Golf's Own Imagineer

Walt Disney would have loved Tom Mascaro who combines engineering skill with imagination

BY KIT BRADSHAW

"My objective through all my years of business was to develop equipment that had never been made before.

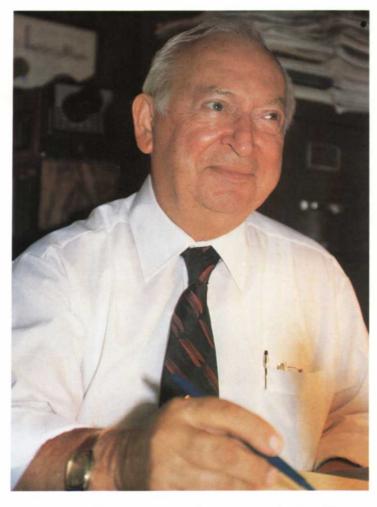
And now John is continuing on with the same thing."

ounds a little like Tom Mascaro, 74, is getting ready to pass the torch to his son, John, 24. But don't bet the store yet. As Tom says, "I've tried to retire three times before and always came back."

There's a difference this time.

The last time Tom had what might be called a brief lull in his active career was in the early 1970s. Young John was only turfgrass high at the time.

Today John has his associate degree in business management from Tallahassee Community College. He has taken additional courses in turfgrass management and has learned the business by working with his father.



Tom Mascaro Age: 74

Experience: West Point Products Corp., Pennsylvania, president; Turf Grass Products, North Miami, Fla., president; Turf-Tec International, director.

Professional: Consultant, lecturer, writer on all subjects relating to turfgrass. Adjunct professor, Florida International University, Miami; Biscayne College (now St. Thomas University), Miami.

Awards: USGA Green Section Award, 1971; GCSAA Distinguished Service Award, 1976. Many state and regional awards.

Personal: Wife, Dorothy; daughters Tammy 27 and Linda 26; son John 24.



John Mascaro Age: 24

> Experience: Turf-Tec International, North Miami, Fla., CEO; Turf Grass Products, North Miami, Fla., vice president. **Education:** Associate of Arts, business management, Tallahassee Community College. Professional: Sports Turf Managers Association, Florida Chapter 1, secretary; GCSAA, South Florida GCSA; Florida Turfgrass Association. Personal: Wife, Jenni.

John has become Tom's right-hand man in their company, Turf-Tec International, with headquarters in North Miami. And he and Tom have dovetailed their efforts to expand their line of golf course equipment into diagnostic tools to help golf course superintendents gather data abour their turfgrass and greens in order to better maintain their courses.

If there is a transition in the offing, then it is moving steadily and very smoothly.

Walt Disney would have loved Tom Mascaro. Years ago, Disney coined a word to describe a person who combines imagination and engineering ability:

Imagineer.

Although Disney and Mascaro never met, the word describes Tom perfectly.

And what has this Imagineer developed in his nearly half century of creativity? The aerifier, the verticutter, the Verti-Groove and the soil profile sampler, just to name a few. Mascaro says he has had the brainstorms for the creation of all these mechanical devices from other people's suggestions, helping to solve problems that needed new, innovative solutions.

Take the aerifier, for instance.

"My brother, Anthony, and I had developed a mechanical leaf-gathering machine in 1946 and we went to Washington to discuss its application with Dr. Fred Grau, director of the USGA Green Section and a pioneer in turfgrass," Mascaro recalls. "He thought the machine was a good idea, but he said that if we could make a machine that cultivated bluegrass fairways, we could make a million dollars. The problem with bluegrass fairways was compaction.

"So we came back home and worked until we invented the aerifier, the first practical tool that cultivated the turf without disturbing the turf. It was basically a modified plow. It removed cores of soil and redistributed them."

Did they make a million dollars?

"Well, let's just say that because of the aerifier, we were jet-propelled into the national picture overnight. We had developed a machine that was just what the superintendents were looking for and the word spread rapidly.

