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3920



John Walters of A.B. Rose Co., Rocky Mount, NC, keeps on top of maintenance at the Union Carbide headquarters in Research Triangle Park. See page 42.



New golf car designs, see page 22.

22

Golf Car Makers Pull Out of Slump With Innovations

Golf car manufacturers' engineers have been busy increasing reliability and fuel efficiency preparing for the post-recession battle for golf car replacements. The battleground extends to utility vehicles as golf car manufacturers introduce their own versions.

32

Fertilizer Guide Part Two: Turf Nutrition

There is more to turf nutrition than making grass green. The plant's ability to resist disease and stress is more dependent on the condition of the roots rather than the foliage. Funk and Rathjens discuss both cool and warm season turf nutrition. Fertilizer requirements are based greatly on the use of the turf and the injury it will receive.



Turf nutrition tips, see page 32.

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Industrial Parks: Image vs Budget

Industrial park landscape managers share responsibility for the bottom line while trying to present the best image of the companies in the park. Budget cuts, weed control, and finding qualified personnel are their biggest concerns.



Carbide's woodland home, see page 42.

40

Shaping the Land In the Platinum Mile

Ed DeLaurentis doesn't just maintain the rich industrial parks of Westchester County, NY, he shapes them. He may be the only landscape architect with a blasting permit. Keeping design, construction, and maintenance closely linked, he becomes the creative mind responsible for the corporate image of companies like Citicorp.

42

Carbide Nestles Building In Piedmont Woodlands

Union Carbide liked what nature had already designed for their new headquarters site in North Carolina. The contractor's job became to keep things as natural as possible under the watchful eye of UC's own landscape experts.

DEPARTMENTS

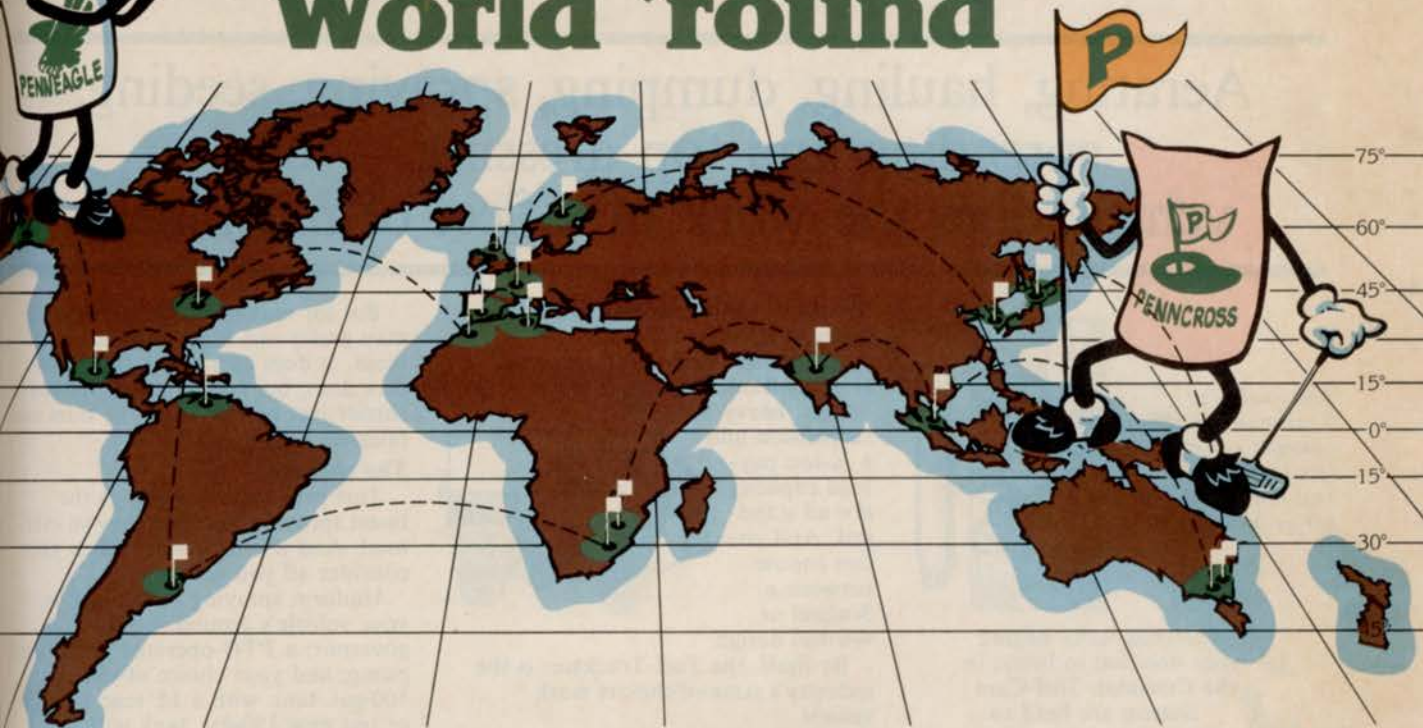
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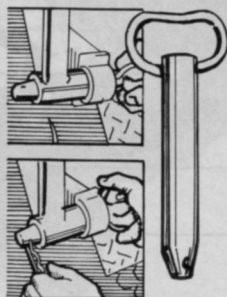
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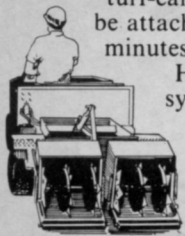


