Dirt” is a four-letter word, according to Mike Singer, Professor Emeritus of Soil Science at the University of California–Davis and SSSA Fellow. One of the original donors to the Dig It! The Secrets of Soil exhibit, Singer says “dirt” is the stuff you get under your finger nails. But soil—now that’s another story. Dig It! is a collaborative effort of Smithsonian’s National Museum of Natural History, SSSA, and the Agronomic Science Foundation with support from government agencies such as USDA.

“Clearly I’m prejudiced, annoyed, and embarrassed that so few people have knowledge of the soil upon which our society depends,” Singer says. “We live in houses that are built on soil, we grow food in soil, run pipes through soil, and bury our dead in soil. But the vast majority of people—especially urban dwellers—don’t understand or value this precious natural resource. And anytime we don’t understand natural resources, we tend to use them badly,” he says, adding that water and air are prime examples. And when you think about all of the services that soils provide and how little people understand about them, the knowledge gap is really much larger for soils than it is for water, air, or any other major resource.

“When people talk about soil at all, they are usually talking about just the top six inches,” Singer contends. “But many soils go much deeper than that. If you came out to California, I could show you soils that are a million years old and seven meters thick. One of the most important questions in soil research asks how long it takes a soil to form. Even very young soils tend to be quite old in terms of human life span,” Singers says, adding that most farmers are only thinking one season ahead in terms of managing their soil resource.

That’s why he, along with ASA and SSSA Fellow John Havlin, Professor of Soil Fertility at North Carolina State University and current ASF Chair, and many other professionals in the field from all across the country are at work to keep Dig It! The Secrets of Soil on the road. Expected to continue in Raleigh, NC this fall, the exhibit may make a stop in Denver on its way across the nation towards California. In fact, there is a museum in Sacramento that is interested, and Singer is looking forward to piquing the interest not only of the next generation of soil scientists, but also to educating legislators about the importance of soil as a natural resource. The exhibit promises to help young and old alike see the connections between soils and everyday life and think about this hidden world in a whole new way.

One fact some people may not know is that not all soils are suited for agriculture. Another relates to soil health. “I know when I’m healthy or sick, but we still don’t really understand how to define a healthy soil,” Singer says.

### Bringing Soils to Life

The exhibition brings soils to life and invites visitors to look at them in new and exciting ways through interactive displays, multimedia, hands-on components, and cultural displays. It covers soil concepts ranging from horizon formation to global element cycles.

“Early on, we saw that the soils exhibition was an opportunity to educate millions and hopefully inspire many of them to look at soil as an exciting science,” says Havlin, a former president of SSSA. “We will hopefully inspire a future generation of soil scientists.”

There are three sections on soils from a human perspective, starting at the scale of the planet, moving to a regional landscape, and ending at the home scale. Visitors will learn about soils in the context of global cycles, food production, and their own backyard. They will also learn about critical issues of soil management, such as management for forests, food production, and urban development.

Singer’s favorite displays are the 54 soil monoliths—one from each state, three U.S. territories, and the District of Columbia—arranged to highlight their dramatic color and textural variety. “All of these soils are different, and they serve different purposes. They look like an art gallery when they are set side by side,” he says.

Do you know of a location that would welcome this interactive exhibit as we continue our quest to educate the upcoming generation about the importance of soil science? If you do or would like to help us make a difference by becoming a mentor, scholar, or donor, please contact Emily Fuger (efuger@sciencesocieties.org or 608-268-4949) or Alexander Barton (abarton@sciencesocieties.org or 608-273-8095).