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Gray: State associations need financial backing.



Grooms: Better understanding than outsiders.

already."

Gray says that, generally, once town leaders hear the advice and concerns of the professional applicators, they either drop the ordinance idea or write it to be practical.

Gray stresses the importance of awareness and support for association activity.

"We're asking (association) members to watch the newspapers and attend town meetings to keep track of any indication that there's going to be activity to restrict pesticides significantly. If they find out, notify us immediately."

Gray says the state lawn or landscaper associations need all the help they can get, both informationally and financially.



Oklahoma: Although the city of Edmond is the only Oklahoma town we know of operating under local pesticide regs, Brad Johnson, president of Green Up! in Tulsa is playing it smart from a public relations point-of-view: he advises do-it-yourselfers on proper lawn care via a weekly AM-band radio program.

Although Johnson admits to receiving a few calls on the heels of the latest 2,4-D report, he says the anti-pesticide feeling in Tulsa is "nothing like it is on the East Coast."

He credits the lack of public worry to the agricultural state's dependence on disease- and insect-free crops.

To the callers who did question the effect of 2,4-D on dogs, Johnson says he explains that the product has been exhaustively researched, has been in use for 40 years, and has the blessing of the Environmental Protection Agency.

Though notification is not a mandate in Tulsa, Johnson takes the initiative and calls neighbors of customers beforehand, just to do what he thinks is right and fair.



Iowa: Since becoming communications point-man for the Iowa Professional Lawn Care Association (IPLCA)

about two years ago, Mike Grooms has had plenty to keep him busy. The state is full of activists out to ban or limit pesticide use, but the association has proven itself capable of banding together to bring about fair and practical change, or at the least, a continuance of a workable status quo.

In February of this year, the IPLCA rallied its membership to attend a critical public hearing on sign regulations. The opposition wanted 12-inch signs; IPLCA wanted to stay with the 4-by-5-inch size.

"Letters of support were written by pesticide user groups," remembers Grooms, including structural pest control operators. "We had 18 members of the association speak publicly versus three people

from environmental groups.

"From that standpoint, I think we can muster a public support policy. That is probably the most critical."

In January, about 70 state legislators will be invited to attend the association's second annual legislative reception. Grooms says it's the perfect time for user groups to tell their story.

"Lawn care operators, sod producers, superintendents, people who make their living in the industry will invite state legislators to dinner. We get to know them and give them a chance to gain a better understanding of what we do in Iowa, not only to earn our living, but also with a concern for environmental issues.

"I think we have a better understanding of our role in turfgrass and the environment (than do outside activists)," says Grooms, who predicts that even if some legislators show up just for a free meal, many will keep an open mind.

The Iowa Alliance of Environmental Concerns is a new coalition of urban and rural pesticide users.

"We feel we would be best regulated on the state level rather than in 900 Iowa towns," says coalition director Mona Bond.

According to Bond, 98 percent of all pesticides applied in Iowa are in the ag sector.

The Iowa alliance, like RISE, is not concerned with regulating do-it-yourselfers.

"At his point," says Bond, "I don't feel it would be in our best interest to go after the homeowners. Home rule is very important, and individual freedoms are sacred."

—Terry McIver

LM REPORTS

The art—and science—of snow blowing

Snow blowers and throwers—in walk-behind, rider and tractor attachment models—easily cast aside what Old Man Winter casts your way.

■ Snow throwers, and the ability to attack the white stuff with gusto, can add a winter service dimension for landscapers and LCOs, who must also enlist 1/2- to 8-foot plows to tackle and satisfy commercial accounts. And snow removal as an auxiliary service needs careful consideration beforehand to insure profitability.

Like all powered equipment, the starting rule is to fit the right machine with the task at hand. Over- or under-powered



Cushman Hansen

snow blowers are of little value. The message: shop around to compare features, operating specifics and cost. Decide what you're seeking to accomplish and purchase accordingly.

Snow blowers and throwers come in

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SNOW REMOVAL: LOTS TO CHOOSE FROM

LISTED BELOW ARE SELECTED MODELS FROM SOME OF THE INDUSTRY'S MAJOR MANUFACTURERS OF SNOWBLOWERS OR SNOWTHROWERS. COMPANIES LISTED BASED ON RESPONSE TO A LANDSCAPE MANAGEMENT INFORMATION REQUEST.

