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 blowers and 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 ensure 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
### SNOW REMOVAL: LOTS TO CHOOSE FROM

Listed below are selected models from some of the industry’s major manufacturers of snow blowers or snow throwers. Companies listed based on response to a landscape management information request.

<table>
<thead>
<tr>
<th></th>
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<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Bolens</td>
<td>5210</td>
<td>walk-behind</td>
<td>21&quot;</td>
<td>n/a</td>
<td>3/1</td>
<td>Tecumseh Snow King engine</td>
<td>300</td>
</tr>
<tr>
<td>J.I. Case</td>
<td>Angle blade attachment</td>
<td>66&quot;-72&quot;</td>
<td>n/a</td>
<td></td>
<td>10 hp, 4-cycle engine</td>
<td>Fits 1835C, 18408, 1845C Uni-loaders</td>
<td>301</td>
</tr>
<tr>
<td>Cushman</td>
<td>Hansen snowblower attachment</td>
<td>50&quot;</td>
<td>Auger speed 237 rpm</td>
<td>n/a</td>
<td>Electric chute control</td>
<td>Fits 1835C, 18408, 1845C Uni-loaders</td>
<td>302</td>
</tr>
<tr>
<td>John Deere</td>
<td>TRS32</td>
<td>walk-behind</td>
<td>32&quot;</td>
<td>220 degrees</td>
<td>6/2</td>
<td>11 gauge welded steel</td>
<td>303</td>
</tr>
<tr>
<td>Excell</td>
<td>V-Blade attachment</td>
<td>48&quot;</td>
<td>n/a</td>
<td></td>
<td>8 hp, 4-cycle engine</td>
<td>Fits Grasshopper 600/700 mowers</td>
<td>304</td>
</tr>
<tr>
<td>Grasshopper</td>
<td>412</td>
<td>attachment</td>
<td>48&quot;</td>
<td>200 degrees</td>
<td>n/a</td>
<td>11 gauge welded steel</td>
<td>305</td>
</tr>
<tr>
<td>Honda</td>
<td>HS828</td>
<td>walk-behind</td>
<td>28&quot;</td>
<td>210 degrees</td>
<td>2-stage</td>
<td>Fits Grasshopper 600/700 mowers</td>
<td>306</td>
</tr>
<tr>
<td>Kubota</td>
<td>B2586</td>
<td>broom attachment</td>
<td>47&quot;-60&quot;</td>
<td>2-way angle</td>
<td></td>
<td>Wire or wire/poly bristles</td>
<td>307</td>
</tr>
<tr>
<td>Ransomes</td>
<td>Jaguar 103044</td>
<td>attachment</td>
<td>50&quot;</td>
<td>Electric auger: 14'/175 rpm</td>
<td>2-stage</td>
<td>PTO shaft drive</td>
<td>308</td>
</tr>
<tr>
<td>Olathe</td>
<td>150</td>
<td>attachment</td>
<td>52&quot;</td>
<td>180 degrees</td>
<td>n/a</td>
<td>Fits Toro 300/220D tractors</td>
<td>309</td>
</tr>
<tr>
<td>Snapper</td>
<td>10302</td>
<td>walk-behind</td>
<td>30&quot;</td>
<td>230 degrees</td>
<td>6/1</td>
<td>10hp, 4-cycle engine</td>
<td>310</td>
</tr>
<tr>
<td>Toro</td>
<td>1132</td>
<td>walk-behind</td>
<td>32&quot;</td>
<td>n/a</td>
<td>4/2</td>
<td>4-cycle 11 hp Briggs &amp; Stratton engine</td>
<td>311</td>
</tr>
<tr>
<td>Troy-Bilt</td>
<td>5hp</td>
<td>walk-behind</td>
<td>n/a</td>
<td>220 degrees</td>
<td>3/1</td>
<td>13&quot; auger</td>
<td>312</td>
</tr>
<tr>
<td>Walker</td>
<td>SB6670</td>
<td>attachment</td>
<td>42&quot;</td>
<td>228 degrees</td>
<td>n/a</td>
<td>Soft cab, adjustable skid shoes</td>
<td>313</td>
</tr>
</tbody>
</table>

Source: LM survey

Kubota attachments

Walker sweeper

Grasshopper Model 412

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 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,
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 condensation 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—are 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
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

**Photos courtesy of:** Wayside Gardens (1 Wayside Lane, Hodges, SC 29655-0001; (800) 845-1124), Park Seed Co. and Lofts Seed, Inc.
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:
   \[ \text{gpa} = \frac{\text{gals, applied over the 660} \times 66}{\text{width actually treated by sprayer (ft.)}} \]
   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.
- Acres of test = \( \frac{26,400}{43,560} \) sq. ft./acre = .606 acres
- Water to fill = 12.12 gals.
- Vol./acre = \[ \frac{gals. \text{ to fill}}{\text{acres of test}} \] = \[ \frac{12.12}{.606} = 20 \text{ gpa} \]

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.