"For a time, we had mailbags with checks in them that we couldn't open for a month because there was so much mail.

"A million? Well, it did pretty well."

Things started getting pretty hectic for Mascaro once the aerifier hit the national scene.

Grau and L.J. Noer, the city of Milwaukee's world-famous agronomist, made arrangements for Mascaro to speak at turfgrass seminars throughout the country. For years, he attended about 25 such meetings annually.

He not only talked; he listened.

He took prodigious notes at the conferences, learning from turfgrass experts. For 40

years, he carried a notebook with him, recording the problems, the needs and the suggestions he heard from golf course superintendents he met on his travels. The notes were translated into designs and into machines to help superintendents do their jobs better.

For instance, when Mascaro found out that some superintendents were using the aerifier on greens in addition to fairways, he invented a smaller version for greens and "it took off like wildfire," he recalls.

"Now, when you invent one thing, everyone thinks you can invent anything. And we had all kinds of suggestions about what was needed. Like the verticutter.

"The verticutter. Now that's an in-

vented word as well as a machine. It was a vertical mower... a true mower that cut the green vertically. You see, a greensmower is horizontal. It only

"We'd verticut half the green, sweep it up and then invite the pro which side he wanted to putt from. He picked the verticut side every time."

cuts the blade that's up. But all grass blades don't stand up. some of them are down at the base, and they never get cut.

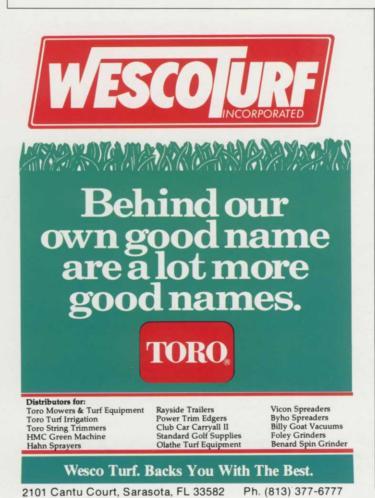
"They just lie there, and they accumulate as part of the thatch. The verticutter was designed to remove thatch before it started by cutting those blades, runners and so forth, before they could form thatch."

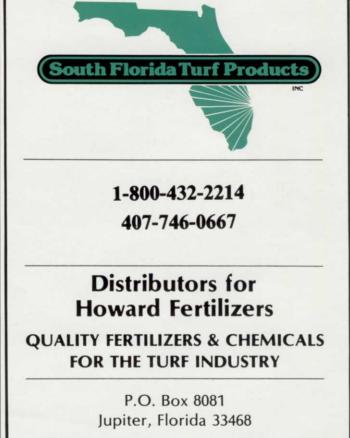
Mascaro developed a unique sales presentation for the device.

"We'd get the pro and the superintendent out on the green," he recalls, and we'd verticut half the green, sweep it up and then invite the pro which side he wanted to putt from. He picked the verticut side every time."

In 1969, Mascaro's Pennsylvaniabased company, West Point Products, merged with Kearny National, and he became vice president of development. Three years later, the company divested its turf division and Mascaro took the cue to move to Florida.

Once in Florida, Mascaro took four years to begin Turf Grass Products,





which was joined later by Turf-Tec International.

"I sat around for four years," he recalls.

"But you were inventing things in your head the whole time, Dad," chided John.

What came from those mental designs was the soil profile sampler, which Mascaro claims is the only one of its kind.

"The Soil Profile Sampler is vertical, and the cutter blades split apart so that the profile of the soil is visible," he says. "You can see everything that's been done to that soil sample in a nice slice. You can even photograph it for reference.

"I have a slide of a soil sample which shows soil that seven superintendents had worked on. The sample shows each one's pet mixture in that piece of soil."

Miami's Orange Bowl was the birthplace of the Verti-Groove.

