

Department of Plant Science

Center for Turfgrass Science

## Chapter 1b: Origins of the Program — The People Who Made It Happen - Industry

### Joseph Valentine

An integral figure in the turfgrass program's genesis is Joseph Valentine, for whom the Valentine Research Center is named. Valentine, born in Italy in 1886 as Giuseppe Valentini and orphaned at the age of 11, spent his adolescence in a Catholic monastery. The monks, who set out to groom Valentine for the priesthood, provided him with an excellent education, which included teaching him English. A letter from a friend, however, changed Valentine's path and set his sights on America.

"My dad got a letter from an old friend of his who'd gone to the New World," says Joseph Valentine's son, Richie. "This friend said, 'You can't believe it over here. This is a great place.' He sent my father passage, which was probably about \$100. At the age of 18, he took a steamer to America."

Upon arrival in America, Valentine stated his name: Giuseppe Valentini. He was told, "Not anymore. From now on your name is Joseph Valentine." Thanks to the quality education Valentine had received at the monastery, he succeeded quickly in landing a job in a Camden, New Jersey, bank. But because he'd contracted tuberculosis during passage, his doctor advised him to look for an outdoor job.

About that time, the Philadelphia area Merion Cricket Club was building a golf course. "They were using teams of horses and drag lines, and they were looking for someone to run immigrant labor," says Tom Valentine, son of Richie and grandson of Joseph. "My grandfather was well qualified for the job because of his ability to speak English and Italian—he could serve as a liaison with the builders and the owners. And he prided himself on looking professional. My grandfather was one of those guys who showed up for work every day in a three-piece suit and a hat, even on the hottest day of summer."

Over the years, Joseph Valentine worked his way up to the position of golf course superintendent at what had become the Merion Golf Club, facing myriad turfgrass management problems along the way. The year 1927, for example, proved to be an especially difficult year for golf course superintendents. The Japanese beetle spread throughout the Northeast, and it was a hot, humid year with many turfgrass diseases. Valentine turned to Charles Hallowell, who was the Penn State extension agent for Philadelphia County. While Hallowell provided agronomic support for Valentine and other golf course superintendents, his primary focus was on home landscaping and gardens. The help that Hallowell could offer Valentine and his colleagues was limited.

As the country headed toward the Great Depression, times got harder. At Merion in 1928, Valentine hired workers who had come from Italy to the United States. Thirty or forty workers would spread out over a fairway

with pocketknives, digging weeds out by hand.

Charles Hallowell worked closely with Valentine toward a common goal: better golf turf management. As the needs of Hallowell's constituency in Philadelphia were growing, economic constraints became more of a problem. Valentine and Hallowell turned to Penn State for help.

In 1928, Valentine, along with T.L. Gustin of Philadelphia Toro and James Bolton, superintendent of the Reading Country Club, traveled to Penn State, entered president Ralph Hetzel's office, and told Hetzel that they'd like to have the same kind of help for professional turf growers that Penn State was providing to farmers.

As a result of Valentine's request, agronomy faculty member H. Burton Musser was assigned to work half-time on turfgrass in 1929—the official beginning of Penn State's Turfgrass Management Program. In 1930, Valentine, Gustin, and Leach formed the Turfgrass Research Advisory Committee, which Valentine chaired until 1955, when the present-day Pennsylvania Turfgrass Council was established.

The year 1932 marked another milestone for the turfgrass program, when Valentine's committee persuaded state legislators to sponsor a bill appropriating \$10,000 for turf research at Penn State. “My father felt that they had reached a point where they'd done what they could and needed more information,” says Richie Valentine. “They wanted to keep growing better grass. My dad thought that through politics they could get some kind of allowance for the college from the state of Pennsylvania to get some research. Ten thousand—that was a lot of money at the time.”

“This appropriation was really a landmark,” adds Joseph M. Duich, professor emeritus of turfgrass science. “It established the validity of turfgrass research in Pennsylvania. And it was due to the persuasive powers of Mr. Valentine.”

Valentine's 1928 visit to Penn State and the subsequent appointment of Burton Musser to half-time turf also marked the beginning of some long-term friendships. Valentine and Musser became lifelong friends, and Valentine developed a relationship with Ralph Hetzel as well.