Company	Model	Walk/ride/ attach	Clearing swath	Chute rotation	Speeds forward/rev.	Special features	Circle No.
Bolens	5210	walk-behind	21"	n/a	3/1	Tecumseh Snow King engine	300
J.I. Case	Angle blade	attachment	66"-72"	n/a	n/a	Fits 1835C, 18408, 1845C Uni-loaders	301
Cushman	Hansen snowblower	attachment	50"	Auger speed 237 rpm	n/a	Electric chute control	302
John Deere	TRS32	walk-behind	32"	220 degrees	6/2	10 hp, 4-cycle engine	303
Excell	V-Blade	attachment	48"	n/a	n/a	11 gauge welded steel	304
Grasshopper	412	attachment	48"	200 degrees	n/a	Fits Grasshopper 600/700 mowers	305
Honda	HS828	walk-behind	28"	210 degrees	variable	8 hp, 4-cycle engine	306
Kubota	B2586	broom attachment	47"-60"	2-way angle	n/a	Wire or wire/poly bristles	307
Ransomes	Jaguar 103044	attachment	50"	Electric auger: 14"/175 rpm	2-stage	PTO shaft drive	308
Olathe	150	attachment	52"	180 degrees	n/a	Fits Toro 300/220D tractors	309
Snapper	10302	walk-behind	30"	230 degrees	6/1	10hp, 4-cycle engine	310
Toro	1132	walk-behind	32"	n/a	4/2	4-cycle 11 hp Briggs & Stratton engine	311
Troy-Bilt	5hp	walk-behind	n/a	220 degrees	3/1	13" auger	312
Walker	SB6670	attachment	42"	228 degrees	n/a	Soft cab, adjustable skid shoes	313

Source: LM survey



Kubota attachments

either one- or two-stage models. Both are usually adequate to clear off tighter spaces such as walkways, ramps, patios and modest-sized driveways, but the two-step models are stronger workhorses which perform better in larger areas.

- One-stage models (3 to 4 hp) collect snow by turning augers which then funnel the material to the chute and spout, blowing or throwing the material upward and outward.

- Two-stage models can be equipped with a high-speed impelling system as well as augers to add power to casting the snow outward, sometimes as far as 30 feet. In two-stage models, the auger generally



Walker sweeper

turns slower.

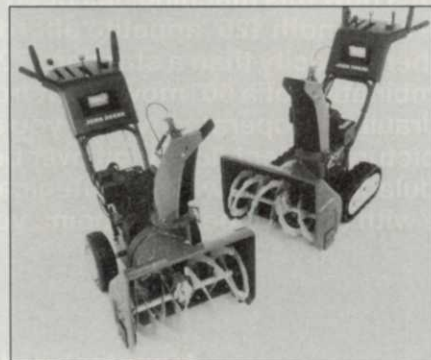
Snow blowers and throwers can clear up ice, too, if worked at a slower speed. Gravel surfaces can be easily cleaned as well, particularly if the skids can be adjusted to about 1-1/2 inches above ground level to avoid launching stones.

At least one consumer rating guide also recommends self-propelled models—nearly all now marketed—in the larger walk-behinds (5 to 10 hp). A reverse gear also eases operation. A high-speed/low-speed transmission combination provides the best versatility. Limited-slip differential gearing enhances traction.

An electric starter is a good option,



Grasshopper Model 412



Deere TRX24, TRX26

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- Low leaching and volatilization
- Reduced thatch build-up

IMPORTANT: Please remember always to read and follow carefully all label directions when applying any chemical.

