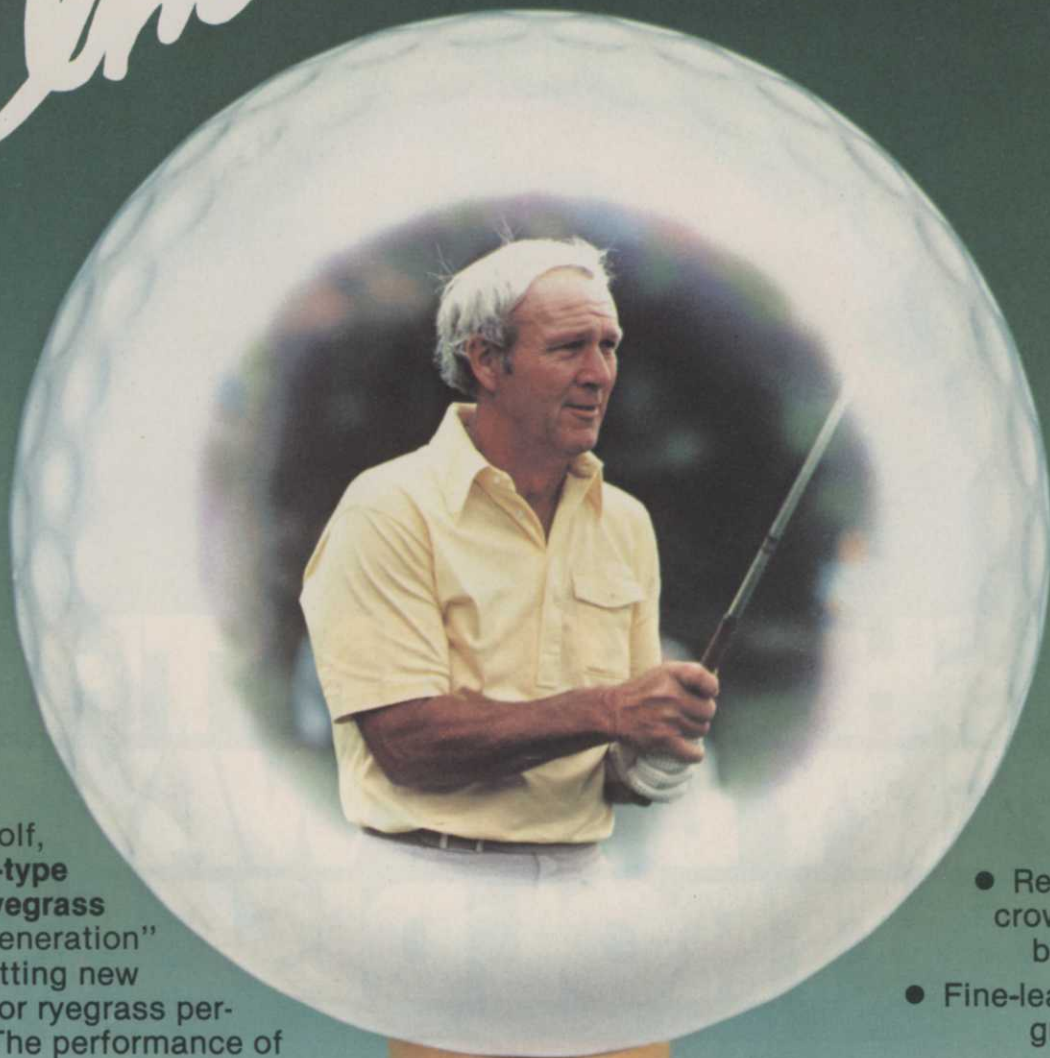


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- Good winter hardiness
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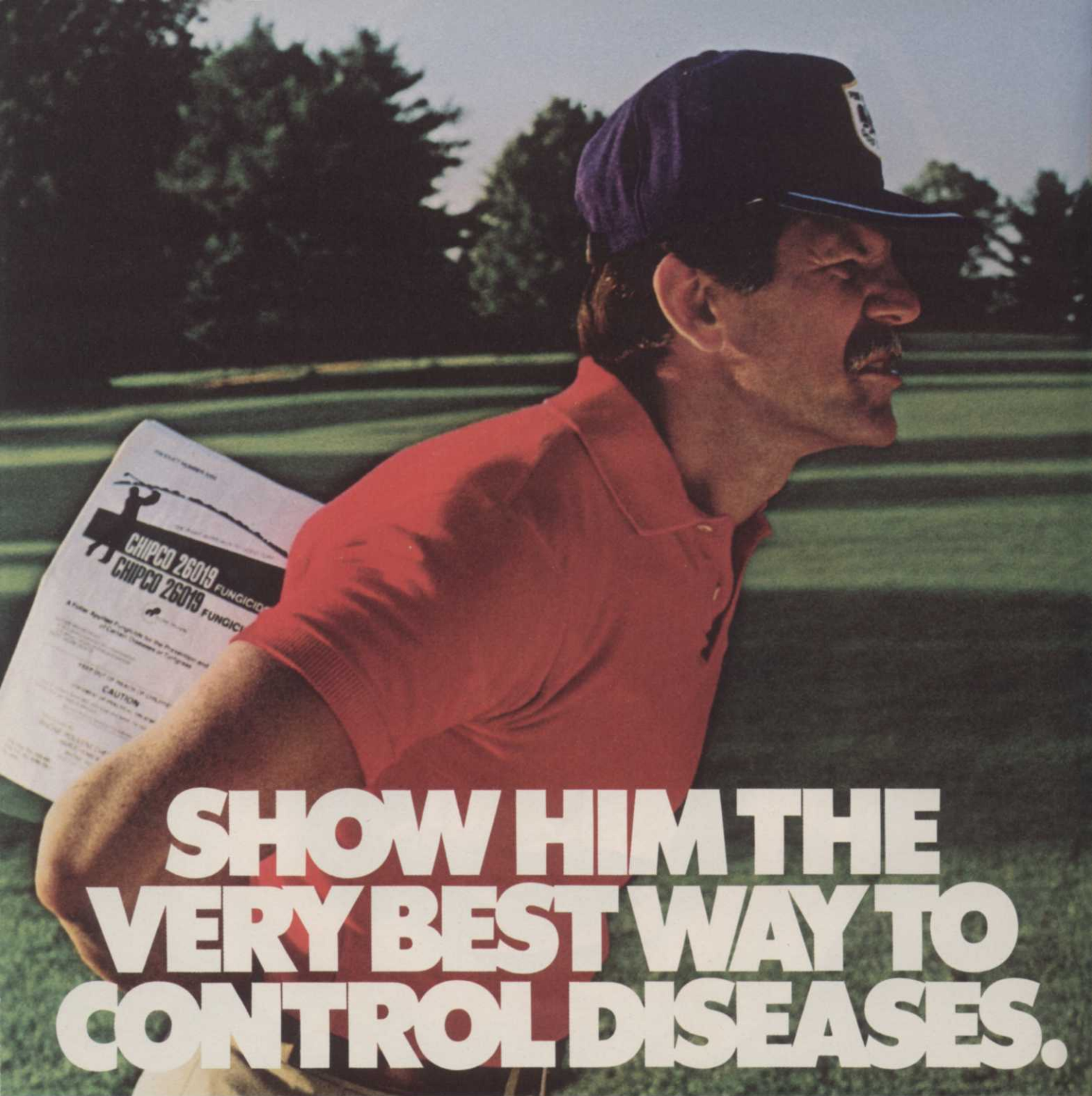
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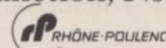
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Tees were verticut and overseeded with Penneagle creeping bentgrass.



Verticutting to soil depth insured seed contact with soil.

same thing on the 14th hole; we re-graded the area and cleaned out the woods which gave us more gallery room."