The economics behind your decision to invest in the Cushman Turf-Care System are hard to argue with:



Here is a single vehicle that can do the work of a half dozen machines, at a fraction of the cost.

Here is a complete set of turf-care accessories that can be attached or removed in minutes.



Here is a groundskeeping system that's so simple, and so well-crafted, your maintenance and repair time will become practically non-existent.

Economics aside, though, there is an even stronger reason to invest in the Cushman System. Results.

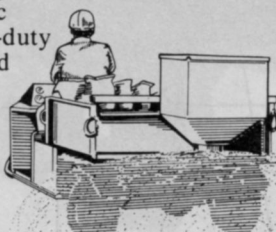
The Turf-Truckster™.

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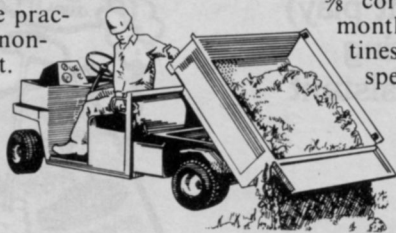
By itself, the Turf-Truckster is the industry's state-of-the-art work vehicle.

But team it up with any of the following accessories, and you have the makings of an efficient, economical turf-care system.

The aerators.

Because you have two types of turf to aerate, Cushman makes two aerator attachments for your Turf-Truckster.

The Greensaver® is ideal for greens and other delicate areas. Interchangeable aerating drums let you select the precise degree of aeration needed — ½" cores for fast-growth seasons, ⅜" cores for slow-growth months, and deep-slicing tines for summer hot spells.



For the rest of your grounds, simply attach the Quick Aerator to your Turf-Truckster. It offers the same choice in aeration tines as the Greensaver, but covers a wide 46" swath.

The dump boxes.

To haul fertilizer, dirt, sand and other supplies, choose our Short Box attachment. It handles 1500-lb. payloads, sits low to the ground for easy loading and can be hydraulically dumped right from the driver's seat.

But for maximum versatility, you may prefer our Flatbed/Box attachment. It does everything the Short Box does, but converts to a flatbed carrier just by removing the sides and tailgate.

The sprayer.

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Uniform spraying controlled by your vehicle's ground speed governor; a PTO-operated centrifugal pump; and your choice of either a 100-gal. tank with a 15' rear boom, or our new 150-gal. tank with a 21' rear boom.

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Just 3 pins connect the Top Dresser to your Turf-Truckster chassis, and you're ready to top dress up to 220 feet per minute.

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A free demonstration.

Of course, the best way for you to learn about the Cushman Turf-Care System is to see it in action. On your grounds. To do that, just call us toll-free: 1-800-228-4444.





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OUTLOOK

States fight over show dates

As a television viewer have you ever been irritated when your two favorite shows are on at the same time on different networks? Not only is it irritating to you, but it annoys sponsors trying to reach you.

Coinciding turf and landscape conferences have the same effect. You want to hear speakers at two coinciding shows but you have to choose one because conference planners didn't coordinate timing. This happens often between shows in neighboring states, as well as between state and national shows.

If you conduct business in a number of states, it's fairly important for you to attend a show for each state, since extension agents report special problems and conditions in their state. Conflicting show dates make this impossible.

Manufacturers and distributors trying to reach you with booths at these shows are going absolutely berserk trying to solve all the details to be in three places at once. It's not just difficult, it's expensive. And, you know who pays for it in the long run.

