DESIGN from page 8
commissioned a study by Dr. Martin Petrovic of Cornell University on the effects of nitrates on groundwater." That report was to be available in May.

Dye believes more concrete data is required to support the idea that properly maintained facilities embellish, rather than destroy, the environment.

"No issue has raised the level of consciousness higher than the subject of wetland and marshland boundaries," says Dye. "Thus, integrating wetlands into the framework of a Master Plan without jeopardizing the natural habitat or course playability has become a major challenge to golf course architects."

Dye says wetlands have become a high priority of regulatory agencies. That concern and subsequent public hearings have resulted in a slower permit procurement process.

"Wetlands have been reduced to less than 99 million acres from the 215 that existed in 17th century America," says Dye. "So it is imperative we protect a valuable natural resource."

NEXT MONTH:
Bio-control of turf pests

INDUSTRY

Universal Studios gets a giant

ORLANDO, Fla. — An extraordinary project came Ed Yates's way recently: uproot, transport and replant a 38-foot Phoenix reclinata palm tree.

Yates's Lakeshore Tree Moving was contracted by Universal Studios to move the tree from an area nursery to the movie company's soon-to-be-completed Orlando lot. Developer Marshall Cohn had purchased the nursery land, and was looking for ways to clear it for a condominium complex.

Moving the 43-year-old tree 13 miles required a lot of planning. "We had some small problems, but we solved them as they came up," says Yates. "We started by going up into the tree with a sky reach to clean it. We then dug a 12-inch trench around the ball, and filled the trench with sawdust. We cut the ball in two halves with chain saws and cross-cut saws."

The police escort would not be available for two days, during which time the tree ball was insulated and received constant watering. Yates says replanting the two halves exactly as they had originally been took about two hours.

Universal Studios/Florida opens in May, 1990.

Ransomes consummates Cushman buy; also purchases Salsco line of products

JOHNSON CREEK, Wis. — Landscape managers will still be able to purchase Cushman equipment from their usual distributors despite a major deal in which product lines changed hands last month.

Ransomes PLC added to its influence on the turf equipment market by first purchasing products previously marketed by Salsco Inc. Then, it purchased Cushman from OMC Lincoln for a reported $150 million.

The Cushman group includes Cushman turf vehicles and mowers, Ryan aerators and sod cutters, and Brouwer mowers, vacuums and sod harvesting equipment. The group will be run as an independent entity under the Ransomes America umbrella.

"Cushman will operate as before," says Helmut Adam, president of Ransomes America. "It is a well-run company with a good name. We are not going to change something
Just like a small sod cutter, the Blade does not spin, the oscillating motion does not throw debris.

Self-propelled and push models available.

Rugged design for commercial use.

Optional Blades:
- Disc Blade for cutting straight edge along sidewalks and driveways.
- Right Angle Blade for golf course sand traps, and flower beds.
- "V" Blade for removing a strip of turf along a sidewalk.

Write or call for detailed literature.

TURFCO
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AMHERST, N.H. — The National Arborist Association is preparing to meet with representatives of the Occupational Safety and Health Administration in Washington next month to challenge OSHA's proposed Vertical Standard regulation.

The NAA will give testimony at public hearings in Washington on Nov. 28 and in California Dec. 12.

By late August, more than 75 firms had expressed dissatisfaction to OSHA regulation with representatives of the National Arborist Association for a reported $2 million.

Those products—which include walk-behind, tow and riding core aerators; a slicer/seeder; a walk-behind dethatcher; self-propelled drop spreaders; tailgate and towed truck loaders and a walk-behind leaf blower—will now be marketed through Ransomes dealers.

Despite the sale, Salsco plans to remain in the turf field. President Sal Rizzo says the company will introduce new products at the upcoming PLCAA show next month.

TURFCO
Pre-grown grass to enter the U.S.

ESSONNE, France — A new pre-grown grass said to be weed- and disease-resistant is being marketed in the U.S. by France's Darbonne Corp.

According to press reports, Minute Grass is more flexible and durable than sod grown in soil, and is said to remain green year-round.