"I was part of the transition from artificial turf back to good grass. . . natural turf," he says. "So when they had a problem with the turf, I was called in. The problem was that the roots were decomposing down deep. The samples we took showed the roots had turned into a giant sponge and the field didn't drain.

"Something had to be done to remove those dead roots, not only to get water into the soil, but also air, nutrients and so on. So I invented the Verti-Groove.

"It takes out thin slices of soil, six

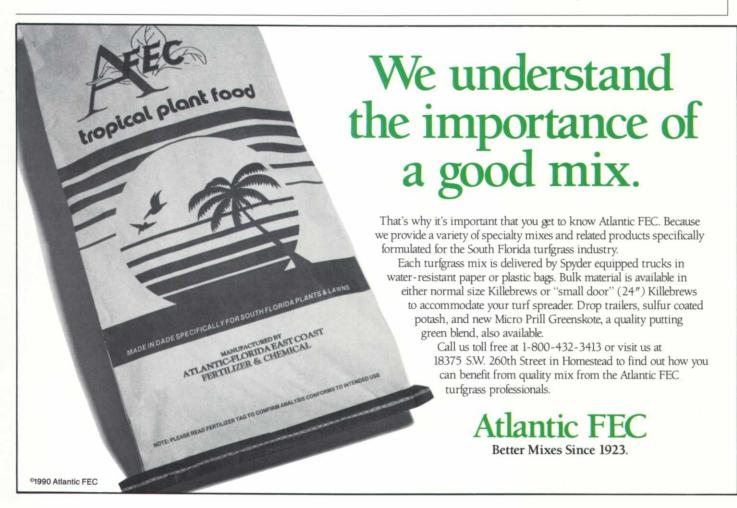
inches deep, and brings the soil to the top without materially disturbing the surface. They could play football in the Orange Bowl the day after we used the Verti-Groove."

Mascaro adds that until that time, no machine had been made that went more than three inches deep to cultivate turf. The Verti-Groove helps to cultivate the soil to a much greater depth.

If the Verti-Groove was born in the Orange Bowl, its development also spawned the successful collaboration between father and son on the creation of new devices to help the industry.

When John joined the company, Turf-Tec changed focus.

"We already had the Soil Profile





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"Growing Turf the Hard Way"

a video opportunity

Tom Mascaro keeps his focus sharply on the future.

"I had been asking myself what was going to become of my collection of 75,000 slides when John came up with a great idea," Mascaro said at the South Florida GCSA Field Day this past April.

"He suggested we turn them into a series of video tapes."

Professionally produced and distributed under the Turf-Tec Productions label. the first tape, "Growing Turf the Hard Way," was released in April.

Nearly a verbatim replay of Mascaro's most popular banquet lecture, the tape not only will become a soughtafter piece of memorabilia for the current generation of turf managers, it should become a stock training item for untold future generations.

Featuring Mascaro's familiar droll, understated delivery, the tape is in some ways superior to his live lecture because it uses the production technique of "dynamic stills," which creates much more visual interest than a

static slide on a silver screen.

For those who haven't heard "Growing Turf the Hard Way," the program humorously details many of the problems Mascaro has encountered in more than half a century of work with golf course superintendents and other turfgrass manag-

"We should learn from the mistakes and experiences of others," Mascaro says, "because we cannot possibly live long enough to make them all ourselves."

Sampler," John says, "so we decided to come up with a line of diagnostic tools that were as simple as possible — no engines or moving parts tools that normally would be available to university researchers.

"But the tools that researchers use are impractical for superintendents to use. So we tried to come up with practical approaches to analyzing problems and practical lab instruments that we could put right into the hands of the superintendents."

Development was a cooperative process, with John translating the original concept into a prototype of wood, steel and leftover parts. Father and son then finely tune the working model before having a local machine shop create a production prototype.

Their new devices include the

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Moisture Sensor, Digital Thermometer, pH Meter, Penetrometer and the Infiltrometer.

