Hapludult, redoximorphic feature, lithologic discontinuity—while these terms for soil sound foreign to most, a talented team of University of Maryland students know them well. In fact, the students, members of UM’s Soil Judging Team, can describe, characterize, classify, and interpret a soil in 60 minutes.

What is Soil Judging?

Unfamiliar to many, soil judging contests take place every year at colleges across America. And it is much more than collecting various soil samples; it is a process that involves immense knowledge of soil properties, to accurately gauge morphological features found throughout the soil profile. During a soil judging contest, soil judgers are given a strict time limit to describe the characteristics of a soil profile. They must identify the color, texture, consistency, structure, and other properties of each soil horizon. Students are also asked to make interpretations about the soil, such as its classification, its parent material, its suitability for different land uses, and its water holding properties. “I love how when you step into a five-foot pit, you are immediately transported back hundreds of thousands or even millions of years,” says soil judger Sam Bosco, Natural Resource Management major. Sam is fascinated by the different factors of soil formation and how the land has changed over time. Soil scientists have calculated that in some cases it takes more than 500 years to form one inch of topsoil.

Soil Judging – Perfected at the University of Maryland

There are more than 20,000 types of soils in the United States. One place to learn about all of them is the Department of the Environmental Science and Technology at UM, which offers a Soil and Watershed Sciences major for graduate and undergraduate students. “Soils are complex ecosystems that exist right under our feet and most people never notice them,” says soil judger Amanda Garzio, Environmental Science and Policy major. Amanda is interested in soils because soils are unique and diverse. “Soils are an underappreciated aspect of our lives, which provides us with food, feed, and living space.” Indeed, soil science is a key factor in food production and agriculture, and is at the forefront of environmental issues such as land use, soil contamination, ground water quality, and waste disposal.

Soil Judging - Experience for Life

Soil judging can not only look great on your resume, but it can also teach you life-skills you would never think you could learn in a five-foot-deep pit. “During the contest, I learned about time management and when to stop dwelling and move on,” Sam says. “I also learned a lot about trusting people, and on the contrary, I learned about trusting my own judgment.” Since it takes numerous people to complete the soil judging contest, students must work together quickly and share soil knowledge effectively because a few seconds can make a difference. “I now can look at a soil profile and describe many of its characteristics and properties without anything but my own knowledge and experience,” Amanda says.