Minute Grass uses a technology that involves mixing a customer's choice of grass seed with bark containing natural resins. The mix is then spread mechanically over a perforated micro-plastic film. Because Minute Grass is grown densely above the surface, it is impervious to weed and other impurities, according to Darbonne Corp. Minute Grass can be grown on tile, concrete, sloped hillsides, balconies and patios. Darbonne reports that it is three times lighter than sod, three times more prolific in growing season and can be stored under 29°F refrigeration for up to six months.

For more information on Minute Grass, contact Darbonne Corp. at: 6, Bd. Joffry, Milly La Foret, Essonne, France 91490.

TURFGRASS
Pre-grown grass to enter the U.S.

NAA is set to battle OSHA's regulation in Washington soon

Members urged to support NAA

Bob Felix: dissatisfied with OSHA's Vertical Standard
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For more information, contact Mobay Corporation, Specialty Products Group, Box 4913, Kansas City, MO 64120.

Circle No. 122 on Reader Inquiry Card
THOSE DARN LAWYERS...may be standing in the way of research to determine athletic field hardness, says Dr. Bob Carrow of the University of Georgia. Carrow told attendees at the Sixth International Turfgrass Research Conference that research is stalled because no one wants to stick their necks out by saying a field is safe, then be called into court as an "expert witness" if and when an athlete is injured.

LOOKING FOR ALTERNATIVES...in available grass species was the goal of a recent study at Ohio State University. The North Central Regional Turfgrass Research Group—led by Jill Taylor, Jim Simmons and Karl Danneberger—initiated a study and evaluated the use of alternative grass species for use in the Midwest. The group believes some of the species would do well in low maintenance areas. Sixteen species were evaluated on a scale of 1 to 9, with 9 being the best score. Best color (all readings are at a height of 2 inches) was recorded by Alta tall fescue, 6.8. Highest density grass was Colt rough bluegrass, 7.5; best in the quality category was again Alta tall fescue, 6.3. Alta recorded the best total score at the two-inch height, with 19.4 out of a total 27 points.

MORE RESEARCH...Other recent OSU experiments included an attempt at tall fescue control in Kentucky bluegrass turf beyond the usual spot treatments. Drs. John Street, Bill Pound and Jim Simmons applied two formulations of Lesco TFC to an established tall fescue stand on April 25 and June 1. Applications of 2 oz. and 4 oz. of active ingredient were made to an established Kentucky bluegrass cultivar on May 1. In general, the 2 oz. rate provided 90 percent control, and the 2 oz. + 2 oz. and 4 oz. rates provide control at 95 percent. There was no difference in percent control between the two TFC formulations. Kill of tall fescue required six to eight weeks. Discoloration of tall fescue began 10 days after treatment.

TURF FOR PEACE..."Today, the more civilized and peaceful a country is, the more [formal] turf is used," says Dr. Fumio Kitamura, organizing committee chairman of the Sixth International Turfgrass Research Conference. He adds, "When our lives become more comfortable, the importance of grass increases as a place where we can get close to it, enjoy it, play and relax on it. Turf is now a symbol of civilization, peace and affluence."
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Circle No. 261 on Reader Inquiry Card
A real 'Easy Rider'

MILWAUKEE — Bill Smithyman, landscape operations supervisor for the City of Milwaukee (Wisc.), is the original "Easy Rider." He spends more time touring the streets than Peter Fonda and Dennis Hopper did in the 1969 motion picture.

Milwaukee, you see, has more than 119 miles of highway medians, most about 20 yards wide, 95 percent of which are irrigated. That's more than 450 acres, and it's Smithyman's responsibility to keep all those shrubs, trees and grass plants green.

He assigns one person to every two miles of boulevard. That person is in charge of weeding, edging, cultivating, picking up debris and manually turning irrigation on and off. Thirteen mowing crews of two to three persons each supplement the one-person maintenance crews.

"Milwaukee's had this system for eons," the veteran landscaper explains.

In 1988, Smithyman's 160 summer employees planted 424 trees, 6,375 shrubs and evergreens, more than 180,000 annuals and almost 6,000 perennials and bulbs.