The third concern was with the heavy Western Pennsylvania clay soil. "Some of our bunkers are so deep we had to pump water out of them. Others, we had to dig deeper," Latshaw said. "We added drainage systems to 1/3 of our bunkers.

During the renovation, which took place from the summer of '81 until December of '82, Latshaw had another challenge at the back of his mind; that of preserving the

original design of the course as much as possible. Oakmont was founded in 1903 by W.C. Fownes who structured the course much like a seacoast course in Scotland, one of the reasons for all the bunkers. The sandy seacoast was even copied by having sand ditches at various places on the course.

"Those ditches make it really difficult because all of the maintenance on them has to be done by hand. It also changed the drainage patterns."

Even with the disadvantages, Latshaw replaced the original sand ditches on holes 2 and 15 to pre-

serve the authenticity of the course.

"They provide a real good hazard," Latshaw said jokingly. "The changes have been so natural in all phases of the renovation that most members don't even know we've done them."

All of the finishing touches in the project were done by hand; in fact, Latshaw estimates that the lion's share of the work was hand done. It was a slow process. The equipment used was mainly a Ford front-end loader backhoe and a "boxscraper" mounted on a three-point hitch tractor. Because of all the excess soil coming out of the bunkers, a dump truck was used extensively. Two Jacobsen UV-4s provided the four-wheel drive needed to go down in and back out of the bunkers. A Ditch Witch dug drains. "We used a lot of rakes, shovels and back power, too," he said.

All of the work was done by Latshaw and his full-time crew of three.

"The committee was under the impression we could do it all ourselves, which, manually, we did. But I did call in Fred Garbin, a local golf course architect, for his expertise. He was a tremendous asset.

"He had a lot of patience and I can be difficult to work with at times," Latshaw joked.

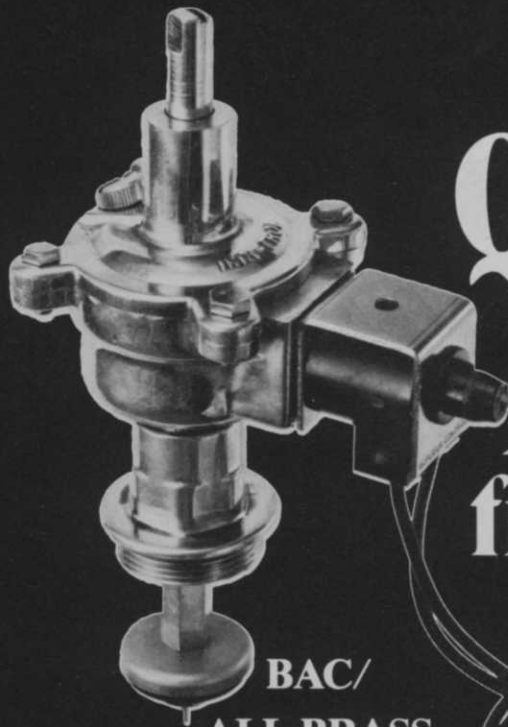
Dr. Joseph Duich, Professor of Turfgrass Science at Penn State University also consulted on the seeding of the project.

"Joe and I are good friends," Latshaw said. "He's the right guy to have around on all aspects of a project like this."

In order to have the golf course in the finest condition possible for the tournament, all of the fairways were aerified with a Ryan's Greensaire.