<table>
<thead>
<tr>
<th>Width</th>
<th>Course dist.</th>
<th>Width</th>
<th>Course dist.</th>
</tr>
</thead>
<tbody>
<tr>
<td>8&quot;</td>
<td>510'</td>
<td>18&quot;</td>
<td>227'</td>
</tr>
<tr>
<td>10&quot;</td>
<td>408'</td>
<td>20&quot;</td>
<td>204'</td>
</tr>
<tr>
<td>12&quot;</td>
<td>340'</td>
<td>22&quot;</td>
<td>185'</td>
</tr>
<tr>
<td>14&quot;</td>
<td>291'</td>
<td>24&quot;</td>
<td>170'</td>
</tr>
<tr>
<td>16&quot;</td>
<td>255'</td>
<td>26&quot;</td>
<td>157'</td>
</tr>
</tbody>
</table>

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

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-
ticularly from a liability standpoint.

To be safe, an employer must know his or her responsibility, accountability and the communication process. Let's examine each of these terms and what it means to the landscape professional:

**Responsibility**

Many municipalities or businesses avoid even thinking about safety. Legally, however, it is becoming negligent to take this approach. Omission is as bad as commission in negligence.

Top level management, if not establishing a safety philosophy, must support the one proposed and assign its policy to implement.

Policies, tailored to the organization, define the goals and objectives of the "safety effort."

**Accountability**

Many municipalities or businesses don't know what is safe or what is unsafe, either for employees or for customers.

The organization must possess the following:

- A complete inventory of its property or plant, especially areas subject to public use. Standards for those areas must be identified.
- A complete schedule of its activities or functions that are subject to public use. Standards for such use must also be identified and associated with such public involvement.
- A complete record of all incident forms, accident reports, logs, inspection sheets, patrol reports, medical and insurance forms, safety audits, insurance memos and all other fact-reporting files.
- A file of outside agency reports and record forms so that police, ambulance, hospital and other records can be coordinated.
- A manual which contains the aforementioned items and minutes of the Safety Committee meetings, including action and implementation schedule for follow-up on concerns discussed. It should contain personnel information of the safety officers, guidelines for investigating accidents or other safety-related problems. It should also contain the various items specified in the accompanying chart.

**Communication**

The communication system must include:

- Information: getting the awareness of safety to the public.
- Discussion: creating a means for feedback from the public.
- Negotiation: establishing win/win situations by responding, accommodating, attending to and following up on any type of incident or accident. Nothing is too small.

Having defined "safety," its relationship to liability and risk assumption will be covered in future issues.

—Dr. Mittelstaedt is board chairman of the Recreation Safety Institute, P.O. Box 392, Ronkonkoma, NY 11779. Phone number at the institute is (516) 563-4806.

**Gobble up tree limbs—not yours**

**Faster drum rollers on new chippers mean more danger for operators.**

Follow these operator hints to safety.

- Industry leaders are expressing alarm over the increasing numbers of operators who are improperly using disc-knife chippers—often with tragic results.

These machines are designed to gobble up large tree limbs—and large limbs only—yet operators insist on trying to ram brush through the device. Amputation or death can result.
Estimating: Quantify your own job needs

If you don't have the time to prepare a comprehensive bid by bid date, then don't start it.

by Kent Miller

Preparing a comprehensive job estimate is a tedious and often ungratifying experience.

One shortcut that should never be taken is to use the vendor's or supplier's quantities and bid amount without thoroughly quantifying the work yourself. Without quantifying the work yourself, you'll be unable to identify their omissions.

If you receive a quote from a supplier, vendor, or subcontractor, thank them for it. Then compare the quantities to your own. If they've picked up something you've omitted, they've just done you a big favor while there is still time to correct it.

Many of our industry suppliers go to a great deal of expense to provide quotations based on their own quantity take-offs. This is indeed a great service that would allow us, their customer, the opportunity of checking our take-offs for possible errors. They do not intend for the estimator to rely heavily on their quantities and clearly state a disclaimer on every quote.

