

Table 11

Selling price = purchase price + markup
Selling price - markup = purchase price
Markup may be expressed as selling price x markup as a percentage of the selling price
Selling price - markup % x selling price = purchase price
Selling price (1 - markup %) = purchase price
Selling price = purchase price / (1 - markup percent)
In our example:
Markup percent = (Selling price - purchase price) / Selling price
= (1.8951 - 1.0000) / 1.8951
= .4723
Then,
Selling price = purchase price / (1 - .4723)
= purchase price / .5277

be lost, damaged and marked down, the initial asking price should be adjusted upward. Also, competition may make it difficult to get a full markup on some items so that other items must compensate. In some cases the exact calculated price may not fit conventional pricing strategy.

For example, almost no one would price a product at \$10.51. So the calculated target price should merely be a starting place for arriving at the price finally used.

Adjusting the bid

How badly you want the job and the degree of competition influence the adjustment process. But how low and how high can you go?

Typically, we would say that on the low side, the bid should not be below variable or out-of-pocket cost. In the language we have been using, this would be all direct costs plus most of variable overhead costs. After all, in the short run, we are going to incur fixed overhead regardless of business volume.

At least two exceptions should be mentioned about the low price. In the case of contracting, for short periods of time it may pay to subsidize the labor cost in order to keep a valuable crew member. In merchandising we take whatever we can get for perishable merchandise such as Christmas trees at Christmas.

The higher bid

Consider at least two factors when bidding on the higher end of the spectrum: competition and the price/volume of business sales relationship.

For some products and services, a relatively high price sells fewer units but total sales are higher than if a lower price were charged.

On the other hand, when price is increased, the percentage decrease in quantity sold exceeds the percentage increase in price. In this case the price increase results in a decrease in total

sales.

If you have considerable competition and the services you offer are not particularly exclusive, the higher price may lead to lower total sales. In this case lower prices result in greater total sales. In this case knowing the price which meets your goal becomes especially important because you must, on average, meet your goal.

Weaknesses of price systems

All pricing systems have weaknesses, starting with the information put into

For some products and services, a relatively high price sells fewer units, but total sales are higher than if a lower price were charged for the service.

the system. Even though you may not have started with the information from your income statement for the previous year, expenses and cost allocations are relatively arbitrary. Depreciation may be used for the expected life of the item or may be based on the fast write-off system allowed in recent years.

The targeted ROI approach has much appeal because it provides a method of allocating overhead costs.

At least three warnings should be sounded:

1) Allocation of many costs among categories is somewhat arbitrary. Many cost items have some elements of more than one category.

2) The method works only if realized sales are in the vicinity of that amount projected. If you come up short, overhead costs not covered comes from profits.

3) The method tends to place equal weight of overhead on each dollar of direct costs. Obviously, there are different demands on overhead for each job. Calculated bid priced may have to

be adjusted in order to be competitive, but if downward adjustments are made on some, upward adjustments must be made on others to be offsetting.

A time of competition

There is no magic formula for pricing landscape services. However, some methods which recognize that general overhead must be recovered do not necessarily tell you how to price a product or service to cover it. The targeted ROI has the appeal of making the allocation, but caution is needed in applying the technique.

Competition in providing landscape services is increasing as more firms enter the business. Those firms which price their services in accordance with their costs are likely to be those which survive. **LM**

(ED. NOTE: We hope this examination of pricing theories for landscape contracting has been helpful. Let us know what you think. If you have a pricing system that works for you, drop us a line. We'll publish your ideas in a future issue.)



Dr. Phillips is a professor/economist in the Department of Agricultural Economics at Mississippi State University. He has written numerous articles on the economics of crop and horticulture production, and has developed and presented marketing programs for Mississippi landscape management firms.

SURVIVING IN A TROUBLED ECONOMY III

Maintaining company strength during lean times requires attention to all labor, material and equipment costs.

by Ed Wandtke, AGMA, Inc.

During any time of economic stress, most green industry companies are apprehensive. To be prepared to handle any volume of service increase or decline in 1991, a company owner needs to examine how the company can vary its operation in either direction.

Likewise, a company must examine various financial issues which may effect it in 1991. Some financial planning will be necessary in anticipation of changing economic conditions.

