

# GOLF COURSE NEWS

## 1990 survey of aerator manufacturers

## Deeper, faster

BY MARK LESLIE

The race is on between aerator manufacturers to develop machines that will aerate golf course greens deeper and faster yet leave a quality playing surface.

"We're trying to get in and out of the green as cleanly and perfectly as you can," said Dennis Brown, manager of marketing services at The Toro Co.

"It's a development problem," said Bob Brophy, manager of lawn-care products for Cushman/Ryan. "You've got to develop a machine that will leave a quality playing surface and still get that depth;

and that is a real challenge."

It is yet another challenge in the evolving field of grounds maintenance where priorities change and research finds new truths.

Ten years ago there was a transition from quality to speed, Brophy said. "A lot of the younger superintendents were willing to give up the quality that the reciprocating aerators would give them in lieu of the fast speed of the rolling drum type. That's when the Cushman GreenSaver and the Hahn and Dedoes ... and all those (companies) came in for greens. Now there seems to be a trend —

Company	Model	Type	Walk/Ride/Pull	Hole Spacing	Spacing Changeable?	Minimum-Maximum	Sq.ft./Hour	Width	Weight	Tine Depth Interchangeable?
<b>Classen Mfg. Inc.</b> 1403 Pine Industrial Rd. Norfolk, NE 68701 Larry Classen 402-371-2294 Circle No 201	455-3	Piston	Walk	2	Yes	1-6	27,000	54	1,040	Yes
<b>Cushman Inc.</b> 900 North 21st St. Lincoln, NE 68501 Scott Stuckey, Clarke Staples 402-475-9581 Circle No 202	GA30	Piston	Ride	Variable	Yes	1-5	28,125	30	1,200	Yes
<b>Dedoes Industries, Inc.</b> 91 Roberts Rd. Ossineke, MI 49766 Jim Poole 800-662-8235 Circle No 203	Model A	Drum	Ride	2 1/4, 4, 5 1/4	No	N/A	N/A	70	850	Yes
<b>Feldmann Engineering &amp; Mfg.</b> 520 Forest Ave. Sheboygan Falls, WI 53085 Myrtle Feldman 800-344-0712 Circle No 204	Model 2340-32	Drum	Pull	3 1/4	Yes	3 1/4 - 7 1/2	16,000	32	85 w/o weights	Yes
<b>Aer-Way, Holland Equipment</b> 20 Phoebe St. Norwich, Ontario NOJ1P0 Paul Gillen 519-863-3414 Circle No 205	AW056S-1380-T	Drum	Pull	6 1/2	Yes	3-6 1/2	50,000	72	960	No
<b>Lesco, Inc.</b> 20005 Lake Rd. Rocky River, OH 44116 Ned Beach 800-825-3726 Circle No 206	Aerator-30	Drum	Walk	5 1/2	No	N/A	28,000	30	254	No
<b>Ransomes Inc.</b> One Bobcat Lane Johnson Creek, WI 53038 Maria Large 414-699-2000 Circle No 207	XRA 270	Piston	Walk	2 1/4-2 3/4	No	N/A	13,900	25	440	Yes
<b>The Toro Co.</b> 8111 Lyndale Ave. So. Bloomington, MN 55420 Dennis Brown 612-887-8805 Circle No 208	09110	Piston	Walk	2 1/4 - 2 1/2	No	N/A	13,000	27	1,275	Yes
<b>Verti-Drain</b> 501 Tall Trees Drive Scranton, PA 18505 Charles Otto 717-963-0829 Circle No 209	305.200H	Piston	Ride	4	Yes	2-6	218,406	79	3,500	Yes

# the challenge to aerator companies

and it's reflected in drops in sales — back from the drum types. Superintendents are saying: 'We need the quality. We're willing to pay the extra labor and time to have the quality aeration job.'

"And in lieu of this, Cushman/Ryan and various manufacturers around the country are trying to come up with faster reciprocating aerators. That's why you're seeing the advent of the faster (machines): to give back some of that speed so they can cut down on labor while still maintaining the quality that they want."

Brophy said recent surveys re-

veal that superintendents want to go deeper in order to combat black layer, an anaerobic layer between two different soil densities, such as sand and topdressing. "And so I think most manufacturers are looking at deeper core aeration or cultivation of the green," he said.

One traditional problem with deep aeration has been that it tends to tear up the surface and it takes a lot of labor to make the greens playable again.

Yet Paul Gillen of Aer-Way, Holland Equipment Ltd. said deeper aeration has been the philosophy in Western Europe, particularly

England and Scotland, for 10 years. Superintendents there found that they were actually forming a pan by continually aerating at a fixed two- or three-inch level, he said.

"At the bottom of the coring tine there is pressure," Gillen said, "and they found if they continued to aerate at the same depth they were ... going to run into problems in growth and moisture... And at the same time they started having problems with black layer. So they knew they had to get down below the black layer and started using our equipment on the greens."

Citing research in England that

shows grass root systems will grow eight inches and deeper below the surface, Gillen said: "If you've got a root system that's there and established, it has that much more feeder root system to absorb the nutrients, it has that much more tap root system to absorb the moisture so you don't need as much fertilizer, you need less herbicide because you've got a healthier grass ... and it is not as susceptible to compaction because you have that root system. The pluses go on and on and on."