We receive quotations from the take-off list we submit to suppliers and vendors prior to the bid date. Some vendors choose to submit their own quantities and unit prices based on their own take-off. Since no two take-offs are alike, you can imagine some of the errors and omissions you'll discover in making the comparisons.

Continued on page 24
A supplier’s quote may differ greatly from your own for several reasons. Let’s state a hypothetical case in which the vendor was an irrigation supply house and their quote did not include the copper pipe, copper fittings, or booster pump station because they weren’t a supplier of it. Maybe the quotation originated from the nursery and one species wasn’t supplied because it wasn’t in stock or available.

Margins today do not allow for errors or omissions. If you don’t have the time to prepare a comprehensive bid by bid date, then don’t start it. It is much easier to walk away from a bid date than it is to finish a bad job.

We jokingly say that a bad job only gets worse. All joking aside, bad jobs cost money and typically originate from poor estimates.

—the author is vice president of The Groundskeeper, Inc. in Tucson, Ariz.
same can be said for writing thank-you notes for referrals, time and advice. Do you have a way—other than sales calls—of keeping in touch with your clients? Quarterly newsletters are becoming the rule rather than the exception in the landscape contracting, lawn care and even golf maintenance segments of the green industry. They can keep your organization in the minds of customers and inform them of new products or services, company achievements and more.

2) Examining your company’s written materials may reveal areas that need to be strengthened.

Does your logo/letterhead/brochure package convey the image you want it to convey? Look at your material as a prospect would see it. Letterheads and brochures should be kept current, clean and progressive; image is crucial to success.

How effective is the written word? It should position your business in relation to the competition, tell what sets you apart. It should be rich in customer benefits and not steeped in features.

3) Make sure your trade association memberships support your marketing efforts. After all, you pay the dues.

Do you or key staff members regularly attend meetings to take advantage of networking opportunities? Should you modify your schedule to assure adequate representation?

Can you take better advantage of speaking opportunities at association meetings? Can your company or golf course act as host? Is it possible to contribute articles or columns to association publications?

4) Public relations—editorial coverage in your hometown newspaper, to be specific—gives your business a credibility that advertising cannot match.

Do you regularly announce employee promotions or honors to local newspapers? Do you publicize company honors, special high-visibility jobs? If your company actively supports significant social/community endeavors like the Chamber of Commerce, how effective is the coverage you receive?

The importance of planning cannot be overstated. Effective marketing efforts are both carefully planned and consistently implemented.

—The author is president of Adrienne Zoble Associates in Somerville, N.J. and author of “The Do-Able Marketing Plan: Business Survival & Growth for the ‘90s.” The workbook is available through her office by calling (908) 685-8008.

Planning strategies for the green industry companies

If you are bracing for an improved performance in 1992, a budget needs to be developed during these winter months.

by E.T.W. Wandtke

It’s not uncommon in the lawn and landscape industries for owners to avoid the rigors of budget-making and budget-following.

As these owners look into 1992, they often say the economy will be better and their businesses will benefit accordingly.

If this is how you are looking at the performance of your company, you should start planning more.

What to plan—Here are types of plans you should be making:

• Your business plan should be prepared before you start the business. Annual updates thereafer are essential.

The business plan details why you are in business, what type of services you intend to offer, and your target market. It should include projections of future financial performance, and the persons you have enlisted to do the job.

Banks want to know this kind of information, as it identifies when times of potential stress (periods of financial need) will occur in the life of your company.

• Your marketing plan—a key component of the business plan—needs to be revised and specified annually, usually three to six months prior to the start of your next business year.

Developing a marketing plan may reveal how little you know about the market. Assumptions and beliefs are easy to come by, but facts and reliable information are not found as easily.

Other components of the marketing plan deal with competition, potential niche opportunities, and the market’s economic outlook.

• Strategic plans usually cover a five-year period, and are updated each year, two to three months prior to budgeting. A strategic plan defines the strategy you will follow to achieve your five-year objective.

• The budget, which covers a 12-month period, is prepared two to three months prior to the upcoming business year.

The budget details what the company’s financial performance is expected to be for each month of the year. Budget preparation takes time; you must examine the prior year’s activity, and predict what you think will happen next year.

A budget needs to be developed during the winter months. Some companies dedicate one week of their winter season to budgeting. This is an ideal way of letting all the employees in your company know the importance of planning.