"If you look at a landscape and you just have turf that is well maintained, it looks great," Smithyman philosophizes. "But trees are a major-profile plant material. They are also the easiest and least costly to add. Then, too, shrubs are another element in your profile."

Smithyman has found that pinching a penny here and there pays off with the city administration when a special project is requested. "We have been very fortunate," he notes. "That's not to say there aren't programs that couldn't use more money. But we operate on a first-class basis and it's paid off when it comes to bottom-of-the-line budget. I believe it's a result of our professionalism."

Plenty of chances to save money exist within the confines of the government structure. For instance, a shredder was borrowed from Milwaukee County last year to shred leaves for composting. "We've got some pretty good stuff," Smithyman notes, saving the city money it would've spent on both debris disposal and buying mulch.

Fifteen miles of drainage slopes are mowed by the department's Hustler 602 mowers. Time and labor are...
charged back to the Sewer Department. More and more, Smithyman's crews help with snow removal in the winter. The boulevards are watered three times a week with water from Lake Superior; water bills are based on acreage.

Most importantly, training and incentives are a big part of keeping valuable employees.

"Bob Skiera, our city forester since the early 1970s, has a philosophy of bringing in the best people at all levels." Smithyman relates. "That gets back to professionalism."

Smithyman's smile reeks of pride. And justifiably so, judging by the work his department does.

"We want to enhance the quality of life in the city of Milwaukee. We feel that we're meeting that goal; it's a good place to live."

—Jerry Roche

**Forging a country club image**

NORTH OLMSTED, Ohio — Bill Prest's current mission in life is a worthy one: to create a country club image while charging a public golf course price.

Prest is the superintendent of Springvale Country Club in this Cleveland suburb. He wants to give the club a distinctly professional look, regardless of the number of Sunday golfers who walk his fairways.

Part of the image upgrade has been accomplished by gradually adding sand traps. "There aren't many public courses with extensive sand," explains Prest. He is placing the traps in such a way that they don't slow down play. "There's nothing worse than a four-hour round of golf that turns into six hours," says Prest. "We've placed these fairway traps so that 90 percent of the play doesn't hit them. They're more cosmetic. At the same time, traps will be in play for lower handicapped golfers."

Prest installed nine traps this past summer, which will bring the course total to 40. The course had 18 when he became superintendent 23 years ago.

Prest has done more than just add sand to the course. He began an overall renovation program five years ago which included an aggressive schedule: "300 new trees, 15 traps and four or five new tees," says Prest. "We've also started renovating the irrigation system and have done some mound building." Dirt for the mounds came from a company working on a housing project next door to the club. The developer gladly supplied Springvale with 100,000 yards of topsoil rather than pay for hauling it away.

Prest, a graduate of the University of Massachusetts, says all renovations are in line with presenting a continued on page 18

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Reader disputes architect's rule

To the editor:

In the July 1989 issue under your column "As I See It," you seem to draw the conclusion that the landscape architect is the project leader as it relates to landscaping and irrigation.

It is my experience in doing major landscape contracting that the landscape architect's roles are limited.

In theory, his work is completed (early on), unless he has a per diem contract with the builder.

I consider the contractor to be the key in completing a job in a fast, efficient and practical way to insure the builder's advertisement specials and certificates of occupancy.

We never install materials that are not specified by the builder. But to get hold of a landscape architect (since they consider us to be beneath them) is like getting hold of the president. Some architects set themselves up on a pedestal. Because they wear a suit and tie and sit in an air-conditioned office, they have no concept of the 32°F in the freezing rain or 95°F without the wind blowing.

I would suggest that architects do not take an active part in projects, and force contractors to make their decisions on the spot in order to satisfy their customers who are paying them. We are being paid by the customer and not by the architect; therein lies the key! If the landscape architect wanted to stop a project, the contractor would be blamed.

James H. Taylor
Taylor Made Landscaping
Farmingdale
New Jersey

Wildflowers work in shade

To the editor:

In the July "Problem Management," Dr. Rao was not correct when he agreed that wildflower seedlings or sod cannot survive in the filtered sunlight of a forest. He accepted the Montana reader's comment that "wildflowers won't work" without questioning the statement.