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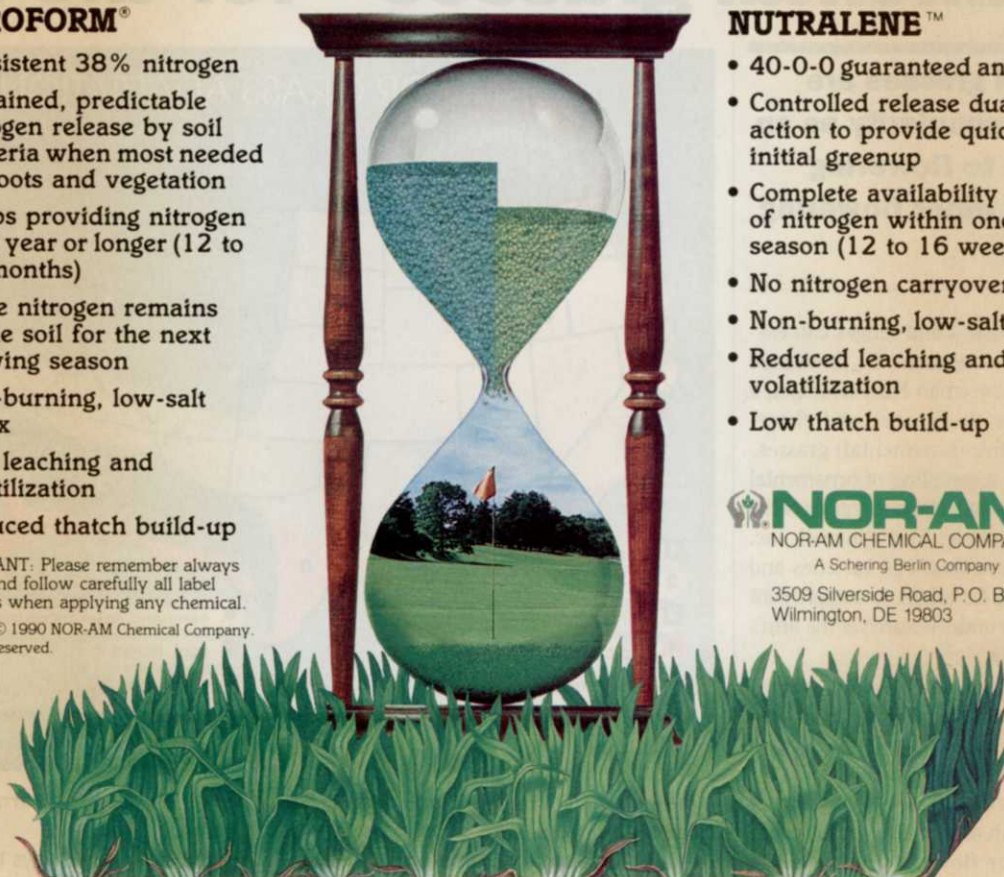


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Olathe Model 150

although many engines have been especially designed for starting in cold conditions. Primer bulbs and other devices for easier manual starting are available.

Consumer Guide, a product ratings publication, also has prepared tips for using and maintaining snow throwers.

Among CG's suggestions:

- Keep the fuel tank filled with fresh fuel starting in the fall. Topping off the tank helps to fend off moisture condensa-

tion during times of temperature changes.

- Thoroughly check engine oil levels, including the gearbox, and follow manufacturer's instructions for oil types and proper levels. Change the oil at the end of the season, readying it for the next season.

- Wax the unit's chute and spout. This makes it easier for snow and ice to move along the passage, improving performance.

- Store the unit in an area that is the

same temperature as outside. If stored in a heated space, allow the snow blower to cool to the outside temperature before using it. This practice eases the problem of snow melting onto the surface of the unit itself. The melted snow then can ice up, leading to clogging.

- Add tire chains to improve traction, particularly on larger units. Cost: usually around \$35.