“Mr. Valentine—he was Mr. Valentine until you knew him for twenty-five years, then you could call him Joe—struck up a very unusual relationship with Hetzel,” says Duich. “Every year Valentine would come up to Penn State, and if Hetzel was available, they'd have lunch or dinner together. Valentine always told Hetzel about the problems golf course superintendents were having and the progress they were making. He'd call up sports writers at the Philadelphia area newspapers and tell them about the struggles they were having at Merion. At every turf conference held at Penn State, either at the conference or during an evening banquet, he gave a report on the doings of the turfgrass research advisory committee. Joe was one hell of a communicator. He had that Italian accent and spoke kind of broken English, but as a communicator he put Ronald Reagan to shame.”

One of Joseph Valentine's accomplishments during his tenure at Merion was discovering Merion Kentucky bluegrass in the mid-1930s. It began when Valentine noticed a patch of creeping, low-growing grass growing adjacent to the 17<sup>th</sup> tee, at the marker. Keeping an eye on the patch, he observed its year-round outstanding performance. With the help of Fred Grau, Penn State's first extension agronomist, Merion bluegrass was developed into the first improved Kentucky bluegrass and became a standard American fairway grass.

"While Merion bluegrass is not used as extensively now as it used to be, it had a great run," says Tom Valentine. "For years it was super popular among sod growers because of its knitting capacity. And my grandfather never had it patented, so he never made a penny on it. He just turned it over to the Department of Agriculture."

"It was a different mindset back then," adds Richie. "My father was an immigrant, he had a job that he was grateful for—it was better than being an orphan—and he said, 'This belongs to Merion because it was found at Merion.' We don't look at things like that today."

Joseph Valentine held the position of golf course superintendent at Merion until his retirement in 1962, at which time his son Richie took over until his own retirement in 1989. After Joseph Valentine's death in 1966, Russell E. Larson, then dean of the College of Agriculture, made a request to Penn State's president, Eric A. Walker, to establish the Joseph Valentine Turfgrass Research Center. Dedication of the center was held in 1970.

"Oh, I remember it well," says Richie Valentine. "The whole family went up. For the plaque, I supplied them with a stone from the 11<sup>th</sup> hole at Merion. I remember that Joe Duich came down to Merion with a van to pick up the stone." Today, the Joseph Valentine Research Center, at the north end of the Penn State campus, stands as a living memorial to a man whose hard work and communication skills established the foundation for the turfgrass program at Penn State.

"I've always thought," says grandson Tom, "that my grandfather's background, his early experience in banking when he first came to America, the professionalism he wanted to bring to the industry—they were part of the impetus for his wanting to start a turf program at Penn State. He and his colleagues weren't farmers or landscapers—they were golf course superintendents. He wanted to bring respect to the turfgrass profession, and he did."

## **Tom Mascaro**

Penn State's turfgrass management program, as well as the entire turfgrass industry, has been much enriched by inventor Tom Mascaro. Born in Philadelphia in 1915, Mascaro earned a business degree from the Lansdale School of Business in 1936. Shortly afterward he went into the mushroom business on his own farm near Valley Forge, Pennsylvania, until the Great Depression squelched demand for mushrooms. Mascaro realized that spent mushroom soil makes an excellent fertilizer and topdressing, especially when it's mixed with other ingredients. He started helping local greenkeepers by customizing topdressings for them.

Mascaro's work with soils led to his establishing his own company, West Point Products, Inc., which specialized in special soil mixtures for golf course greens and organic fertilizer, as well as machinery and hardware for use on turfgrass. "Tom was one of the first to recognize that soils need to be modified so that turfgrasses can root and have a chance against compaction," says Thomas Watschke, professor of turfgrass science.

Mascaro's Penn State connection began around 1930, when he took correspondence courses through Penn State. He also formed an acquaintance with H.B. Musser, Penn State's first faculty member in turfgrass research. In the 1950s, Mascaro often accompanied O.J. Noer, agronomist for the Milwaukee Sewerage Commission, and Penn State turfgrass faculty such as Burt Musser and Fred Grau, on travels throughout the country to turfgrass field days and conferences as they shared their knowledge with golf course superintendents.

"Because of all his contacts, Tom was always very shrewd about what the industry needed," says Watschke. During his travels Mascaro had the opportunity to talk with turfgrass equipment salesmen and realized that many of them were lacking in knowledge about turfgrass science. He set out to find a source of accurate, up-to-date information about turfgrass management for the salesmen. He knew that his friend and colleague Burt Musser was writing a book for the USGA Green Section and asked him for ideas on where salesmen could get their own reading material on turfgrass management. Musser sent Mascaro a basic correspondence course that had been discontinued and suggested that Mascaro rewrite it and update it for equipment salesmen. As a result of Mascaro's efforts, 265 students enrolled in that course.

