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*Consult your operator's manual for safety instructions when mowing hills.

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J-8-0

in the landscape for erosion control and durability in recreational areas, but turfgrass also has the highest seasonal maintenance requirement of any plant in the landscape, aside from annual flowers.

Trends in turf

The trend today is to use small islands of high-quality turf in the highly visible public areas of the landscape, and durable low-maintenance ground-covers whenever possible to replace turf.

Mow often enough so that no more than one-third of the leaf tissue is removed at any one mowing. The closer you mow, the more frequently you'll have to mow.

The idea of letting certain warm-season turfgrasses go dormant during drought is not acceptable to most commercial clients who are paying top dollar for a green landscape.

One of the key components of xeriscaping is to group plants in the landscape according to water needs. A low water-use zone, for instance would contain plants that could survive, once established, on what nature provides, while plants in the moderate water-use zone would be watered only when necessary.



This elaeagnus hedge is treated with Atrimec, which suppresses eight to ten weeks of growth with one application.

Zoning areas of a landscape in terms of maintenance requirements helps streamline follow-up maintenance practices.

Use shade to cool

A shaded landscape can be as much as 20° cooler than a similar landscape in full sun. It also requires less water than one in full sun.

Plants in the shade will generally grow slower than those in the sun, reducing maintenance needs.

Look closely at the building plan for hardscape surfaces, like concrete patios, walks, and other heat-radiat-

ing surfaces, and shade them whenever possible.

Select plants that will not overgrow their planting site and space them according to their mature size.

It's common to see plants like English laurel and rotunda holly being planted on two-foot centers when they should be spaced at least five feet apart. This is called "overselling" in the commercial landscape industry. Before long, the plants grow together and become thick and dense. Pests become a problem, and the plants begin losing their individuality as they are

continued on page 54

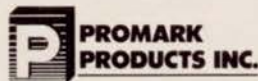
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shared en masse.

Mulches are a must in a low-maintenance landscape. They conserve water, insulate plant roots from extreme temperatures, help prevent weeds, reduce certain soil-borne diseases, and provide a buffer zone that prevents plant abuse from landscape equipment. Also, a good herbicide program and regular mulching will reduce the need for hand weeding.

Fine-textured organic mulches, like bark mini-nuggets or pine straw, are among the best for water con-

servation. Rock mulches absorb and radiate heat, causing unnecessary heat load and water loss in the landscape.

Install efficient irrigation systems. Drip irrigation and micro-sprinkler irrigation are much more efficient in water use than sprinkler irrigation.

Sprinkler systems should have matched precipitation rate nozzles for even distribution of water over the irrigated area. Low-cost rainfall sensors will prevent an irrigation system from operating during rainfall. Irriga-

tion systems on time clocks should be adjusted weekly according to rainfall patterns, time of year and water needs.

Don't shear

Shearing is not only stressful to the plants but also results in a thick, dense outer canopy, increased pest problems, and water-demanding new growth. It is among the most costly and highest maintenance practices in a landscape. The more you shear, the more you will need to shear to maintain a desired formal shape.


Chemical growth regulators may, in certain instances, offer a cost-effective alternative to pruning. They are particularly useful on formally pruned hedges or excessively vigorous shrubs. Growth can be suppressed for 12 weeks to 24 months with one application, depending on the product used.

Use of PGRs

Chemical edging with PGRs by spraying a four-inch swath of turf along shrub beds will reduce the cost of mechanical edging. PGRs are also available that will suppress sucker growth on plants like crepe myrtle and crabapple. Still other PGRs cause fruit abortion from messy trees, to prevent trees from growing into power lines, or to maintain the size of street trees.

Finally, computers are revolutionizing the landscaping industry. Cost accounting, plant locator programs, cost estimating and job bidding programs are now available to the landscaper to make his job more efficient, more accurate and less costly.

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*Scores selected from 1984 National Kentucky Bluegrass Test; Moscow, ID. Tested as IDSL39

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Dr. Wade is an associate professor and extension horticulturist with the University of Georgia Cooperation Extension Service in Athens, Ga.