Wildflower germination in filtered sunlight will occur, assuring reasonable soil conditions and some level of moisture.

Columbine, ox-eye, coreopsis and corn poppy are among those which can survive in less-than-ideal (but not impossible) low level sunlight.

We can offer Dr. Rao a few jobs, some recent, where success on a scale of 1 to 10 has been a 6 or 7. This is not out of the range of acceptability, since turf (or ground cover), in many cases, does not reach this level under more ideal conditions than those described.

We, however, have always appreciated the good doctor's sensible and knowledgable comments in the past and always look forward to his management page.

Norm Krisburg
Agro Dynamics
Plainfield
New Jersey

Correcting desert plant references

To the editor:

Thank you for the beautiful two-page spread on the landscape project at Sun Valley, Ariz, in the June issue. The photo on page 34 really shows off the Sonoran Desert in all its beauty, and one can envision the highway (shown on page 35) transformed into a setting of equal splendor.

Our desert plants are indeed exotic. So exotic, in fact, that your copy editor, in condensing a few paragraphs from my original story, combined my descriptions of the yucca and ocotillo. Many of your readers who know the desert will catch the error.

The plant you have described as a yucca is the ocotillo pictured on page 34 to the right of the photo; it's the spiny upright plant in the foreground with orange plumes. A yucca, on the other hand, is the type of plant you may recognize as "Spanish bayonet," which is one of its commonly-distributed varieties.

Thank you for the opportunity to write for your magazine.

Joan C. Risley
Risley & Assoc.
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PREST from page 17
country club image. "We were a flat, wide open, boring golf course," he remembers. "A lot of young public golf courses in this area are like that." Prest has installed wall-to-wall cart paths, connecting all but two holes. A great advantage in wet weather, the paths enable Springvale to run carts on wet days when other courses dare not tear up the fairways with tire tracks. And carts are mandatory on weekends.

"That has allowed us to get more players on the course at one time and get more players through."

In parts of the course, Prest has gone to low maintenance flower beds, longer grass reminiscent of the Scottish courses, and mulch. Low maintenance areas also serve to divide the course into playable and out-of-play areas.

He's even started a small tree farm in a low maintenance, out-of-play area.

How's that for initiative? —Terry McIver
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Circle No. 130 on Reader Inquiry Card

POLARIS
Believe It.
Rosabeth Moss Kanter of the Harvard University Business School has issued a stern warning to American business via Business Month magazine:

"Companies will have to figure out how to make work better. They will have to think of ways to give people careers they can be proud of."

This is the problem confronting the green industry as it heads into the 1990s. Why? Consider these facts, so boldly suggested by Fortune magazine:

- "The employment rate in the '90s will be lower than in the '70s and '80s.
- "As baby-boomers age, they will leave a demographic vacuum in their wake, confronting managers with a scarcity of entry-level job seekers.
- "Growth of the workforce will slow from 2.4% per year in the '80s to 1.2% in the '90s.
- "The Hispanic population will grow by 33%, the U.S. population by less than 10%.
- "U.S.-born white males will make up only about 15% of the net increase in the labor force.
- "Companies that can't learn to attract women, blacks, Hispanics or Asian men will face a shrinking pool of desirable employees."

The pendulum shifts

During the last 10 years, the green industry used much of its resources to address legislation affecting pesticide use and workers' rights. (Rightfully so.) But the 1990s bring new problems.

"It's a social issue, not a governmental one," says Alan Shulder, executive director of the Professional Grounds Management Society (PGMS). "How do we get the young people? They can work at McDonald's for $4.50 an hour; they're in an air-conditioned setting with flexible hours. In the green industry, they would be working in the summer heat at $4.00 an hour and they'd have to be to work at 6 or 6:30 a.m.

"The industry is just beginning to realize it's got to be competitive. Did you know that in some parts of the country, you have to pay $7.50 an hour just to hire a body?"

Shulder's key point: green industry businesses compete not only with their kin for good workers, but also with other labor-intensive industries.

According to Business Week magazine, the National Restaurant Association (McDonald's and others) and the National Retail Merchants Association (Kmart and others) both predict radical employee shortages in the...