



Soil biology, chemistry, and physics ... Oh My!

By Briana Wyatt, Susan Chapman

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The screenshot shows a video conference interface. The main screen displays a slide with the title "Soil Physics, Chemistry, and Biology ... Oh My!" and the logo of the Soil Science Society of America. Below the title, it says "Presented by members of the Soil Science Society of America". The slide features a photograph of a grassy soil cross-section. To the right of the main screen, there is a vertical stack of four video feeds, each showing a different person: Briana Wyatt, Owen Duckworth, Jenn De Bruyn, and David Lindbo. The video feeds are labeled with their names. The bottom of the screen shows a standard video player control bar with icons for play, volume, and other media controls.

More than 60 K-12 educators attended the SSSA K-12 Outreach Committee's recent webinar titled "Soil Biology, Chemistry, and Physics ... Oh My!"

Those of us involved in soil science know that soil is so much more than what food is grown in, what we walk on, or what we move out of the way to build houses or buildings on. It is complex, life giving, and is critical for a balanced ecosystem. Despite the importance of soil, many people outside the field, including K-12 educators, are not aware of the value and impact of soils.

The SSSA K-12 Outreach Committee is working to change this! One opportunity was our recent webinar titled “Soil Biology, Chemistry, and Physics ... Oh My!” hosted by the National Association of Geoscience Teachers, American Geosciences Institute, and the National Science Teaching Association.

Each presenter introduced basic concepts related to our field of study (what it is, why it's important), presented an interactive K-12 lesson plan for each subject area, and provided a bit of information about the importance of soil science careers. We wrapped up with an overview of our website and educator's guide resources. Thanks to our SSSA members for developing the webinar:

“[The webinar provided an] excellent overview of soils and ideas/activities to get students engaged in discovering soils for themselves.”

- Physics: **Briana Wyatt**, Assistant Professor, Texas A&M University
- Biology: **Jenn DeBruyn**, Associate Professor, University of Tennessee–Knoxville
- Chemistry: **Owen Duckworth**, Professor, North Carolina State University
- Moderator: **David Lindbo**, Director, USDA–NRCS Soil and Plant Science Division

More than 60 K-12 educators attended, and feedback from the webinar participants was overwhelmingly positive. One participant commented, "The webinar gave me the working knowledge and resources to immediately put the activities to use with youth." Others stated that they "walked away with new appreciation for the complexity of soil" and that the webinar provided an

"excellent overview of soils and ideas/activities to get students engaged in discovering soils for themselves."

The webinar recording can be viewed at www.soils4teachers.org/webinar, and the lesson plans and activities discussed in the webinar, plus many others, are available at www.soils4teachers.org/lessons-and-activities.

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