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TAKE AIM AT SUCCESS

Success can be measured once you set and attain business, family and community goals.

by E.T. Wandtke

It's not easy to define success. The best definition might include success in four areas: personal finance, family life, company recognition, and public recognition.

What is your definition of success? Have you considered these four areas in charting your success? This article will give you a simple system to assist you in staying focused on your personal success goals.

Financial questions

Many individuals in the lawn/landscape industry have failed to set financial success goals, and therefore cannot determine their progress.

Some business owners define success as being able to take time off in the off-season and not worry about cash. How much cash you need to be able to take considerable time off without worrying about the business depends on your personal spending needs. Most financial planners indicate to their clients that at least one year's cash reserve should be enough.

Another measure of financial success is being able to take time off from daily business duties to enjoy time doing other activities.

What hobbies or activities do you engage in when you're away from the office? Have you started to wonder what you would do if you ever sold your company?

These questions can be answered if you have set a financial goal which will provide you the resources necessary to take time off or retire early.

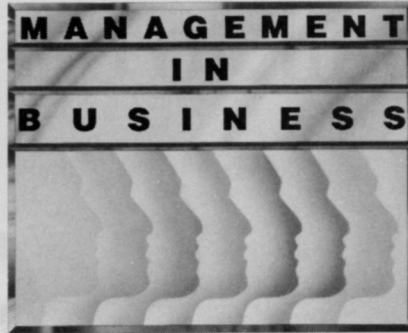
Set a personal financial goal for yourself that you want to achieve by the end of 1990. Do it now, and write it down.

Don't neglect family

Starting a lawn or landscape business and making it profitable requires that you devote lots of time to all aspects of the business. This often means time away from your family.

How much time have you been spending at home? Do you leave for home early on Friday night? Do you really have to go to work on Saturday and Sunday?

Some suggestions to help foster stronger family relationships are: in-



cluding your spouse in attendance at dinner meetings or at national conventions, or establishing a strict one-night-a-week-out-alone policy rather than a weekend evening.

To stay in touch with the rest of your family, you may consider having them work in the business when they are old enough. Attend the children's school functions or volunteer to help coach activities your children take part in. And take the time to get out of town with the whole family twice each year.

Meeting business goals

Most companies consider themselves successful if they meet or surpass their budgeted profitability for the year. However, many of you may not have set profitability goals for the year. How then can you determine if you have been successful?

Some measure their business success by how well they exceed the national standards of performance for a company of their size.

While this is one way of comparing your performance, it does not take into consideration the fact that your mix of service offerings may be different from the company you are comparing yourself to.

Another measure of business success is the continued financial viability of your company. This would mean that you completed the year with a profit, with positive cash flow, and have increased your customer base over last year.

Some individuals measure their business success by having reached certain milestones of volume performance. Being a million dollar company,

or being recognized as one of the largest companies in the green industry is a measure of success for some owners.

All of these business and financial measures of success can be used in any green industry company. The best way to use them is to write your company's financial success down and then work on it for the year.

In the public eye

For most, this measure of success comes either in the industry or in the community. Being selected an officer in one of the green industry organizations such as ALCA, PLCAA or PGMS would be considered a sign of success by many. Others require more, like being recognized by the community as a successful business person.

Public recognition often requires involvement in public service, which then requires a commitment of time and possibly money.

What time and financial commitment can you afford? Would you like to have others in your company involved? These are some of the questions you will need answers to in order to set your goals for determining community recognition and success.

Do it now!

Take time to write down your personal definition of success. Give yourself a target to shoot for. Quantify all items in order to be able to measure your degree of success.

Place a three-by-five card with your success goals on the mirror where you shave in the morning. Give a copy of your own definition of success to a good friend. Ask him to check with you from time to time to help keep you on track.

Once you have taken the time to write down your personal definition of success, you will become more focused in working to achieve the success you seek.

Next year at this time, you will be a success—or at least you will know what you need to work on to get there.

LM

Ed Wandtke is a senior consultant with AGMA, Inc. in Columbus, Ohio. He focuses on operations and financial questions.

