

Teaching soils to the General Public

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Soils are critical to all life on the planet yet most individuals treat soil like dirt. As soil scientist we have long recognized this and have struggled to find ways to communicate the importance of soils to the public. The goal is not purely altruistic as we recognize that society funds or research and provides the workforce in soils that we need to continue to gain knowledge and expertise in soil science. In 2006 the Soil Science Society of America took a bold move and created its K12 Committee in part to complement the Dig It! The Secrets of Soil exhibit that opened in July 2008 at the Smithsonian's Institution's Nation Museum of Natural History (of which SSS was a founding sponsor). The committee's work began quickly with a website designed to provide resources for K12 teachers (primary and school teachers). The first accomplishments included reviewing and posting links to web based information already available to teachers. These links were sorted by subject and grade level to make it easier for teachers to navigate the web and find what they needed quickly. Several presentations and lessons designed for K12 teachers were also posted at this time. Concurrent with this effort a subcommittee reviewed and organized the national teaching standards to show where soils could fit into the overall K12 curriculum. As the website was being developed another subcommittee developed a soils book (Soil! Get the Inside Scoop, 2008) to further complement the Dig It! exhibit. This was a new endeavor for SSSA having never worked with the non-academic audience in developing a book. Peer-reviews of this book included not only scientist but also students in order to make sure the book was attractive to them. Once the book was published and the website developed it became clear more outreach was needed. SSSA K12 Committee has attended both the National Science Teachers Association (since 2008) the USA Science and Engineering Festival (since 2010) with exhibits and workshops. It has cooperated and contributed to the American Geological Institutes' Earth Science Week materials with brochures and lesson plans and with National Association of Conservation Districts by providing peer-review and distribution of materials. The most recent developments from the committee include a web redesign that is more student and teacher friendly, the development of a peer-review system to publish K12 Lesson Plans, and finally the publication of a new soils book (Know Soils, Know Life, 2012) for the 8-12th grade audience. It is hoped that Know Soils, Know Life will be used by the Cannon Envirothon and environmental science students and teachers. Future activities planned include a state soils book, teacher's guide for Know Soils, Know Life and development of a searchable digital photo/video library. Overall this committee has been exceedingly productive in its brief 8 year history.

Most recently and in part based on the success of the K12 Committee's success, SSSA created an Identity Committee with the goal of not only reaching our members and other related scientist but also to better engage the public and the media. The efforts of this committee have been to redesign our web site to make it more accessible to the general public. The opening page has interest of a general nature and links that some who knows nothing (or very little) about soils can navigate to find out more. Prominent on this home page are links to soil questions posed by the public and answered by soil scientists. There is also a soil related blog as well as a resource for soil photos. In order to encourage secondary school students to consider a career involving soils there are profiles of individuals who are researchers, consultants, teachers and artists as well as soil scientists. The hope is that all this information will inspire a new generation of soil scientist as well as help the general public understand that soil is not just dirt.