1983 has been a year of product change for both chemicals and equipment. That change came from feedback manufacturers received from distributors and you at conferences. They depend upon shows for feedback. The thinner they have to spread their staff during show season the less time they have to listen to you.

The most annoying aspect of this problem is the solution is simple. Talk to each other, show planners.

Sure, hotels limit you in picking dates. Sure, you've had your show the same time each year for three generations. And most important, you are often an extension agent not a show organizer.

Sorry gentlemen, there is no reason good enough to explain why something with such a simple solution goes unsolved. It's time to try harder to make show timing more sensitive to the needs of both the showgoer and the exhibitor.

Talk to each other. Pick straws. Arm wrestle, anything to straighten out this unnecessary mess of coinciding shows. **WTT.**



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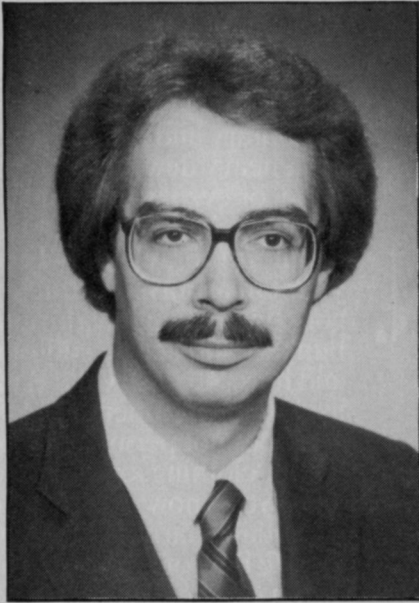
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**MILLIKEN
CHEMICALS**



John M. Schilling, new GCSAA executive director.

ASSOCIATIONS

GCSAA promotes Schilling to top job

Modesty and hard work paid off for John Schilling in September when the Golf Course Superintendents Association of America executive committee promoted him from associate executive director to executive director. Schilling's predecessor James McLoughlin resigned in May after a controversial two years at the helm.

"Each time the association has asked him to take on new and increased management responsibilities, John has successfully responded," GCSAA President Robert Osterman said in announcing the promotion. Schilling has served GCSAA in the past as director of communications, editor of *Golf Course Management* magazine, director of marketing and sales, and associate executive director. He was graduated from the University of Kansas with a bachelor's degree in journalism and a master's in business administration. Schilling retains his responsibilities as director of conference and show.

"I sense an overwhelmingly demonstrated mandate from the membership to set new standards in program development, membership services and fiscal management. All of these areas are of high priority and I urge every member to take an active role in shaping the future of the Association. The Association is accountable to its members. Now is the time, not for long speeches, but for results."

EQUIPMENT

Briggs managers work line as strike enters third month

Briggs & Stratton union workers were still on strike in late September as the critical lawn and garden manufacturing period approached. Department managers have been able to keep one out of twelve lines operating since August 1 when the strike began.

"The critical period for lawn and garden equipment production is October through January and for snow equipment March through May," Advertising Manager Jim Metzger told *Weeds Trees & Turf*. "Once the union does return it will take three weeks to get all assembly lines going again."

"I've been running a punch press the past few weeks and in a way it's been a valuable experience," says Metzger. "Some of our customers have noticed small improvements in detail since the managers have been

on the line. Normally desk-bound executives are assembling engines ranging from 3 to 11 h.p. and we can see results from our enthusiasm."

The union workers currently are paid \$12.85 up to \$23 per hour. In arbitration they have complained about the size of dividends given to stockholders and the work assignment powers of the company. Like other union members, they are concerned about future production techniques, such as robotics.

"We don't expect a critical supply problem until November," Metzger said. "Even with new blade-stop regulations, lawn and garden sales have surpassed manufacturers' expectations." The snow equipment business is roaring back, too, after two or three bad years."

Honda to build North Carolina plant

American Honda Motor Company will produce Honda power lawnmowers at a new, wholly-owned subsidiary, Honda Power Equipment Mfg. Inc. to be located in Alamance County, NC, near Burlington.

According to Makoto Itabashi, president of HPE and executive vice president of American Honda, "We have chosen this location because the demand for Honda power lawnmowers is growing in the Eastern United States. Since we manufacture products where our sales are greatest, this allows us to return the proceeds

of our efforts to the local economy."

Located on 69 acres, the \$10 million investment will include a 60,000 square-foot plant which will employ 80 people. Nearly 10,000 self-propelled and push lawnmowers of around four horsepower will be produced each month at full production. The facility will include welding, die casting, and paint operations.