Toro's Brown said, "We're work-

ing on deeper tining, deeper core removal, getting below that three- to 3 1/2-inch level is certainly one of the desires."

The major companies have their research arms working on ways to beat the black layering that plagues so many courses.

Brophy of Cushman/Ryan said: "Toro's looking at a program. Jacobsen is. I've heard John Deere is. I know we are."

"When all this equipment is going to be available, God only knows... Normal span from drawing board to the marketplace is

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Depth Variance	Diameter Variable?	Diameter Variables	Manufacturer's Listed Price	Parts-Service Centers	Pull Plug?	Tines Solid or Open	Core Removal Attachments
1,3	Yes	3/8-3/4	\$6,500	N/A	Yes	Open	None
23/4, 33/4	Yes	1/4-3/4	N/A	76	Yes	Full circle, top ejection	Core Harvester, Windrow, Levelawn]
25/8, 3, 3 1/8	Yes	3/8-3/4	\$4,848	67	Yes	Solid	Drum sides collect cores
0-2 1/2	No	5/8	\$319.50	N/A	Yes	Open	None
8	N/A	N/A	\$1,950	100+	No (shatter)	Solid	None
3	No	5/8	\$995	None	Yes	Both	None
24	Yes	1/4-3/4	N/A	35	Yes	Open	N/A
0-3	Yes	3/8-3/4	N/A	50+	Yes	Open	Windrow
1-16	Yes	3/4, 1	N/A	33	Yes	Both	None

# \$1-billion resort planned in 'sensitive' Fla. area

BY PETER BLAIS

A major resort complex that will feature six signature golf courses is being planned for an environmentally "sensitive" portion of Florida's Osceola and Polk counties.

The \$1 billion project is known as Johnson Island and is located on 8,500 acres 17 miles south of Walt Disney World. In addition to the signature courses, plans call for an equity membership course, par 3 executive course, two-year accredited Golf Academy, multi-training pod facility, 1,500-room hotel and conference center, retail shopping area, marina and retirement village to be built in three

phases over 15 years.

Developer Louis Fischer, chairman of Fischer Associates Inc. of South Miami and Kissimmee, hopes to have all necessary permits in hand by the end of the year and the first course in operation by early 1992.

But there are several environmental hoops through which Fischer must jump before the project becomes reality.

The Johnson Island area is home to many forms of wildlife, including two endangered species - the Southern bald eagle and the American wood stork. This has raised concerns with local officials and

several environmental groups, among them the Audubon Society and Sierra Club.

"It's a beautiful piece of property. And a lot of people are saying it's one of the best proposed developments they've ever seen," said Fischer, who is hoping to allay those fears by developing just 32 percent of the total parcel. He may also sell some of the environmentally-sensitive land to other developers who would preserve it in exchange for being able to develop wetlands elsewhere as state law allows.

"It has some potential," commented Jack Shannin, development director of Osceola County. "It's

the first project I've seen with that much open space. They've done a good job of looking out for the environment.

"I don't see the golf courses as a problem, but the size of the whole project. It's a rural area, but there's no real infrastructure out there. He might have to cut back some."

Fischer applied in December for a regional development review with the East Central Florida Regional Planning Council and the Central Florida Regional Development Council. Because of its size, the project is considered a Development of Regional Impact, and must be reviewed by the two councils to

determine its effect on local community services.

There are also a number of local, state and federal permits needed before construction can begin. Fischer said he plans to begin the permit application process in March and hopes to have final approval from the counties by December.

That would allow him to begin the first phase, which would include two golf courses and 500 hotel rooms. The first course should open 12 to 15 months later. Fischer foresees all six courses eventually beginning and ending next to a common clubhouse.

## Australia

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worldwide economic depression, it was 1931.

The building of the course was left entirely to Royal Melbourne's greens superintendent, Claude Crockford; the execution of MacKenzie's plan was handed over to former Australian Open golf champion Alex Russell. Thus Crockford and Russell actually worked the land that became the two courses at Royal Melbourne. They followed MacKenzie's plan on the West Course, Russell's on the East.

Most of Australia's courses were designed by native golfers turned architects. Besides Russell and Soutar, Sydney-based pro James H. Scott was among Australia's busiest.

In the mid-1960s, the great Australian golfer Peter Thomson joined forces with Michael Wolveridge to create perhaps the most notable of all local design firms. Their work brought them not only many jobs in Australia but throughout Asia as well.

## Aerators

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three to five years."

Gillen added that greenkeepers have compounded their problems with sand topdressing over the last 25 to 30 years, so that now they have to get down through those layers of the topdressing, or rebuild the green. He said that sand topdressing, if it is not high-grade sand that is similar in particle size, creates an area that inhibits water movement.

"This is why the universities are saying that unless you get in and deep-aerify you'll have to rebuild your greens or suffer with what you've got," he said. "And there's probably only 10 percent of courses that can afford to rebuild their greens."

## Penn show set

The Western Pennsylvania Turf Conference and Trade Show will be held Feb. 20-22 at the Pittsburgh Expo Mart/Radisson Hotel in Monroeville, Pa.

Co-sponsored by the Pennsylvania Turf Council and Pennsylvania State University, it offers sessions on pesticide regulation and use, turf diseases and more.

Interested people may contact the Pennsylvania Turf Council, P.O. Box 417, Bellefonte, Pa.

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