Operations check

The three major costs a green industry company incurs are labor, materials and equipment.

Labor and materials are variable, and dependent on volume; equipment costs are fixed.

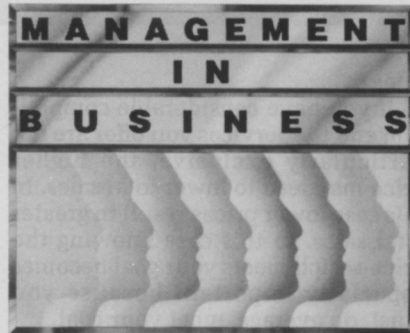
With increased fringe benefits and expected higher wages for older employees, a company owner must pay careful attention to the cost of adding, keeping or replacing employees.

Payroll options

This year offers many companies the opportunity to maintain last year's pay level since there will be more unemployment in the marketplace. The problem with this approach is that most people who can be hired at last year's level will be no better than current employees.

A better option: increase wages to attract a higher level of employee than you have had in the past. This will allow you to hire people who can handle more decision-making challenges on the spot in the field. This will give you time to improve customer retention or work on prospecting.

If you do not have a system in your company to measure and track employee productivity, now is the time. Knowing production levels of each crew helps you determine which employees or crews are most effective. It may be surprising for you to learn that individuals or crews who always come back to the office late may not turn out to be the most efficient pro-



duction personnel. Knowing this data, you can determine what needs to be done to increase productivity or you may identify employees who have become complacent or inefficient in their work performance efforts.

Posting production data daily or weekly often puts indirect pressure on individuals performing under the company average to increase their efforts. It is amazing what peer pressure can do to help underachievers reach higher levels of performance, with minimal pressure from management.

Quality service performance

Tracking customer service calls, the reason for the call, and the technician or crew who serviced the property is another area which you need to be monitoring for 1991. This information will provide you with insight into service effectiveness and quality.

Quality control information needs to be tracked to increase customer satisfaction and evaluate individual employee's effectiveness in delivering a quality service. Monitoring also identifies patterns of product or equipment failure, when and if those patterns start to appear.

Inventory control

Materials are generally the second-highest expense category for companies operating in the lawn/landscaping or the design/build segments of the green industry.

This means that paying close attention to and monitoring these costs may improve profitability.

Unless you've already done so, 1991 is the year to pay close attention to materials usage. An inventory control system will increase profitability.

Comparing the actual product used to treat an area against label specifications is important. In 1990, many companies complained of ineffective products. Upon investigation, it was determined that a lower rate was used than that recommended by the manufacturer.

Dump stale equipment

Companies accumulate equipment. Look around your facility and identify what equipment has not been used in the past two years. If you don't use it, sell it now. Turn that dusty equipment into cash.

Standardize on only one or two types of equipment to reduce parts needed to maintain equipment. This will also make training new employees easier since there is less equipment to learn.

Evaluate your equipment to determine the type of properties you are now servicing. Your customer mix may have changed over the past three or four years. Look for trade-in deals and change your equipment to better match the current property needs.

Look at the books

If you are unable to determine the profitability of any service, you risk losing money on an increase in volume. Perhaps you have missed business in your pursuit of what turned out to be unprofitable services.

Offering fewer services will prove more profitable if your total lawn service volume comes under pressure.

Don't let the competitive pricing and your quest for higher volume cause you to sacrifice profit margins.

Advisory groups work

If you have not operated a business during tight economic conditions, now is the time to call on the experience of others.

Most owners have a group of people who advise them on the direction
continued on page 80

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QUICKIE-QUIZ

Post-emergence weed control

ED. NOTE: Answers to all questions can be found in this month's Post-emergence Weed Control Guides for Warm and Cool Season Grasses.

