or Circle No. 298

**Henderson has new dump body**

The new MAGNUM dump body from Henderson Manufacturing is elliptical, to afford a lower center of gravity for greater stability in off-road environments. Five-inch longsills also add to the low profile, while the absence of crossmembers prevents the washboarding that contributes to rust and corrosion. The new design, combined with the high-strength materials, is also more resistant to dents, and provides a faster, cleaner load dump.

For more information, contact the company at 319/927-2828 or Circle No. 299

**Garden tractor plows too**

Kubota’s G-Series garden tractors are equipped with standard two-wheel steering or optional four-wheel steering, ideal for confined areas. Both 38-in. to 62-in. snowblower widths feature a hydraulic lift. The company says these are ideal for light commercial or residential uses.

For more information call the company at 714/557-3663 or Circle No. 300

**Western’s hopper-type sand and salt spreaders**

Western offers several models of hopper spreaders for the ice control professional.

Designed for ice control on roads and parking lots, these spreaders mount easily on pickup, dump or platform trucks. They’re available in 12-gauge steel or 16-gauge 304 stainless, in capacities ranging...
from 1.8 cu. yd. to 4.1 cu. yd. Electric throttle and electric clutch are standard.

For more information about this versatile hopper, contact the company at Western Products, P.O. Box 245038, Milwaukee, WI 53224-9538 or www.westernplows.com
Circle No. 301

Gloves have three layers

PolarGard gloves have three layers of protection: the outer glove features a leather palm and fingers with a heavy cotton back. The inside features a Thinsulate lining for warmth. The secret ingredient is a layer of PVC which creates a waterproof barrier between the outer glove and the Thinsulate lining.

For more information, contact Compliance Safety Inc., at 800/340-3413 or Circle No. 302

Deere updates blower line

John Deere gears up for winter with two new snow blower models: the 724D and an updated TRS22 (shown).

The 724D offers a sturdy, midsized frame and 24-in. clearing width. The 7-hp Tecumseh "Snow King" engine provides dependable operation in winter conditions and power to clear deep, heavy snow.

Other engine features include overhead valve design to burn fuel cleaner and more efficiently, a cast-iron cylinder liner for long life and an automatic compression for easy cold weather starts. Remote deflector cap controls on the new 724D and existing 826D snow blowers are being replaced with a handle that can be manually adjusted from the operator’s console, eliminating the chance of a cable binding or breaking.

A 5-hp model TRS22 replaces the current 4-hp model. The new 5-hp engine will ensure superior power to handle tough snow.

For more information, Circle No. 303

Three in one plow from Fisher

As a trailblazing "V" Blade, the EZ-V plow from Fisher is perfect for punching through drifts and snowbanks to get you started on those big jobs.

In the scoop position, this plow cradles and controls the snow in crowded locations, like tight parking lots, where you can’t cast it to the side.

When a straight or angled blade is needed for windrowing, the 8½-foot EZ-V plow adjusts quickly and easily.

The best part about this snowplow from Fisher—the feature that sets it apart from the competition—is the convenient, easy-to-use hand-held Fish-Stik control. The operation of all functions—raise, lower, moving the wings in or out either simultaneously or separately—is right in the palm of your hand.

With the Insta-Act hydraulic system, users will get a state of the art power source that allows them to hydraulically lock the blade wings to act as one.

As with all Fisher plows, the EZ-V plow incorporates the well known Fisher trip-edge design, which keeps plowed snow out in front of the blade and makes stacking easier.

Back dragging is said to be easier, also, with the EZ-V plow. The double-acting cylinders are used to hold the wings firmly in place.

For more information, contact the company at Fisher Engineering, 12 Water Street, Rockland, ME 04841 or www.fisherplows.com or Circle No. 304

New poly snow deflector

TrynEx now offers heavy-duty snow deflectors that make a plow more efficient. Built of tough polyethylene with reinforcement ribs, these deflectors are rigid enough to handle the job, yet flexible to avoid damage. Standard, 8-ft. lengths can be easily cut down to 7½ ft. Mounting kits include self-tapping bolts. Deflector kits contain six units per package. A company logo or organizational name can be molded into the center of the deflector.

For more information, contact the company at 800/725-8377 or Circle No. 305
DTN Weather Center...on duty 24 hours a day, 7 days a week!

WEATHER WATCHDOG

It’s not a computer! The DTN Weather Center includes a small one-meter satellite dish, receiver and color monitor. (Dog not included.)

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THE WEATHER WATCHDOG!

2110 West Dodge Road • Omaha, Nebraska 68114
American Cyanamid Company

Using state-of-the-art technology, this plant is a model for safety and environmental responsibility, emphasizing strong programs in recycling and reuse in all production areas to minimize waste.

The plant's integrated environmental systems provide management control levels that are designed to meet or exceed industry standards for air, water, solid and hazardous wastes. Pollution prevention and waste reduction efforts are an important part of ongoing programs in all production areas. Cyanamid manufacturing plants also participate in the Chemical Manufacturers Association's Responsible Care Program.