The Penetrometer is the superintendent's equivalent to a Stimpmeter. It measures percentage of soil compactness from 0 (uncompacted sand) to 100 (cured cement). Fifty is the preferred measurement, Tom says, meaning the soil should contain 50 percent solids, 25 percent air and 25 percent water.

"In Florida," says John, "the problem with soil is often compaction. Between mowing greens daily, high traffic and so on, there are some greens that become so compact they show 80 percent compaction on the Penetrometer.

"You have to remember that practically any area will become compacted if you are putting a 2,000-pound mower on it every day of the week. With this device, the superintendent can tell how compacted the area really is.

"Superintendents are in the position of trying to please all the golfers who play at their clubs. If the golfers are complaining that the greens are too soft or too hard, the superintendent can take a compactness reading. He's got a device that can take out the guesswork."

Three other tools — moisture sensor, and special versions of the digital thermometer and pH meter — also help the superintendent



Tom and John

Mascaro with some
of their inventions.

diagnose problems with his turf.

The moisture sensor, which measures the moisture absorption at any selected depth between one and six inches, helps the superintendent plan his irrigation program. The digital thermometer, helps him enhance seed germination or head off heat-related stress problems. The pH meter helps the superintendent make micro-adjustments to the soil alkalinity.

Right now, the Infiltrometer, which tests soil percolation in 15 minutes, is the Mascaros' pride and joy.

"It's a blockbuster," says Tom.

"Usually, a soil sample is sent to a laboratory," explains John, "and the lab mixes the sample,

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compacts it to a specific weight and then tests how long it takes water to run through the area.

"The advantage of the Infiltrometer is that it gives the superintendent this information, not in the lab, but in the field. You aren't just getting the soil infiltration, but you are getting soil infiltration on number-seven green. You are getting a truer reading." As with all the Mascaros' tools, the Infiltrometer comes with a complete set of instructions, including all the data needed to analyze the results obtained.

"If it shows that water is percolating at less than four inches an hour, that's bad," says John. "Anything under one inch is critical... and we've seen readings that low in some tests we have done."

Two other Mascaro devices are in production and soon will hit the marketplace: the Singafier and the Aeriforke.

The former kills weeks by using a concentrated propane flame for killing crabgrass and goosegrass. It's extremely popular with environmental activists and a South Florida chapter of the Audubon Society already has two of them.

"There's no residue, no chemicals, it's very simple to use and very inexpensive," says the elder Mascaro. Penn State University is developing a larger version of the device, he adds.

"The larger models can be used to kill weeds in bunkers without chemicals," he says. "That way, when sand is blasted out of traps and lands on the green, it doesn't contain any herbicides."

The Aeriforke is a hand aerifier for homeowners.

"You'd be surprised how many homeowners are aware that turf is aerified on golf courses, but they don't have an easy way to do the same thing on their own lawns," says John.

Tom says it may be marketed as an alternative form of exercise.

"Instead of 'aerobicizing,' people could be 'grassercizing'," he says.

The end of the Mascaro line of inventions is not in sight, both say. Imagineering is an ongoing activity.

"My dad has always said, 'Just because people are doing things one way doesn't mean it's the only way to do it. You can look at any operation on a golf course and there can be a better way to do it.'"

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President honors Jacobsen for exports

Jacobsen Division of Textron was honored by President George Bush for its export success during a recent ceremony at the White House. The company received the U.S. Commerce Department's "E Star" Award for outstanding export sales.

In accepting the award, Jacobsen President Robert Reid credited increased emphasis on overseas markets, spearheaded by the company's international operations department, and a strong network of foreign of foreign distributors for making the award possible.

"We have been responsive to the needs of international markets, supplying our customers with quality turf products," Reid said. "We have a very competent group of distributors throughout the world, and we've been able to benefit from the growing worldwide interest in turf care in general and golf in particular. These factors are help-

ing Jacobsen experience strong international sales growth."