—Jack Simonds

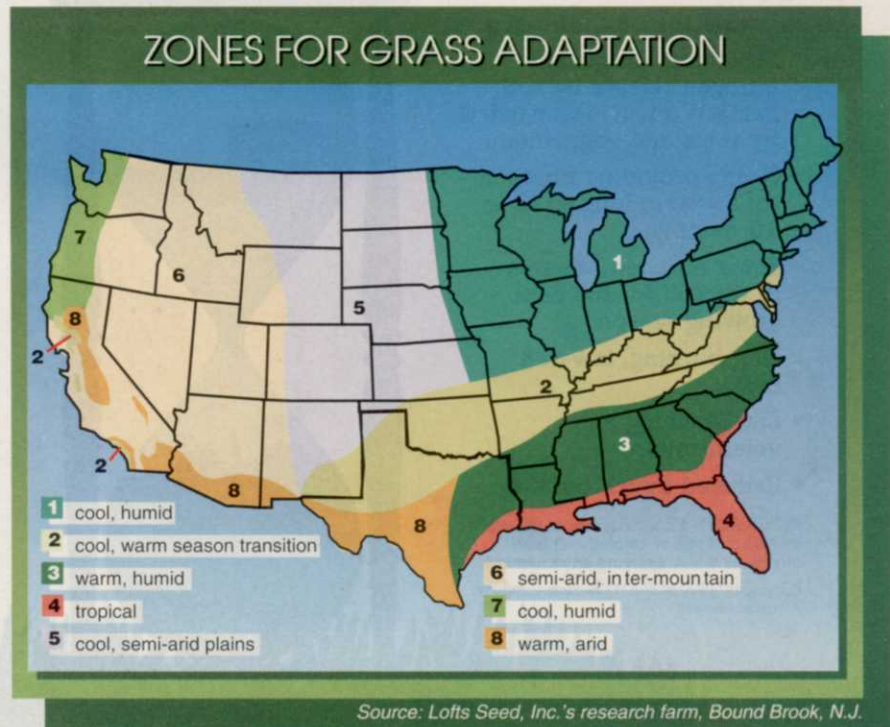
Ornamental grasses—for the bold

Ornamental grasses are growing in popularity as an alternative to flowering shrubs and other flowering perennials.

■ Tall grasses, rushes and sedges can easily and strikingly augment all landscape settings, says nurseryman Kurt Bluemel, a leading marketer, researcher and cheerleader for decorative (ornamental) grasses.

Shown here is a sampling of ornamental grasses adaptable to eight climatic regions of the U.S. It's a small sample; Kurt Bluemel, Inc. alone markets more than 120 varieties and searches worldwide for others to complement its 600 grasses now under research at the firm's Baldwin, Md., facility.

"If you stop and look, you can see how beautiful ornamental grasses are, how light affects their beauty. There are so many virtues that can be listed," says Bluemel. Ornamental grasses are growing in popularity as an alternative to flowering shrubs and other flowering perennials. Any long-stemmed grass that can be used as a substitute in these instances provides a good working definition of an ornamental grass, Bluemel says.



"Designing grasses come into first place for someone with a little more progressive thinking or someone thinking about cost effectiveness," says Bluemel. The varieties grow faster, require less maintenance and are harder in the face of disease, insect infestation and drought,

when compared with ornamental shrubs, Bluemel claims.

"The old guard," says the veteran nurseryman, "is deeply ingrained in round and cylindrical shapes. This conceals what this country has to offer."

Continued on page 18

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Circle No. 243 on Reader Inquiry Card



a. Chinese silvergrass (*Miscanthus sinensis*/*Eulalia japonica*): Zones 1-8



b. Eulalia grass (*Miscanthus sacchariflorus*): Zones 2, 3 and 8; some areas of zones 1, 5 and 6)



c. Maiden grass (*Miscanthus sinensis* 'Gracillimus'): Zones 2, 3, 4 and 8; some areas of zones 1, 5 and 6

In Europe and Asia, by contrast, public areas routinely are beautified by ornamental grasses. Some public areas in the U.S. have followed suit.

Golf course superintendents also have heard and understood his message.

"I tell (golf course superintendent) audiences that I'm the anti-turf man. I am the grass man, and I like my grass standing up, not cut off. I like my grass in golds and reds," says Bluemel, laughing. "In the roughs and bunkers, these plants can be good ground cover," he adds.

Landscapers, too, are learning the benefits—both practical and aesthetic—of adding a touch of pastel color to the scene, color only found in the tall ornamental grasses either indigenous or adaptable to North American climates.

—Jack Simonds



d. Plume grass/Ravennae grass (*Erianthus ravennae*): Zones 2, 3, 4, 7 and 8; some areas of zones 1, 5 and 6



e. Pampas grass (*Cortaderia selloana*): Zones 3, 4 and 8



**f. Fountain grass (*Pennisetum alopecuroides*): Zones 2, 3, 4, 7 and 8; some areas of zones 1, 5 and 6
Zones 3, 4 and 8**



g. Weeping lovegrass (*Eragrostis curvula*): Zones 1, 2, 5, 6 and 7



h. Sheep fescue (*Festuca ovina* glauca): Zones 1, 2, 5, 6 and 7

Photos courtesy of: Wayside Gardens (1 Wayside Lane, Hodges, SC 29695-0001; (800) 845-1124), Park Seed Co. and Lofts Seed, Inc.