1. Unlike pre-emergence herbicides, post-emergence control products can be applied as "spot treatments" or on an "as needed" basis, directly to a weed infestation.
 - a. true
 - b. false
2. Even low rates of most post-emergence herbicides are harmful to newly-sprigged or sodded warm-season turfgrasses.
 - a. true
 - b. false
3. Which of the following have a good tolerance to MSMA and DSMA:
 - a. carpetgrass
 - b. centipedegrass
 - c. bermudagrass
 - d. St. Augustinegrass
4. Mowing schedules need to be coordinated with post-emergence herbicide applications. A general recommendation is to delay mowing:
 - a. one day before or after application
 - b. three to four days before or after application
 - c. 48 hours before application
5. Two applications of MSMA + Sencor are necessary to control goosegrass. The best interval is:
 - a. three to four days
 - b. five to seven days
 - c. two to three weeks
 - d. seven to 10 days
6. The tolerance of warm-season turfgrasses to post-emergence herbicides decreases at air temperatures greater than:
 - a. 75 degrees
 - b. 85 degrees
 - c. 90 degrees
7. Single applications at high rates generally cause more turfgrass injury than repeat applications at low rates.
 - a. true
 - b. false
8. The effectiveness of most post-emergence herbicides is better when rainfall or irrigation does not occur for _____ hours after application.
 - a. eight to 10
 - b. 10 to 12
 - c. six to 24
 - d. 48
9. Established dallisgrass can be controlled in bermudagrass or zoysiagrass with repeat applications of:
 - a. 2,4-D
 - b. Sencor
 - c. MSMA or DSMA
 - d. Image
10. _____ can be used in warm-season turfgrasses for yellow and purple nutsedge control.
 - a. DSMA
 - b. Sencor
 - c. 2,4-D + diclorprop
 - d. Image
11. Roundup is classified as a:
 - a. amine
 - b. ester
 - c. non-selective
 - d. surfactant
12. Why are amines most effective when used in the spring?
 - a. the price is low during spring
 - b. the product is less volatile
 - c. the weed is most susceptible to control
13. According to research, Dimension's ability to control crabgrass declines:
 - a. when the temperature rises
 - b. when tillers number four or more
 - c. under high humidity
 - d. when spray volume is low
14. Nyctinasty refers to:
 - a. A leaf's reaction to light
 - b. The ability of a plant to absorb chemicals
 - c. The chemical similarity between esters and amines
15. The LD₅₀ of Roundup is:
 - a. 5600 mg/kg
 - b. 7200 mg/kg
 - c. 1500 mg/kg
 - d. 4700 mg/kg
16. The more lipophilic the leaf surface:
 - a. The prettier it looks
 - b. the easier it is to apply chemicals
 - c. the more difficult it is to retain water droplets
 - d. the more resistant it is to disease

ANSWERS: 1.a; 2.b; 3.c; 4.b; 5.d; 6.c; 7.a; 8.c; 9.c; 10.d; 11.c; 12.c; 13.b; 14.a; 15. b; 16. c

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| 0015 <input type="checkbox"/> Parks | 0065 <input type="checkbox"/> Airports |
| 0020 <input type="checkbox"/> Rights-of-way maintenance for highways, railroads & utilities | 0070 <input type="checkbox"/> Multiple government municipal facilities |
| 0025 <input type="checkbox"/> Schools, colleges & universities | <input type="checkbox"/> Other type of facility (specify) _____ |
| 0030 <input type="checkbox"/> Industrial & office parks/plants | _____ |
| 0045 <input type="checkbox"/> Condominiums/apartments/housing developments/hotels/resorts | _____ |

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| 0110 <input type="checkbox"/> Lawn care service companies | <input type="checkbox"/> Other contractor or service (specify) _____ |
| 0112 <input type="checkbox"/> Custom chemical applicators | _____ |
| 0125 <input type="checkbox"/> Landscape architects | _____ |

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| 0205 <input type="checkbox"/> Sod growers | <input type="checkbox"/> Other supplier (specify) _____ |
| 0210 <input type="checkbox"/> Dealers, distributors | _____ |

2. WHICH OF THE FOLLOWING BEST DESCRIBES YOUR TITLE? (Check only one)

- 10 EXECUTIVE/ADMINISTRATOR—President, owner, partner, director, general manager, chairman of the board, purchasing agent, director of physical plant
- 20 MANAGER/SUPERINTENDENT—Landscape/ground manager, superintendent, foreman, supervisor
- 30 GOVERNMENT OFFICIAL—Government commissioner, agent, other government official
- 40 SPECIALIST—Arborist, forester, architect, consultant, agronomist, pilot, instructor, researcher, horticulturalist, certified specialist
- 50 OTHER TITLED AND NON-TITLED PERSONNEL (specify) _____

Best-made tees: well-drained and roomy

There are two ways to "tee off" golfers: provide them with lush, spacious well-drained tees, or subject them to matchbook-sized tee surfaces with compacted soil.