The "E Star" is given to companies which already have received the Commerce



Tracy Meeks

Jacobsen Textron President Robert Reid receives the E-Star Award from President Bush with U.S. Trade Representative Carla Hills looking on



Department's "E Award," which Jacobsen won in 1974 for export sales of consumer lawn and garden equipment.

Jacobsen now manufactures only professional turf equipment for golf courses, parks, sports fields and other large turf areas.

Mike Young Designs names first VP

Mike Young Designs/Turf Mark Golf Services of Watkinsville, Ga., has named Tracy Meeks, former superintendent at Berkeley Hills CC in Norcross, Ga., as the firm's

first vice president.

Meeks, who holds a B.A. in turfgrass maintenance from the University of Georgia, will oversee day-to-day operation of the company's

golf course construction projects.

Before moving to Berkeley Hills, Meeks had been assistant superintendent at Cherokee CC in Atlanta, where he was involved with the construction of a ninehole addition to the club's 18-hole layout.

Lofts taps A&M grad to head new facility

The former assistant to Dr. Milton Engelke at Texas A&M University's turfgrass breeding research project in Dallas has been named to head the new Lofts Seed research facility near Albany, Ore.

Dr. Virginia Lehman, who completed her doctoral studies at Texas A&M earlier this year, earned her master's degree from the University of Idaho, specializing in turfgrass breeding and seed production.

Lofts also operates a re-

Turf Industry Roundup

Companies doing business with golf course superintendents in Florida are invited to submit their news releases to The Florida Green, c/o Janlark Communications, 1206 Kimberle Court, Auburndale, FL 33823. We cannot accept items for this section over the telephone.

search facility in New Jersey.

Ciba-Geigy picks turf manager

Bernd Druebbisch is the new product manager for herbicides with Ciba-Geigy's turf and ornamental products group. He will be responsible for the company's Pennant herbicide, a control for yellow nutsedge and other weeds.

Before joining the turf and ornamental division, Druebbisch was product manager for Ridomil, an agricultural fungicide. He managed the product in Africa and Asia.

Druebbisch moves from Ciba-Geigy's worldwide headquarters in Basel, Switzerland, to the the company's U.S. headquarters in Greensboro, N.C.



Fuller Tresca, Jr., right, and Jacobsen President Robert Reid

PGA Show moves to Friday-Monday

he PGA Merchandise Show will change to a Friday-Monday format next year, Jan. 25-28, at the Orange County Convention/

Civic Center in Orlando.

The four-day, Friday-Monday pattern will be maintained through the year 2000 except in 1993, when a scheduling conflict forces a return to the Saturday-Tuesday format.

The format switch was made to reduce the time

> exhibitors must spend away from the office and to allow all attendees to take advantage of more cost-effective airline prices.

"Member-Only Day" has been reduced to the first four and a half hours of the show on Friday, from 8:30 a.m. to 1 p.m.



Turf students from all over the country at Jacobsen's annual seminar

Tresca named Top Performer

Tresca Industries of Jacksonville and Orlando was honored by the Jacobsen Division of Textron with the manufacturer's Top Performer Award for 1989 at the GCSAA Convention and Show in Orlando last February.

Florida supt. talks at Jake seminar

om Alex, superintendent at Grand Cypress Resort in Orlando, was one of the faculty members for the 23rd annual Jacobsen College Student Seminar at the company's headquarters in Racine, Wis.

The seminar brought together 36 students from turf programs throughout North America and two students from the United Kingdom. Students heard lectures on subjects ranging from budget preparation to employee training to environmental management.

"I talked about a little bit of everything," said Alex, whose lecture was entitled, "The Daily Pressures of Maintaining a Golf Course."

"The neatest thing about the session was the final afternoon session when they put all the speakers on a panel and let the students fire questions for three hours.

"The whole seminar is kind of neat. I'd go back if they asked. Any superintendent should be delighted to be asked. Those kids were the cream of the crop—I came back with a couple of resumes.

"I'm surprised other manufacturers don't do the same thing."