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Waterscape designs look like nature's own

New designs, technology and construction methods have elevated the craft of waterscaping to new heights of form and beauty.

Some of the most artful strides in the craft are being made by MAC-AIRE, a Los Angeles-based waterscaping company, led by president Ken Macaire.

Macaire, a professional landscaper since 1969, has operated his own landscaping company and retail nursery business. He's now brought his talents and experience in landscaping to the fore, and has made waterscaping a specialty.

And it's a specialty that's more in demand by residential developers, hotels and golf course designers.

The difference between Macaire's designs and those of most other rockscapers is that Macaire individually designs dramatic and innovative rockwork and waterscapes that are geologically and regionally accurate for the surrounding environment.

"Quite often," says Macaire, "companies have gotten by with their name [recognition], and by pouring a whole lot of water over a rock.

"One architect I know says people aren't going to judge rockscapes like they used to. People aren't going to accept a whole lot of water and say 'Gee, that's a beautiful water feature.' Companies are going to have to make some tasty designs."

Macaire's designs for residential and commercial projects are seen in locations throughout Southern California, but the company is not restricted by state lines or even great distance. The King of Zaire was recently a client, and work in Japan appears to be on the horizon.

Attention to detail

Realistic waterscape designs by Macaire include:

- individually designed features, not just a redundant collection of castings;
- dramatic, innovative designs that are true to nature;
- leach lines, creating many levels of water flow;
- sculptured rockwork, integrated with natural stone.
- geologically and regionally accurate designs;
- plants designed directly into rockwork.

Wes Mason, project manager for Sumitomo Construction in Los Angeles, hired Macaire to install a boul-



"The look of natural beauty" is what Ken Macaire achieves with custom-designed waterscaping. This project was installed at the Mulholland Estates in Beverly Hills.

der pond for the Los Angeles Christian Reform Church, and was impressed with the waterscape's natural look.

"It's as real-looking as anything I've seen," says Mason, who thinks the Macaire waterscaping even rivals artificial stone work seen at tourist attractions such as Disneyland or Knotts Berry Farm. "They couldn't begin to touch Ken's work," states Mason. "If more people saw how realistic it was, they'd want to use it in lieu of other things. It doesn't look artificial, it looks real."

Macaire waterscaping projects usually require at least 2,000 square feet of rock work. This can include a diving rock, water slide and a retaining wall to recirculate water.

"There's no question about it; the look is beautiful; we're very happy with the way it looks," says Steve Dubow, who hired Macaire to install an outdoor spa waterscape at Dubow's new residence in Rancho Palos Verdes.

"It's very difficult to tell what is

real and what is not," Dubow claims. "The Macaire people are very knowledgeable, and are very good crafts people."

Quality waterscape designs by Macaire aren't cheap, given that all designs are made by hand and require two months installation time. "Usually, rock for a boulder pool costs at least as much as the pool itself and possibly 20 percent to 30 percent more," Macaire explains. "Theoretically, 'the man installing the pool is there for five days. We're there for two months.'"

Macaire estimates a typical project will cost from between \$30,000 to \$60,000.

The Macaire waterscaping process consists of six steps.

First, miniature clay models are made to provide a blueprint for construction. Steel rods are then shaped to form the basic rock outline. A cement coating is then applied, and the boulders are embossed with textured impressions. Wall panels are installed last, and the rockwork is painted to match the surroundings. **LM**