When golf course superintendents heard about the correspondence course, they asked for one of their own. Mascaro went to Penn State and discussed the possibility with Musser, and the two of them developed and administered a correspondence course together. That course was a success as well, with 15,000 graduates.

Anyone who knew Tom Mascaro knew his passion for inventing. "Tom was an inventor almost to the point where he couldn't help himself," says Watschke. "If he woke up in the middle of the night, he thought of something else he could make." Mascaro had a lifelong friendship with Eb Steiniger, who was golf course superintendent at the Pine Valley Country Club in New Jersey. The pair formed a unique relationship, in which Mascaro would create an invention and present it to Eb to try out at Pine Valley.

"Dad lived in West Point, a suburb of Philadelphia, and Eb was just across the bridge in New Jersey," says Mascaro's son, John. "They did a lot of traveling around together, and when my dad had an idea he'd take it by Eb's course at Pine Valley and show him the equipment. Eb would give him feedback, and from what I understand he was a pretty good critic!"

In a 1993 interview, Steiniger talked about his collaboration with Mascaro: "Tom was always hanging around our place, bringing some new equipment to try out at Pine Valley. Some of it was really good. We got the whole place aerified, and it didn't cost me a thing because I didn't buy his machine! Tom was very generous with us."

"Eb and Tom were fast friends," adds Watschke. "When they'd try out Tom's gear at Pine Valley, if something didn't work, Eb would tell him so. But a lot of it did work, and versions of several of Tom's inventions are still in use today." One story goes that when faculty member Joseph Duich asked Mascaro to give a talk to his students in the two-year technical program, Mascaro replied, "Under one condition: For every invention I talk about that worked, I have to talk about two that didn't work."

Mascaro held numerous patents on his devices, many of which were developed in collaboration with Steiniger. One of Mascaro's most successful and best-known inventions is the *Aerifier*, patented in 1946 and used to cultivate and aerate turfgrass. "The Aerifier was actually the first aerator," says John Mascaro. "The name Aerifier is a copyrighted name that my dad came up with. But over the years it's been imitated, and the word *aerifier* has become generic—sort of like *Kleenex*." Other well-known Mascaro inventions include the Verticutter, developed in 1952 for removing thatch, and the Vertigroove, designed to remove soil layers on greens and improve drainage. Of the 100 or so turfgrass products Mascaro and his company released over the years, twenty were awarded patents.

"Tom was a generous person, and he donated some of his equipment to budding turf programs like the one at

Penn State," says Watschke. Mascaro provided an Aerifier to James Watson, Jr., a Penn State graduate student researching soil compaction. In 1950 Watson received the first Ph.D. in turfgrass science at Penn State.

In August 1994, Penn State held a dedication ceremony for the [Mascaro/Steiniger Turfgrass Equipment Museum](#), located on the Penn State campus. Visitors to the museum will find many of Mascaro's inventions, as well as his extensive collection of more than 100,000 slides.

Mascaro retired in the early 1970s and moved to Florida, where he started up the company that is now Turf-Tec International. His son John now serves as president of Turf-Tec International. Tom Mascaro died in 1997 in Fort Lauderdale, Florida, but his memory lives on in the many contributions he made to Penn State and the turfgrass industry. "Penn State's turfgrass program is fortunate to have had Tom Mascaro," says Watschke. "Tom always enjoyed the interaction with students and faculty, and the friendships forged over the years."

## Eberhard Steiniger

"I spent over sixty years in turf management and field research, and I enjoyed every minute and every year of it."

Those simple words of Eberhard "Eb" Rudolf Steiniger in a 1993 interview sum up an illustrious career filled with accomplishments as well as lifelong friendships. Steiniger, who served for over fifty years as golf course superintendent at the Pine Valley Golf Club in New Jersey, was instrumental in the beginnings of Penn State's turfgrass management program. He was part of the group who pushed for turfgrass research funding at Penn State in the late 1920s, and throughout his career collaborated with faculty members H.B. Musser and Fred Grau, as well as others, on development of turfgrasses.

Born and educated in Germany, Steiniger immigrated to the United States in 1926. "A year after I came here," said Eb, "I saw my first golf course—at Lakeville Country Club in Long Island. The people I was working for were members of that club, and when they took me out to show it to me and I saw this beautiful landscaping and this huge, beautiful piece of turf in front of the clubhouse, I thought, This is for me. And that's where my career in golf course work started."