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Sprayer calibration simplified

In the name of safety, in the name of profits and in the name of professionalism, keeping pesticide sprayers properly calibrated is a necessity.

■ To calculate the level that your sprayer is applying liquid to an area, consider these three methods offered by Brady Surrena of ISK Biotech in Mentor, Ohio. He believes the methods—once individual nozzles have been checked for proper operation—is simple. Calculations are based on the amount of liquid delivered to a smaller area and projected to one acre. From these calculations, gallons per acre (gpa) are determined.

If your test calibration determines the gpa is not what you need, the easiest method is to change the sprayer pressure. An increased pressure will increase the gpa; a decrease in pressure will decrease the gpa.

Method one

1. Measure an area 660 feet (40 rods) long.

2. Fill the spray tank up to the neck with water and mark the water level.

3. Spray over the 660 feet at the sprayer pressure and speed to be used in the field.

4. Record the volume necessary to refill the spray tank to the level marked in Step 2.

5. Calculate the amount of water applied per acre by using this formula:

$$\text{gpa} = \frac{\text{gals. applied over the 660 ft.}}{\text{width actually treated by sprayer (ft.)}} \times 66$$

example:

$$\text{gpa} = \frac{12.12}{40} \times 66 = 19.99$$

6. The width treated by the sprayer would be the swath width for broadcast application.

Example:

Swath width = 40 ft.

Test length = 660 ft.

Area of test = 660 ft. x 40 ft. = 26,400 sq. ft.

$$\text{Acres of test} = \frac{26,400 \text{ sq. ft.}}{43,560 \text{ (sq. ft./acre)}} = .606 \text{ acres}$$

Water to fill = 12.12 gals.

$$\text{Vol./acre} = \frac{\text{gals. to fill}}{\text{acres of test}} = \frac{12.12}{.606} = 20 \text{ gpa}$$



Method two

1. In a band application, accurately determine the width, in inches, of the band sprayed. In a broadcast application, measure the distance, in inches, between the two adjacent nozzles.

2. Locate this width in the table below and read off the corresponding course distance. Mark it off in the course to be sprayed.

Width	Course dist.	Width	Course dist.
8"	510'	18"	227'
10"	408'	20"	204'
12"	340'	22"	185'
14"	291'	24"	170'
16"	255'	26"	157'

3. For more than one nozzle spraying the same area, as with fungicide, measure the band width of one of the nozzles and see Step 8 below.

4. Tie quart container to one nozzle to catch all that nozzle's spray.

5. Start a distance back from the beginning of the course to get operating speed, and turn sprayer ON at the beginning of the course and OFF at the end.

6. Remove quart container and read volume collected, in ounces.

7. For more than one nozzle spraying

same area, multiply ounces collected by number of nozzles spraying the same area.

8. Ounces collected will equal your gpa rate.

Method three

1. Measure out 660 feet or 40 rods in the field to be sprayed.

2. Drive over the 660 feet with the sprayer and equipment that will be used during the time of spraying. This will most nearly simulate the conditions during the time that the chemical is actually being applied. Record the time required to travel over the 660 feet at the speed which will be used for the field.

3. With a stationary sprayer operating at the pressure to be used in the field, catch the volume of water delivered from 2 to 4 nozzles in the length of time it took to travel the 660 feet (time found in Step 2).

4. Record the volume caught from the nozzles and calculate how much would have been delivered from all nozzles:

$$\text{gals. over 660'} = \frac{\text{gals. caught} \times \# \text{ nozzles on sprayer}}{\# \text{ nozzles from which spray was caught}}$$

5. Calculate the amount of water applied per acre:

$$\text{gpa} = \frac{\text{gals. applied over the 660'}}{\text{width actually treated in feet}} \times 66$$

Landscaping public areas for employee and consumer safety

Of course you're not negligent. But in court, all of a sudden you'd better be prepared to prove it.

by Dr. Arthur H. Mittelstaedt

■ In court cases involving people who are injured on public lands, about 65 percent of the defendants are government or university employees—a number that is rapidly growing.

Thus, landscape managers of public lands must be concerned about both employee safety and consumer safety, par-