PRODUCT FOCUS:
The Specialty Products Department of American Cyanamid Company's Agricultural Products Division researches and develops special-use chemical products, and markets them globally.

The department's herbicides, plant growth regulators and insecticides are used in forestry, professional turf management, consumer lawn and garden, industrial vegetation management, horticultural and greenhouse industries, professional pest control and public health markets.

American Cyanamid is committed to the development of products that are effective, convenient and respectful of the environment. Along with others in the turfgrass and golf course industries, the company believes it has a responsibility to protect the environment, to improve the aesthetics of America's communities and provide enhanced recreational opportunities for all. The company is committed to helping secure a superior habitat for people and wildlife through the manufacture and marketing of environmentally-sensitive products.

MANUFACTURING FACILITIES:
American Cyanamid has a number of manufacturing facilities worldwide. Many of the company's products are manufactured at a 2,000-acre complex in Hannibal, Missouri. In addition to
The Ariens Company

PRODUCT FOCUS:
Now in its 66th year of producing lawn, garden and snow removal equipment, The Ariens Company continues to grow with the times by introducing many new products and advanced technologies. Today the company is run by President Daniel Ariens, the great-grandson of Ariens founder, Henry Ariens.

MANUFACTURING FACILITIES:
Ariens premium-quality products have been built at its Brillion, WI, plant since the early 1930s; and as a manufacturer of premium walk-behind mowers, riding mowers, garden and utility tractors, tillers, and snow throwers, the Ariens name is well respected in the outdoor power equipment industry.

The respected Gravely line of commercial lawn and garden equipment is also in the Ariens' stable. Established in 1916 in North Carolina, Gravely became a wholly owned subsidiary of The Ariens Company in 1982, and has since moved its headquarters to Brillion, WI. In recent months, Gravely took on a new logo and motto—"We Keep You Cutting"—with the launch of its Gravely 260Z zero-turn mower. Gravely equipment is sold to independent dealers in the United States and over 36 countries worldwide.

Stens Corporation, Jasper, IN, is the newest addition to the Ariens Company family. Since the company's conception in 1969, it has built a solid reputation for providing premium aftermarket parts to the outdoor power equipment industry. In 1995 it was bought by the Ariens Company.

MAJOR PRODUCT LINES:
The Gravely Commercial Lawn & Garden line of products includes the: PM 250Z, 260Z and 270Z zero-turn mowers; the PM300, PM360, and PM460 Outfront Mowers; the Pro150, Pro200 and Pro300 Walk-Behind Mowers; the Professional 2-Wheel Mower; a compact loader; a Pro Vac; a Pro Aire core aerator and six chipper models.

TOGETHER AS ONE:
Ariens, Gravely and Stens are three of the leading brand names in the outdoor power equipment industry. Each brand builds on the strengths of the other two and together they form one solid, well-respected company, The Ariens Company. To learn more about the company or its brands, visit any of the three web sites at www.ariens.com, www.gravely.com or www.stens.com.
Aquascape Designs, Inc.

PRODUCT FOCUS:
Founded in 1991 by Greg Wittstock, the company's president, Aquascape Designs Inc. is a wholesale manufacturer and distributor of the renowned Aquascape Designs Ecosystem and patented filtration pond products. We are the single leading manufacturer of complete, ready-to-assemble pond kits. Twenty products with a 20-step construction process combined with our patented filtration system are what differentiate Aquascape Designs from the competition.

MANUFACTURING FACILITIES:
Aquascape Designs is privately held and has doubled its revenue annually since its inception. The company is comprised of two divisions; the first encompasses the manufacturing, distribution, sales and marketing entity which primarily focuses on the nationwide sales and distribution of pond kits. Our customer base includes landscape contractors, landscape architects, garden centers and retailers.

Our new 36,000-sq.-ft. distribution center and office facility is located in Batavia, IL, just 35 miles west of Chicago. The Aquascape currently employs 51, but is rapidly growing.

TECHNICAL SUPPORT / TRAINING:
Aquascape customer service representatives are extensively trained in product function and ecosystem development. Our technical service group provides in-depth design, installation and technical support as a free service to all of our customers.

Our marketing efforts are comprehensive and targeted to the education of our customers in order to help them succeed and prosper with water features. We market to our customers with a 24-page, full-color catalog that is mailed six times a year. Throughout the year, we produce training, educational and marketing materials in order to provide a continual flow of current information to our customer base. Trade shows, educational seminars and hands-on construction sessions are conducted across the country to provide hands-on knowledge of our products and one-on-one contact with our customers.

We also provide a wide range of selling tools for our customers to market to their customers. Videos, brochures, presentations, templates, access to our image gallery and web site development provide a tremendous amount of marketing options and opportunities.

PRODUCTS:
Pond kits