

The National Academies of
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Soils: The Foundation of Life

A workshop hosted by the U.S. National Committee for Soil Sciences

December 5, 2016, 9:00 am to 5:00 pm
National Academies of Sciences, Engineering, and Medicine
Keck Center, Room 100
500 Fifth St., NW, Washington, DC 20001

9:00 am - Welcome and introduction of the workshop. *Donald L. Sparks (S. Hallock du Pont Chair, Francis Alison Professor, Director, Delaware Environmental Institute (DENIN), University of Delaware); U.S. National Committee for Soil Sciences, Chair*

9:10 am - Soil scientists and their work. *Patrick Megonigal (Associate Director of Research, Smithsonian Environmental Research Center), Chair*

Soils and National Security

9:15 am - *Jo Handelsman (Associate Director for Science, White House Office of Science and Technology Policy): The State and Future of U.S. Soils*

Climate Change and Sea Level Rise

9:35 am - *Susan Trumbore (Director, Max-Planck Institute for Biogeochemistry; Professor of Earth System Science, University of California, Irvine): Role of Soils in Adapting to and Mitigating Climate Change*

9:55 am - *Torbjörn Törnqvist (Chair, Department of Earth and Environmental Sciences, Tulane University): Soils and Sea-Level Rise: Are Our Youngest Soils Also Our Most Vulnerable?*

Water, Health, and Food Security

10:15 am - *Henry Lin (Professor of Hydopedology/Soil Hydrology, Penn State University): Soil and Water Resources: Tackling the Last Hydrologic Frontier*

10:35 am - *José Centeno (Director, Division of Biology, Chemistry and Materials Science, Office of Science and Engineering Laboratories, U.S. Food and Drug Administration): Soils and Health: A Medical Geology Perspective*

10:55 am - *Pedro Sánchez (Research Professor, Institute for Sustainable Food Systems, Soil and Water Sciences Department, University of Florida): Soils and Food Security*

11:15 am - Break

Soil and Biodiversity

11:30 am - *Diana Wall (University Distinguished Professor and Director, School of Global Environmental*

Sustainability at Colorado State University): Common Ground: Soil Biodiversity for Humanity and Ecosystems

Cities and Built Infrastructure

11:50 am - *Peter Groffman (Professor, CUNY Advanced Science Research Center and Brooklyn College Department of Earth and Environmental Sciences): Soils in Cities*

12:10 pm - *Christopher L. Meehan (Bentley Systems Incorporated Chair of Civil Engineering and Associate Professor, College of Engineering, University of Delaware): Soils and Their Role in Infrastructure*

12:30 pm - Pick up lunch outside of Keck 100

1:00 pm - *Dennis Dimick (Ret.) Executive Editor, National Geographic Magazine: Our Good Earth: Where Food Begins*

1:15 pm - *Soils, the Discipline and the Resource: a Panel. Asmeret Asefaw Berhe (Associate Professor, Soil Biogeochemistry, University of California, Merced), Chair*

Panel participants:

- *Richard Pouyat (Assistant Director, Climate Resilience and Land Use, Environment and Energy Division, White House Office of Science and Technology Policy)*
- *Sally Brown (Research Associate Professor, University of Washington)*
- *Colin Campbell (Senior Research Scientist, METER Group (formerly Decagon Devices))*
- *Steven Shafer (Chief Scientific Officer, Soil Health Institute)*

2:30 pm – Break

2:45 pm - Separate breakout sessions along the five groups of talks in the morning with rapporteurs and scribes

4:00 pm - Re-convening of the breakout groups, reports from the five rapporteurs and summary of the day's proceedings. *Ronald Amundson (Professor, Department of Environmental Science, Policy, and Management, University of California-Berkeley), Chair*

5:00 pm – Adjourn

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