Jim Latham sorta' thinks the former is the better way to go.

An agronomist with the USGA Green Section, Latham has seen the best and the worst the industry has to offer, and says the worst tees are brought about by a combination of poor cultural practices.

Start with drainage

Latham says that the best tees are well-drained, with a sand subsurface across the entire tee. "This way," he

Broken ball tees are a sure sign of rock-hard, compacted soil. Add water, ASAP.

explains, "as the tee is watered, moisture goes into the sand and off in all directions. The shoulders, made of heavier soil, direct water toward the drain tile.

"The better the drainage off the slopes," continues Latham, "the easier the slopes are to maintain" with heavy mowers or aerators.

Be on the lookout for more broken ball tees than usual; they're a sure sign of thirsty, rock hard soil.

Shift the wear around

When building tees, remember: the wider the tee, the easier it is to shift wear and tear from side to side as well as from front to back. This might be harder to do on No. 1, since that's usually the smallest tee on the course.

Latham quotes the USGA specs for tees: "for par 4 or 5 holes, we like to see about 100 square feet for every 1000 rounds played; with par threes, about 200 square feet per 1000 rounds. It takes that much space to keep up with the traffic over the long haul."

No trees on tees

Tees are for people. Large trees, when too close to tees, might just as well be weeds.

Especially, says Latham, with the cool-season grasses. They can't handle shade, traffic and competition for



Tees with lots of elbow room make it easier to control wear and tear from side to side and front to back.



Sand below the playing surface eliminates compaction, provides adequate tee drainage. Thicker soil on the slopes directs moisture towards the drain tile. Better drainage means easier mowing.

nutrients simultaneously.

If you suspect a root is robbing the turf of nutrients, but do not want to remove it, Latham recommends root pruning.

Let the poa alone

Latham takes a positive outlook when it comes to *Poa annua* on tees. If a tee has some poa established, says Latham, "why not capitalize on it, and give it hell. Over-water it, over-fertilize it, aerify it, do something with it."

Shrubby surrounding a tee might look good, but it's not considered a wise practice as it impedes air flow. "And without that air movement,"

says Latham, "we don't get evaporation. It's not giving the tee the necessary cooling effect," so important during warm weather.

Rye is recommended

Latham believes perennial ryegrass is "terrific" for cool-season tees.

"It comes up fast, produces well, can be cut at any height and looks pretty good if you seed them heavily enough."

When seeding new tees, Latham also recommends rolling the seed after it's put down to guarantee soil contact.

"It's such a simple thing," says Latham, "but so many times, a superintendent forgets to do it."

And don't forget to aerify.

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PRODUCTS

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From the Grasshopper Co. comes a new mid-size rider mower with 44- or 48-inch cutting decks and a variety of features.

Model 614 runs via a direct drive dual-hydrostatic system and dual levers for easy control. The model also boasts of zero-turning radius.

Among optional attachments are included an eight-cubic-foot grasscatching system, a 48-inch



multi-purpose dozer blade and a 48-inch snow thrower.

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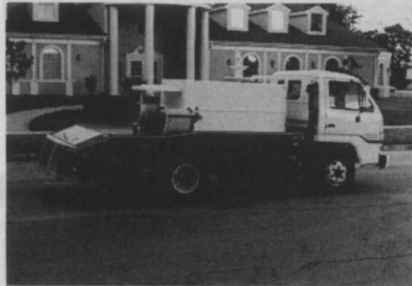
State-of-art spray truck now available

Neelco Industries, Inc. introduces its premier lawn spray truck line with its Premier model.

The truck, featured at the National Pest Control Convention in 1990, a 500-gallon baffled fiberglass holding tank and eight hp Wanna Hydra Cell pump.

The vehicle is designed for easy access to all valves including sight gauge for the drop tank, pressure gauge and the remote starter switch for the pump engine.