"Normally, we use this for greens and tees, but found it had a number of advantages being used on the fairways," Latshaw said. "For one thing, it brought up lots of soil and made a good seedbed for our overseeding program. I'm a firm believer in Penneagle creeping bentgrass. It can really compete with poa annua."

continued on page 82



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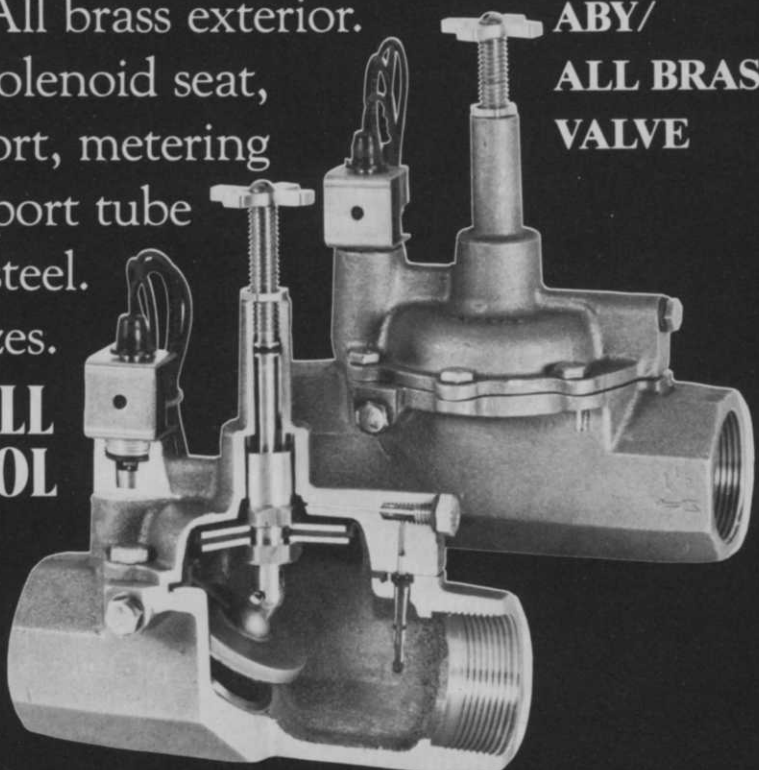
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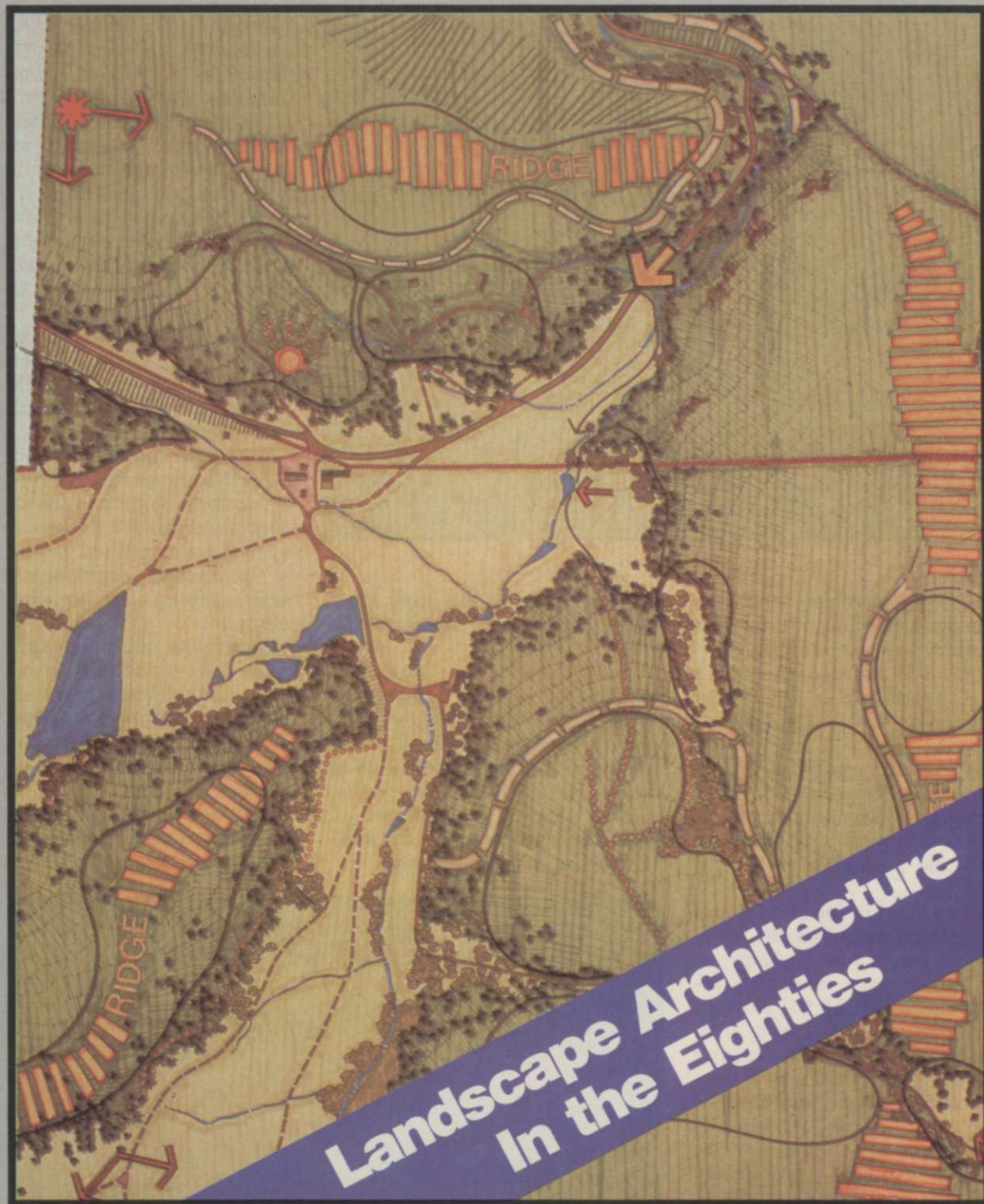
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LANDSCAPE MANAGEMENT



