

DIG IT! THE SECRETS OF SOIL

A PRIMER ON THE SMITHSONIAN SOILS EXHIBIT

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This past summer the Soil Science Society of America (SSSA) opened an exhibition entitled, “Dig It! The Secrets of Soil”. It resides at the Smithsonian Museum of Natural History in Washington D.C., and represents a huge step forward in our Society’s efforts to educate youth about soils and to pique their interest in studying soils.

The objective of the Exhibition is to teach young people and adults that soil is one of the most valuable resources on earth and perhaps the most overlooked. Visitors learn that soils play a vital role in sustaining human welfare and assuring future agricultural productivity and environmental stability. The Exhibition illustrates that soils provide food, pharmaceuticals, fibers, and shelter, and play critical roles in the filtering of water and functioning of ecosystems. To put it simply, soils sustain life.

“Dig It!” has five major themes:

- ✓ Soils Are Living
- ✓ Soils Are Varied
- ✓ Soils Change Over Time
- ✓ Soils Link the Earth’s Land, Air, and Water
- ✓ Soils are Resources -- Renewable, but Subject to Misuse and Overuse

The exhibit occupies approximately 5,000 square feet of space in the Natural History Museum, which is the most visited natural history museum in the world, and it will be on display through January 2010. The exhibition is located near the Hope Diamond and IMAX theater exit, giving it great visibility to the literally 1000’s of visitors.

A soil monolith from each state, territory, and the District of Columbia are on display. Models and videos show water, nutrient, and gas movement in soil, soil formation, and relate soils to our daily activities. Interactive stations include soil texture, color and parent materials, and the distribution of soils in the U.S. In addition there are captivating videos to capture attention and to teach intriguing facts about soil.

This great Exhibition is the result of the tenacity and work of many persons over an 8-year period. Let me take you back to the year 2000 when this project first began and tell you the intriguing story of how “Dig It!” came to be. There were two soil scientists who each shared a passion for soil, for science, and for education, but these gentlemen had never met, and were certainly not aware of each other’s interest in a Smithsonian Exhibition. Independently, they each approached the Smithsonian Natural History Museum with an idea for an Exhibition about soils. They literally knocked on doors, made phone calls, and sent emails. They made convincing arguments that the world needed to be better educated about soil and the secret world

beneath our feet; remember all of this was going on without the one knowing what the other was doing.

Dr. Patrick Drohan, a Soil Scientist and SSSA member now at Penn State, contacted the Natural History museum's Carolyn Margolis. The second soil scientist, Mr. Tom Levermann with the USDA-NRCS, approached the Museum's Barbara Stauffer at about the same time. Unfortunately Mr. Levermann passed away in 2002 and did not get to see the fruition of his dream, but he inspired Jim Ware, another NRCS scientist who kept the project going. It's fortunate for us that these two gentlemen were persistent and that their enthusiasm was so contagious. They eventually convinced the Smithsonian staff and the SSSA to launch the soils exhibition project. They both can be credited with planting the seed which brought this great educational Exhibition on soils to completion.

Our Society is extremely proud of "Dig It!"; it is truly a world class exhibition that is already attracting large numbers of visitors, many of whom are under the age of 16. In evidence of how captivating the Exhibition is for kids, I offer the following comments overheard by Dr. Patrick Megonigal, Lead Curator of "Dig It!":

- ✓ a 10 year old boy telling his mom he learned that soils recycle nutrients
- ✓ a teenage girl who said "I had no idea soils were so different. How weird!"
- ✓ lots of people being photographed in front of their state soil
- ✓ a kid about 7 years old who got dragged out of the SSI movie about half way through. He said to his Mom "...but it's interesting". His mom said "I know, but we have to go"

My words cannot adequately convey the excitement and uniqueness of "Dig It!"; you will just have to see it for yourselves!

The SSSA owes a resounding thank you to the Smithsonian and the Natural History Museum's staff for their incredible vision on this project, and to the Steering Committee and its co-chairs Pat Megonigal of the Smithsonian Environmental Research Center; H.H. Cheng, University of Minnesota; Patrick Drohan, Penn State; John Havlin, North Carolina State; and Kevin McSweeney, University of Wisconsin. Many of our SSSA members served on the Design Team, Smithsonian's Extended Advisory Team, and as State Liaisons. All of us owe our lead sponsor, the Nutrients for Life Foundation, a huge thank you. The Foundation stepped up with a large gift that paved the way for securing our dream of having a Smithsonian Exhibition. We also are grateful to our other major supporters of the exhibition: Bayer Crop Science; LI-COR Biosciences; Syngenta; and the USDA-NRCS (they loaned its collection of state soil monoliths to the museum for display in this Exhibition), the Bureau of Land Management, and the more than 1,200 corporations and individuals who supported the Exhibition with generous contributions.

"Dig It!" will continue to take center stage at the Smithsonian Natural History Museum through January 2010, and then plans are for it will travel to science museums throughout the United States America through 2013 to expand its educational reach even further. We need your continuing support to assure that "Dig It!" can go on the road for four years after its time in the Natural History Museum in Washington D.C. is complete. Please contact Paul Kamps at our Society Headquarters to learn how you can help.

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