The vehicle comes equipped with



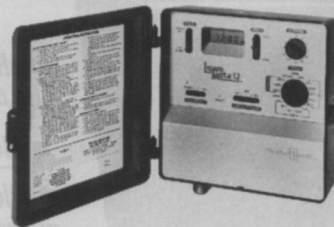
300 feet of half-inch hose spray mounted on the side and spooled on a Hannay electric reel. Neelco can custom build spray equipment to specifications.

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Two irrigation system controllers proving popular

Weather-Matic Co. says its two new LawnMate Controllers are being well received by irrigation specialists. Don Thompson, director of Weather-Matic's marketing and sales department says operation ease is one reason for the good reception.

LawnMate Controllers feature a nine volt standard alkaline battery



which automatically turns on in the event of power failure. Programs and clock time are uninterrupted for a week with the back-up system.

Thompson says LawnMate installation time is lessened because a lower panel is removable allowing ac-

cess to the field wiring terminal block. The unit is equipped with keyhole mounting.

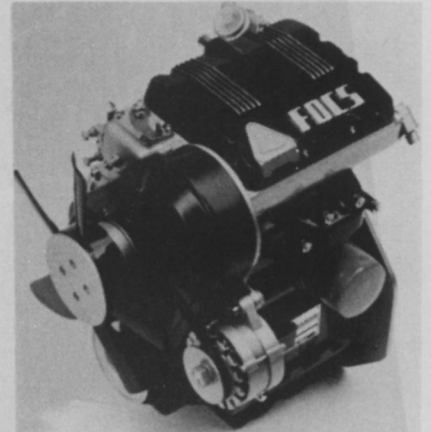
LCS information display includes time, date, watering days, program values and days of the week. Rocker switches are used for all programming.

Two models are designed for seven and 12 stations.

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continued on page 70

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PRODUCTS from page 68

Turf colorant now comes in tablet form

Becker-Underwood, Inc. now manufactures its popular Turf Mark colorant in tablet form.

The tablet is designed for use with most common backpack sprayers. Each tablet treats one to two gallons of spray solution. The tablets dissolve without agitation. Pond and fountain water may also be colored with the product.

The Turf Mark colorant mixes

well with all water soluble pesticides and fertilizers.

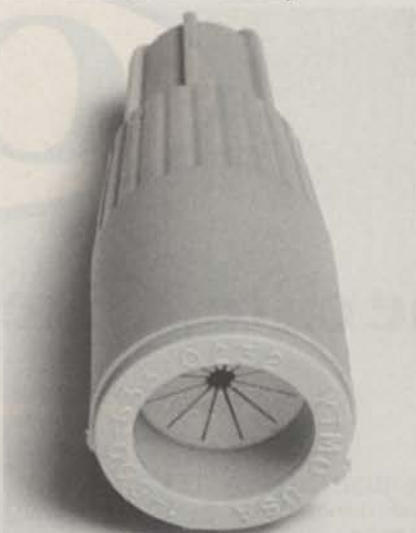
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New waterproof splicer simplifies electric joints

King Irrigation Products now offers a "one step" waterproof splicer which may be used on all low voltage systems where such a joint is desired.

Filled with a waterproof gel, the one-step wire connector can accommodate most common wire sizes from

three No. 22s to 4 No. 12s. King says use of the wire connector eliminates need for red, yellow, orange and blue or gray connectors. Once wires are passed through the cap, they are coated with a sealant. The connector is twisted for final sealing.



King says typical uses include residential and commercial outdoor lighting, fountains, waterfalls and marine and dock uses.

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Adjustable nozzle provides flexibility

The popular Toro Stream Rotor nozzle now comes in a more adjustable version, the company says.

The first adjustable Stream Rotor is



adjustable in the 16- to 30- foot range without changing nozzles. The new nozzle fits all bodies.

Circle No. 197 on Reader Inquiry Card

Clear bottle eases absorbent product use

From the Finn Corporation comes clear plastic bottle packaging of Hydro-Gel A 1000C; granules which soak up to 400 times their weight in water.

Finn says the plastic bottle also is equipped with a special shaker and pouring onto an affected area is an easy task.

continued on page 72

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