"Construction will begin immediately," said Itabashi, "and we expect to begin shipments by mid-1984."

CHEMICALS

Schering AG buys FBC from Boots, Fisons

In an effort to get away from research-intensive businesses, Boots and Fisons sold their interests in FBC Holdings Ltd. in September to the West German company Schering AG.

Both Boots and Fisons want to expand further into the U.S. pharmaceuticals market and now have \$182.4 million from Schering to split.

Schering owns Nor-Am, an agricultural chemical company in Naperville, IL, and Nepera Chemical Company in Harriman, NY. The agri-

cultural and specialty chemical divisions of FBC, which make Turcam and Nitroform, are larger than Nor-Am or Nepera.

FBC is currently located in Wilmington, Delaware. George Jones, communications manager for FBC, said a decision was expected by October whether moving will be required. Wilmington is a hub for the chemical industry with Du Pont, ICI, and FBC there. Jones said, "Nor-Am and FBC are a good fit."

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UPDATE

NGF honors 5 for service

Phyllis Meekins, Henry Thomas, Walter Keller, John Riggle and William "Old Bill" Lyons have something in common.

They have the distinction of being the first recipients of the National Golf Foundation's Outstanding Service Award, inaugurated this year to honor those "who have provided continuous and exceptional service to golf, the people who play the game and the environment in which it is played."

"It's a very impressive lot," said Joe Much, NGF acting executive director who headed the selection board. "The winners come from all over the country and represent different aspects of the golf community."

Winners will be honored at the Foundation's 10th Annual Golf Management Workshop in Las Vegas this month.

Meekins organized golf clinics for underprivileged youth and today, PGM Golf Clinics include more than 20 boys and girls. Thomas has been head professional at City Park Golf Courses in New Orleans for more than 50 years. Walter Keller has been fundraising for tournaments for the past 16 years. He also organizes clinics and seminars for physical education teachers to help them more effectively teach the game in schools. For more than 20 years, John Riggle has been executive director of the Arizona Golf Association and serves on the rules committee of many USGA events. William "Old Bill" Lyons is known in the golf community as an innovator, entrepreneur, agronomist and long-time owner-operator of the Lyons Den in Canal Fulton, OH.

Golf is gold to developers

Developing condominiums around golf courses is paying off for Golf Hosts International, the force behind Innisbrook in Tampa and Tamarron in Durango, Colorado.

During the so-called recession, Golf Hosts was able to sell condominiums on its courses for \$8,000 to \$15,000 more than comparable units in other residential developments. Condos facing the course or water commanded nearly \$25,000 more.

Appreciation of golf course condos also exceeds that of residential property in general according to Golf Hosts, at ten percent or more per year. This fact is attracting investors to golf course condominium developments further increasing appreciation rates.

The American Society of Golf Course Architects sees this as an important signal to future golf course development. "More than a recreational facility, the golf course serves as a green belt to enhance the lifestyle of those who reside around its sculptured terrain," explains ASGCA member Arthur Hill, designer of Tamarron.

Martel is GCSAA keynoter

A "practical futurist" is how GCSAA Executive Director John Schilling describes this year's Convention speaker, Dr. Leon Martel.

Martel is an author who charts trends, demographics and changes in society to predict how these aspects will effect the country. He will tailor his speech directly to golf course superintendents.

The 1984 Golf Course Superintendents' Convention and Show is set for Jan. 28-Feb. 3 in Las Vegas.

SEED

Northrup to market Park Bluegrass

The Northern Minnesota Bluegrass Growers Association has named Northrup King Co. of Minnesota as marketing agent for certified Park Kentucky Bluegrass. The variety was previously handled by Twin City Seed Co.

Northrup King will develop a marketing program aimed primarily at the wholesale seed trade. The marketing effort will be handled by Northrup King's Consumer Products Group. The company has been a wholesaler of Park seed for many years.

Larry Vetter, sales manager for Northrup King's Medalist Turf Products and wholesale activity, said "There is growing interest in varieties such as Park that are in the low maintenance category, both straight and in mixtures. As a result, we are planning a new and expanded sales program for this superior performing variety."

EQUIPMENT

Jacobsen names Kimpfbeck new director

Curt Kimpfbeck has been named the director of international distribution for Jacobsen Division of Textron Inc.

Kimpfbeck will be responsible for increasing Jacobsen's international



sales through the company's network of more than 50 foreign distributors located in Europe, South and Central America, Africa, Asia and Australia.

Prior to joining Jacobsen,

continued on page 14