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IMAGE AND MAINTENANCE

Landscape architects don't hesitate to step in on maintenance of their designs.

Instability in the construction market was a distant third at 37 percent as a problem. Close behind this were competition from unlicensed designers, variety of plant material produced, size of plant material available, and quality of plant material from nurseries. Only one out of five felt the quality of landscape architecture graduates was a problem and very few were concerned about the future supply of graduates.

More than half the respondents had ten or less years of experience in the practice, an indication the field attracts a healthy number of college students.

Education and experience are by far the primary sources of information for architects in selection of plant materials for designs. Nurserymen are consulted more often by landscape architects than books, publications, or extension personnel.

Landscape architects are not hesitant to participate in maintenance of their designs through inspections and recommendations. Three fourths charge for supervision or inspection of installation and 40 percent charge for making suggestions and recommendations for maintenance. Nearly half the architects recommend contractors

TABLE 1

Type of Firm

Type	Percent
Landscape Architecture Firm	56
Government Agency	20
General Architecture Firm	11
Landscape Contracting Firm	8
Multi-disciplinary, architecture, landscape, engineering, planning	6

The landscape architect today is very image conscious and worries most about contractors doing installation and maintenance of his design, according to the latest *Weeds Trees & Turf* market survey.

The LAs also rated use of low maintenance plant material and the growth of design/build companies to be the areas of greatest impact on the profession in the future.

Readex, an independent research company, polled 285 landscape architects in January. It found the average landscape architect to have 13.5 years of experience, works for a firm specializing in landscape architecture, and is part of a five-person staff. The primary types of design work they do, in order of responses, are commercial buildings, public properties, residential, and irrigation design. The secondary areas of concentration are interior landscape design, residential, irrigation, public properties and commercial. Golf course

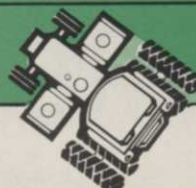
and highways are the areas landscape contractors are least involved.

More than 80 percent cited maintenance of their designs after installation as their biggest problem. Two thirds mentioned the reliability of contractors doing installation as a problem. One architect said this concern, plus speed of job completion, as the major force behind design/build companies.