• Your management plan, or people plan, is developed as part of the business plan and is updated on an annual basis.

Individual strengths and weaknesses of key employees are examined, as a way of defining the type of person who works best in the company. Accomplishments of key employees serve as the basic background

Preparing a budget

A budget is most easily prepared when the following items are listed:

1) Services to be performed, and number of customers per month.

2) Materials to be used.

3) Labor costs, including expected raises, projected overtime, bonuses and incentives, and the cost of fringe benefits.

4) Operating costs, including vehicles, equipment, maintenance and repair, fuel and oil, and other equipment operating expenses.

5) Administrative or fixed expenses are budgeted, since they tend not to vary much from year to year unless a change occurs in the company’s operation.

6) Other direct expenses, such as safety costs or license fees are planned based on when they will hit over the course of the year.

—E.T.W.
for the owner to present to the banker and others advising the company. These advisers will look at the information to evaluate your future potential based on the accomplishments of the goals detailed in your strategic plan.

When to plan—Timing helps considerably in the financial success of your company. Most companies in the green industry need to start their strategic planning in the summer months (June to September) in order to have time to agree on all aspects of the plan. Once a strategic plan is developed, only selected components will require adjustment over the next five years.

Slowdown or acceleration in the realization of the plan, competitive changes, or other economic variables need to be reflected in the newly revised plan.

How to budget—It's tough to break a budget down into its component parts. Not all aspects of budget development can be prepared without first completing the marketing plan and the strategic plan. Sales plans are detailed into sales per month, type of sale, pricing structure to be followed, number of customers anticipated to be sold, advertising to be undertaken, expected results of the various advertising efforts, and promotional money to be spent, including the results of their expenditure.

Once the sales plan is completed, you will need to develop an operating budget. (See list on preceding page.)

—The author is a principle in Wandtke & Associates, a management and marketing consulting firm based in Columbus, Ohio.
For more info, call (800) 966-3546

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The bright side of night mowing

To keep golfers moving along the course during the day, one now-famous course has begun to mow at night. Here's how it's done.

- Coeur d'Alene Golf Course has implemented night mowing. It can work on golf courses and even on commercial contracting jobs.

Superintendent Dan Moore at Coeur d'Alene Golf Course in the tourist mecca of northern Idaho solved a difficult problem with a logical answer.

Question: How to schedule mowing so crews don't compete with the deluge of tourist-type golfers who frequent the course? Answer: mow at night.

Moore's first concern was lighting the course for trim work. It took two months of experimentation with various lights to find the best floods. Eventually, Moore and his crew devised a hardhat mounted with a high-powered floodlight that lights up to 20 feet. The same lights with a 21-pound battery are now mounted on all the self-propelled rotary mowers.

“Our guys get a real workout,” says Moore.

Similarly, it took considerable effort to find out Ford tractor lights worked best for night mowing because they throw a wide, even beam as well as use low amperes.

The maintenance scenario goes some-

- Toro 223 mowers pull specially-designed carts with hydraulic lifts. This way, mowers can collect tons of clippings before they have to dump their loads.

The sprinklers, with their on-site weather station, fire into gear minutes after the mowers are finished.

The maintenance crew finishes well before the first golfers tee off in the morning.

The resort uses two Toro 223s to mow the bentgrass fairways, three Toro 216s and two 450-D five-gang mowers to groom the bluegrass roughs. The eight-member hand crew works with two Flymos, four regular rotary mowers and four Redmax reciprocating head trimmers to tend the greens, tees and 4.5 miles of concrete cart paths.

“The biggest hurdle is trying to manicure such massive acreage,” says director of golf Mike DeLong. One hundred-twenty of the 150 acres is neat as a formal garden.

“The message is that anything is possible, but it takes manpower and equipment.”

During the day, one crew keeps the cart paths clean. Another edges nine holes, while a third crew's sole function is to pluck petals off the 25,000 geraniums on the course and resort grounds.

In addition to the geraniums, the course has 46,000 petunias, 3,000 pansies, 25,000 junipers and thousands of Austrian pines. Geraniums are hand-watered with a flood nozzle to prevent blasting delicate petals off the plants.

“The owner (resort magnate Duane Hagadone) is striving to be the best, and wants the golf course to be just as good,” says DeLong.

—Leslee Jacquette

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Director of golf Mike DeLong (left) and superintendent Dan Moore initiated the concept of night mowing at Coeur d'Alene Golf Course to cater to tourists.