

LABOR, PACE OF TECHNOLOGY TO CHANGE STANDARDS IN THE 80's

By Bruce F. Shank, Editor

This article is a stab at the future of the Green Industry in the next ten years. I don't suggest this projection to do anymore than to help us all think about the next decade in order to grow and prosper. It is an exercise in planning by imagination combined with current events. You will have your own version, no doubt. But just to have taken the time to think about more than today is beneficial and even inspirational.

1980 will be a tight year probably. We can't stop at 1980. If you are a good businessman in the first place you have a handle on debt. Be careful, but don't stop planning, don't stop looking ahead, and don't stop growing.

As the Green Industry enters the 1980's two factors will stand out, the pace will be much faster and standards for design and maintenance will change.

The 1980's will be the decade of the quick-thinking, well-trained, and progressive businessman. The small businessman will have to be especially sharp to keep abreast of the larger companies with greater resources for new technology. Economies of scale will keep the big company ahead technologically and even or cheaper pricewise. Rising labor costs will stunt the growth of those companies unable to cut labor costs through technology.

There will continue to be special niches where the small business can make it, but these niches will be changed by new standards in design and maintenance of landscapes. These standards will change in response to population trends, higher priced and less willing labor, and rising costs of petroleum-based products. Three standards will evolve: native vegetation with minimal maintenance, intense use areas, and display landscapes for brightening population centers. The residential or commercial lawn will fall under the third standard.

Interior plant displays will abound as centralized shopping and entertainment centers begin to dominate and centralize human behavior. Population centers will be nearly continuous as they are in parts of Europe and Japan. Commuting to work from remote areas around cities will be less common.

The 1980's will bring smaller and better residential lawns, smaller but intensely used parks, increased apartment and condominium living, technologically advanced golf courses, and highway rights-of-way requiring little or no maintenance.

There will be a clear delineation between low and high maintenance landscapes. Architects will be encouraged to specify lower maintenance plants in their industrial landscapes, but more exotic and high maintenance plants in malls and other activity centers. Parks, commons, schools and athletic grounds will require additional maintenance as use increases. Athletic fields especially will have

to withstand extreme wear and be constructed to bounce back quickly. Versions of the Professional Athletic Turf (PAT) system originated by Daniels and Robey of Purdue will be necessary. Technological advances to enable turf to withstand extreme use will be developed in the next few years. Overall, parks and athletic areas will require more attention than they currently receive.

Numerous small parks could become an administrative problem for municipalities unless much of the maintenance is contracted out. Simplifying maintenance for the municipality and making the contractor more attractive an option would entail a broad service package including building maintenance, debris collection, initial reconstruction to make the park easier to maintain, and complete plant maintenance service. A weekly or even daily schedule for each park may be required to handle the demand placed upon the park grounds.

Similar conditions would exist for exterior and interior maintenance of malls and shopping centers. Offering a single service to the mall management lowers competitive advantage.

Lawn care will become the dominant method of care for non-irrigated industrial and residential property as the value of property rises. The lawn service, however, should be more inclusive of services such as mowing, pruning, planting, and design. Economies of scale would be achieved by specialized crews to handle specific tasks, combined turf and tree programs, and computerized routing.

Some residential tasks remain untouched by large lawn care companies, such as aerification, weed control and mulching around ornamentals, and thatching. Some lawn care firms choose to subcontract this type of work. Locating labor to perform such functions appears to be a problem, however.

Weed control and fertilization of both turf and ornamentals could be carried out by chemical injection into irrigation systems. Maintenance would thus be reduced to mowing, edging, and verticutting and aerification where needed.

In other words, many maintenance considerations will be solved at construction time rather than by continuous care. For example, although an irrigation system may seem a luxury, it could lower maintenance costs over the life of the system by reducing labor costs for fertilization, weed control, and irrigation. Small-scale irrigation systems which include injection devices will be offered soon, as well as a line of chemicals for injection systems. Growth regulators will be one of the chemicals to be applied by irrigation systems. Closer attention to soil pH and microbial conditions of the turf will control thatch accumulation. Correction of pH will be accomplished through irrigation injection.

Installation and maintenance of small-scale irrigation systems will create a new niche for Green Industry businessmen.



Golf courses, especially public courses, will be forced to adapt to intense use as the number of courses in relationship to the population decreases. New courses built as new population centers evolve will be designed and constructed with intense use in mind. Greens and tees will be much larger. Maintenance standards will change, especially for roughs. Native, low maintenance plants will dominate the rough to concentrate maintenance efforts on tees, fairways, hazards and greens.

Larger, more efficient equipment will be utilized to mow, aerify, and spray. Injection irrigation will take over much of the fertilization and weed control, especially on new courses. To gain better control of turf conditions, specifications for new courses will include improved drainage, thorough irrigation, better turfgrass cultivars, and careful composition of the rootzone. These specifications will increase construction costs but control maintenance costs in the future. Older courses will gradually renovate to gain more control of turf conditions.

Unrestricted use of golf carts will cease. Ways to keep carts in the cart paths will emerge. Ball location will also require some solution. If roughs go native, locating balls will be more difficult and more time consuming. Golfers aren't going to leave many \$1.25 golf balls in the rough. Some provision will have to be made to make ball searching less desirable to the golfer. Changing rules to penalize slow play could have some effect, but poor golfers care more about the relatively expensive golf ball than they do their score.

It is imperative that government agencies stop subsidizing municipal courses so that the greens fee can rise to a level determined through competition by daily fee courses. If subsidies don't stop, many daily fee courses will be unable to cover rising maintenance costs and return a profit to shareholders too. Perhaps the pressure for zero-base budgeting will stop such frivolous and unfair subsidizing.

Use of secondary treated effluent water for golf courses and sod farms will increase. Management will have to provide monitoring devices, to hire someone who can understand water organisms and content, and to work closely with water management districts. The technology of irrigation with ef-

In the 80's, there will be higher standards for plant materials and maintenance in population centers and reduced emphasis or native standard for remote areas.



fluent will be developed under Federal support and private research.

Effluent water will play a significant role in reclamation in the 1980's. Although native plant species will be used, irrigation will be needed to speed up natural establishment. Coal development will happen in a big way with reclamation right behind. The scale of the projects may limit contracting to large, equipped companies. The key that will prevent any local farmer with a seed drill to underbid will be understanding of native plant species and their proper establishment. Only well-trained horticulturists with knowledge of native plant material should direct large-scale reclamation efforts. The Department of Interior must stand firm on specifications for reclamation under the guidance of experts in native plant material. Coal companies won't like picky specs on native plants and they will resist them until the Department of Interior shows its insistence and determination to reject anything less. Once the point is made, however, they will make the necessary commitment to secure the coal and restore the land as quickly as possible.

As farms turn into housing developments, man will bring with him his tree, ornamental, and lawn standards. These standards will be higher as well in the new decade. Occupations involving the care of man's green world will grow. But higher standards will mean a need for increased knowledge and sophistication by Green Industry professionals.

With or without Federal support through Urban Forestry programs, greater attention will be paid to the urban environment. The arborist, the landscape contractor, the lawn care specialist, the nurseryman, and the extension agent will be dealing with a broader variety of plant materials. Factors such as irrigation and soil pH will be considered by property owners. Plant and forget will be reserved for remote, unpopulated areas. The population centers will become urban plant show-cases, each with a special natural feeling to ease man's anxiety under more crowded conditions. Man has learned from his concrete jungle mistakes and will strive to avoid their recurrence. The Green Industry businessman will show him how.

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