TABLE 2

Level of Involvement in Following areas

Area	Great	Some	None
Commercial	49%	36%	9%
Public lands	39%	41%	13%
Highways	10%	28%	42%
Residential	37%	43%	15%
Irrigation	27%	41%	22%
Interior	6%	49%	33%
Golf	5%	26%	55%



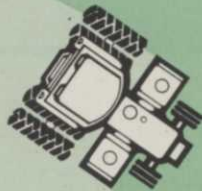


TABLE 3
Reference Sources

Own education/experience	90%
Nurserymen	72%
Journals/magazines	56%
Association Publications	51%
Extension Releases	46%

or references to owners of properties they have designed.

Without being asked, nearly a tenth of the architects mentioned a misperception of the LA's work as a problem. "LA firms are a prime consultant to owners rather than sub-consultants to the general architect and engineering firms," said one respondent. Another said the image problem is mainly with the mid-size projects. "A significant gap exists between the very large project where the LA's services are considered essential, and the single-family residence work designed and installed by the contractor. The vast majority of these 'between' projects never get professional design attention."

Other factors which concern LAs are the lack of standard specifications, the difficulty of keeping current, and underqualified designers. One respondent

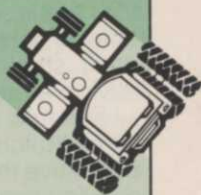
claimed, "The number of highly competitive, small contracting firms dilutes the quality of finished jobs. Owners, therefore, are dissatisfied with landscape contractors in general. Many owners are starting their own nurseries and buying plant material directly from suppliers. LAs have reduced roles and therefore reduced fees."

This lack of recognition for the mid-size design, the increase in design/build firms, and the poor image of small jobs seem to be encouraging landscape architects to associate themselves more with regional planning and large scale consulting. As one LA said, "The landscape architect's influence and presence is in the regional and planning scale of projects. There may be less involvement in planting plan work as a major source of income."

The future for landscape architecture appears greatly tied to computer design and drafting. Some call it computer aided design or modeling. Stored data can be ac-

TABLE 4
Biggest Problems Facing Landscape Architecture

Quality of maintenance after installation	81%
Reliability of contractors doing installation	65%
Instability of construction market	37%
Competition from unlicensed designers	34%
Variety of plant material	34%
Public misperception of landscape architect	34%
Size of plant material	30%
Quality of landscape architect graduates	20%
Price of landscape architecture services	17%



cessed to design jobs not unlike computer graphics in automobile or building design. Plant selection information can be more specific based upon site conditions, own-

Landscape architects are not hesitant to participate in maintenance of their designs through inspections and recommendations.

er's desires, and the latest plant resistance information.

One architect predicted a decline in government funded work, saying LAs are too dependent on that type of work.

Underneath the business of landscape architecture, the artist and the idealist in LA's express themselves with a sense of responsibility for the preservation of nature in the midst of modernization and growth. **WTT**

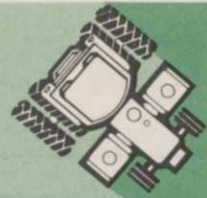


TABLE 5
Future Impact of Trends

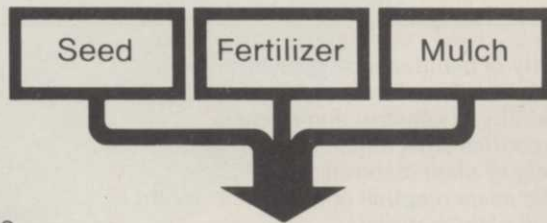
	highly significant	significant	insignificant
Low-maintenance plants	56%	38%	4%
Drip irrigation	22%	50%	18%
Interior landscaping	27%	52%	14%
Propagation by cuttage	7%	32%	42%
Container over bare root	24%	39%	26%
LA involvement in maintenance	37%	47%	11%
Design/build firms	45%	42%	7%
Government work	30%	43%	16%

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