

Why the Baltimore Orioles Put a Soil Scientist on Their Roster

Paul Zwaska didn't learn how to shape a pitcher's mound while at the College of Agricultural and Life Sciences of the University of Wisconsin-Madison, but his soil science degree helps him understand why a particular vein of Maryland clay yields the best mound-building dirt in the nation.

Zwaska doesn't need to know soil physics to operate the state-of-the-art, vacuum-pumped field drainage system at the new Oriole Park at Camden Yards, either — but his knowledge of soil physics tells him why his system works perfectly (his field can be ready for play within a half-hour after a heavy rain, while an identical system 50 miles away can't clear puddles from the surface).

That can be explained, he says, by basic soil physics.

"They tried to put a loam-based sod on a sand-based field. It's common sense," Zwaska says. "Maybe it's not. Maybe it's because I learned it in school. That's something soil physics taught me."

On-the-job experience taught Zwaska how to trim the basepaths, but soil scientists helped him work out the specs for his infield dirt. His "recipe" calls for 20 percent Michigan peat, a compound with properties of a compost-like consistency and dark color, both of which make tracking baseballs much easier.

Zwaska learned the art of caring for a baseball infield from his predecessor Pat Sanderone, long-time groundskeeper for the Baltimore Orioles, who hired Zwaska as an assistant in 1986. He learned the science of turf and soils from specialists in soils, horticulture, plant pathology, entomology and agricultural engineering at the UW-Madison. In particular, he learned his specialty from James Love, who established the turf program in 1960 and ran it until retiring in 1986.

It was Love who also introduced Zwaska to the late Harry Gill, groundskeeper for the Milwaukee Brewers and co-founder of STMA. Gill gave Zwaska a summer internship, and later recommended him to Pat Sanderone and the Orioles.

Zwaska swears this job is the one he knew he wanted the day he entered college.



Above: Zwaska stands above his pride and joy — Camden Yards. *Right:* Only one clay in the entire nation's meet's Zwaska's requirements for the pitcher's mound.

He says he got the "itch" for grounds keeping as a kid growing up in Madison, Wis., and took frequent trips to Chicago's Wrigley Field for Cubs' games.

"In high school, I'd go to games with my friends. They'd be down by the rail taking pictures of the ballplayers. I'd be taking pictures of the grounds," Zwaska said. "I still have those pictures."

Zwaska took over as head groundskeeper last winter, just in time to help with the move from the old Memorial Stadium to the new Oriole Park at Camden Yards. The new park has drawn national acclaim for its carefully crafted, old-time baseball feel, with arched-brick facade, steel trusses and green slat seats.

Zwaska was a part of the five-year stadium design process. He helped Sanderone and consultants work out the field design, and planned the service areas under the stands. He's pleased with both the ballpark and the fact that his club inaugurated it with a winning season.

The only thing Zwaska doesn't like about the whole arrangement is that it's not home



in Wisconsin. "I hate the summers and I hate a brown Christmas." Other than that, Zwaska simply says, "I love this job." □

Paul Zwaska is a member of STMA. This article was reprinted from CA Quarterly, College of Agricultural and Life Sciences, University of Wisconsin (UW)-Madison, courtesy of Robert Mitchell, Editor. Photos taken by B. Wolfgang Hoffmann, Department of Agricultural Journalism, UW-Madison.