"I asked the greenkeeper to hire me, and he did," Eb continued. "A year later, he left for Pine Valley and brought me along. He stayed two years at Pine Valley, and when he left in 1931, I became in charge of the course. I worked directly under the president of the club, John Arthur Brown. That was an unusual situation. And the team of John Arthur Brown and Eb Steiniger lasted over fifty years." After Brown's death, Steiniger worked six more years at Pine Valley until his retirement in the early 1980s.

While at Pine Valley, Steiniger established a large practice range that included turf nurseries and ten acres of research plots, as well as a helicopter landing pad. "We had any kind of turf that people would bring me," he said. "And every now and then Burt Musser would sneak over to New Jersey and visit me. I worked closely with Burt."

Steiniger traveled extensively during his career and often brought back plants to introduce to his research plots at Pine Valley. He helped develop C-7 Cohansey creeping bentgrass, which is found on many golf courses today.

Steiniger also had a role in developing numerous pieces of turfgrass maintenance equipment. He and his

lifelong friend Tom Mascaro were “the perfect marriage of innovator and inventor,” said Thomas Watschke, professor of turfgrass science, at the August 1994 dedication of the Penn State Mascaro/Steiniger Turfgrass Equipment Museum. “Tom would invent and prototype pieces of equipment at the urging of Eb, and they'd try them out at Pine Valley. If it didn't work, it was back to the drawing board, back to the metal shop to rework, redesign, redevelop.”

Steiniger's pride in Pine Valley was well known and well deserved—the club features one of the top golf courses in the world. “Pine Valley is a unique place,” says Watschke. “It's gorgeously manicured where it should be, and neglected otherwise. The contrast is stunning. It's such a prestigious club, there are members from all over the world, some who don't even play golf. Eb told me a story once: There was a group of guys from the U.K.—an Irish guy, a Scot, and two from England—who traveled the world playing golf, and every year one of their stops was Pine Valley. During one visit one of them said, ‘Mr. Steiniger, I'd like to pay you a compliment.’ And he said three words: ‘This is it.’ He played all over the world, every year, and Pine Valley was it. Eb told me that was the nicest compliment he ever received.”

Steiniger remained a friend of Penn State throughout his career. He attended his first Turfgrass Conference for Greenkeepers on campus in 1928 and was a faithful attendee thereafter. “Back then, there was very little information available that would help us grow healthy grass,” he said in 1993. “So each and every year I looked forward to going to the Penn State Conference and took great pride in seeing it grow into one of the finest conferences and turf schools in the nation.”

A popular figure at conferences, Steiniger enjoyed the people every bit as much as the education. Says his friend Stan Zontek, director of the USGA Green Section, Mid-Atlantic Region, “At conventions and conferences, superintendents and students alike would gather in hotel rooms and hospitality suites to hear veterans like Eb tell stories. You listened, you learned, and you laughed. And when you went back to work, those tidbits of advice and insights influenced how you did your job.”

Steiniger served as president of the Pennsylvania Turfgrass Council in 1970 and 1971, and he served as president of the Pennsylvania Golf Course Superintendent's Association. He was also director of Penn State's Musser International Turfgrass Foundation and O.J. Noer Turf Research Council and chairman of the Joseph Valentine Research Center.

Those who knew Eb Steiniger can't seem to say enough good things about him. “He was one of the nicest guys you could ever meet—a real fun-loving guy,” says Richie Valentine, turfgrass consultant and son of Joseph Valentine. “He had that German accent that you always recognized. I never heard him say a bad word about anybody. He was something else.” Adds Watschke, “He was a charming fellow, a real gentleman.”

Steiniger passed away in April 2002, at the age of 96. The late George Hamilton shared a few words at his funeral: “Eb's respect and kindness towards everyone was unsurpassed. He and his family were present in August 1994, when we dedicated the Penn State Mascaro/Steiniger Turfgrass Equipment Museum. To Eb, the excitement of the day wasn't about the building with his name on it. It wasn't about the vast array of equipment in the building. It was about the people. Being together with his family, his good friend Tom Mascaro, and others was the big event. I think it's safe to say that Eb loved people more than any other part of life.”

That's evident in this note, which Steiniger wrote to Fred Grau in 1973:

Dear Fred,

Here is my check for \$100.00 for my sustaining membership in the PTC. I am just so glad to send this as long as I can afford it. I will never be able to repay Pennsylvania State University for what they've done for me. I always will be indebted to them for giving me knowledge, guidance, for helping me in my career, and for the wonderful friends I made.

P.V. was never prettier this spring. John Arthur is still going strong, but he needs me a lot.

Gratefully yours,

Old Eb