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

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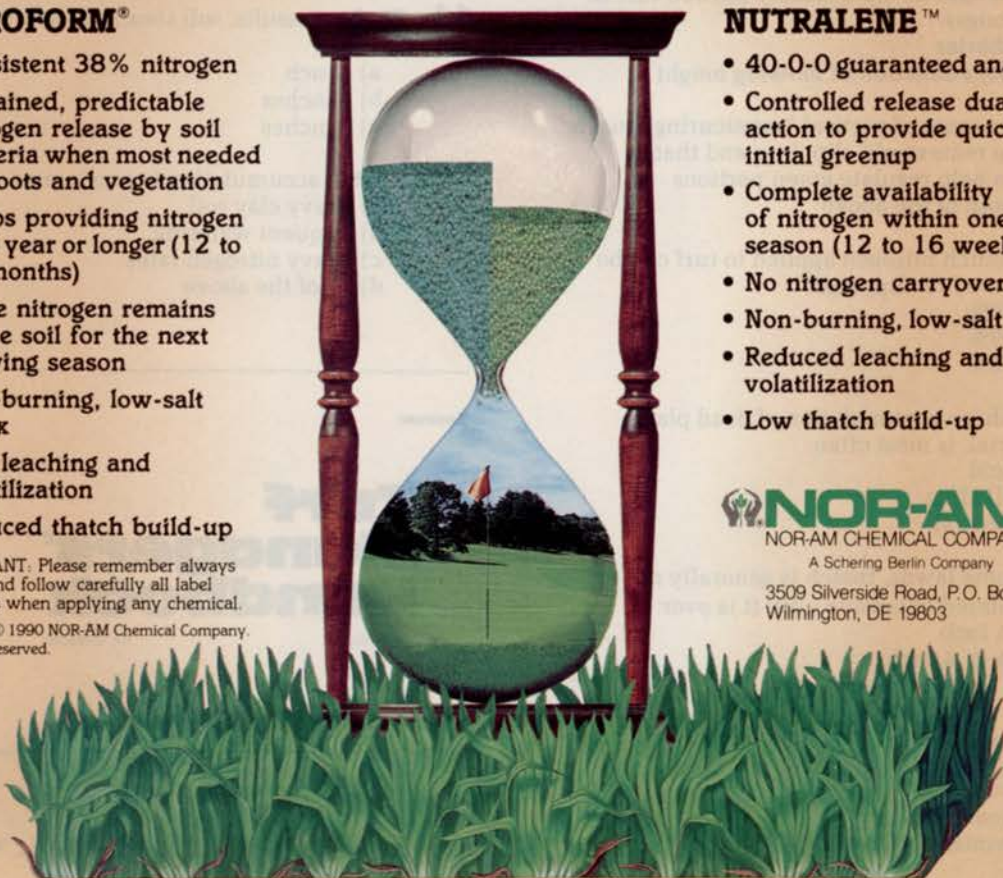
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Program	Clippings	Leaf Extension %
Ideal	No longer than height of cut	100
Acceptable	Longer than height of cut	150
Poor	Twice as long as height of cut	200
Neglect	More than twice as long as height of cut	over 200

- Mowing is needed when the ratio of new growth to mowing height is:
 - 1:1
 - 2:1
 - 3:1
- Best quality of cut is obtained with:
 - reel mowers
 - rotary mowers
 - flail mowers
- Root length in more closely-mowed turf is:
 - longer
 - shorter
 - not a function of mowing height
- The purpose of vertical "manicuring" turf is:
 - to remove old clippings and thatch
 - to help regulate green portions
 - both of the above
- How much nitrogen applied to turf can be recovered in clippings?
 - 25%
 - 50%
 - 75%
- Thatch, an accumulation of dead plant material, is most often:
 - acid
 - alkaline
 - neutral
- On home lawns, thatch is generally not considered excessive until it is over:
 - ¼ inch
 - ½ to ¾ inch
 - 1 to 1½ inches
- Excessive thatch may favor insects, diseases and:
 - puddling
 - heavy soil
 - winter desiccation
- Thatch can be avoided/alleviated by:
 - collecting clippings
 - fertilization
 - aeration
 - all of the above
- The most effective means of altering the rate of thatch decomposition is:
 - limiting fertilization
 - topdressing
 - introducing earthworms
- For best results, soil should be aerated to at least:
 - 1 inch
 - 3 inches
 - 6 inches
- Thatch accumulation is accelerated by:
 - heavy clay soil
 - frequent watering
 - heavy nitrogen rates
 - all of the above

Source:

Turf Managers' Handbook

W.H. DANIEL

R.P. FREEBORG

ANSWERS

1) a; 2) a; 3) b; 4) c; 5) b; 6) a; 7) b; 8) c; 9) c; 10) b; 11) b; 12) d