

# Communicating the importance of soils to human health: new options and opportunities

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## INTRODUCTION

All of our knowledge goes unused if people are not aware of or do not understand it. As scientists we spend a lot of time communicating with each other, but are not always so effective at communicating outside the scientific sphere. A number of recent papers, books, and book chapters have addressed links between soil and human health (Fig. 1), but few in the general public seem to recognize these links. Therefore, the logical conclusion is that the scientific community is profoundly failing to communicate the importance of the soil - human health connection to the broader public. To effectively communicate this message it is important that we do two things: 1) find a way to make a positive connection between people and soil and 2) find a way to reach people with this message. This project explores new opportunities to bridge the communication divide that so often exists between scientists and the public.

## CONCEPTS TO CONNECT

Making a positive connection between the general public and soil involves presenting a viewpoint of soil that people who are not intimately vested in soil can relate to. Soil health, soil security, and soil ecosystem services (SES) have been proposed as concepts that might help make that connection; each has close ties to soil biodiversity. Soil health is a relatively old concept (dating to 1910) that already has international acceptance by agricultural interests and policy makers and connections between soil health and human health are recognized by some farmers. Soil security (2013) and SES (1990s) are newer concepts than soil health, and do not currently have as much recognition in the non-scientific population. However, each builds on broader concepts that should be appealing to the general public. Soil security seeks to build on well accepted concepts like food, water, and energy security, and SES builds on recognition that nature provides essential needs.

## WAYS TO COMMUNICATE

Another major aspect of making a connection is how that message will be communicated and perceived. Social marketing represents a relatively new approach and social media a new platform to connect with the public. Each presents unique opportunities and challenges. Social marketing seeks to change behavior rather than convince people to purchase a specific good. The changed behavior leads to a more desirable outcome than what was achieved under previous behavior. Marketing on social media is quite different than traditional marketing, in that the context of a message (who it comes from) is more important than the content of the message (the focus of traditional marketing). Several groups, such as the Soil Science Society of America, International Union of Soil Sciences, and Soil Science Australia, have begun nascent social media campaigns to promote soils (Fig. 2), but the effectiveness of these efforts is still being evaluated.

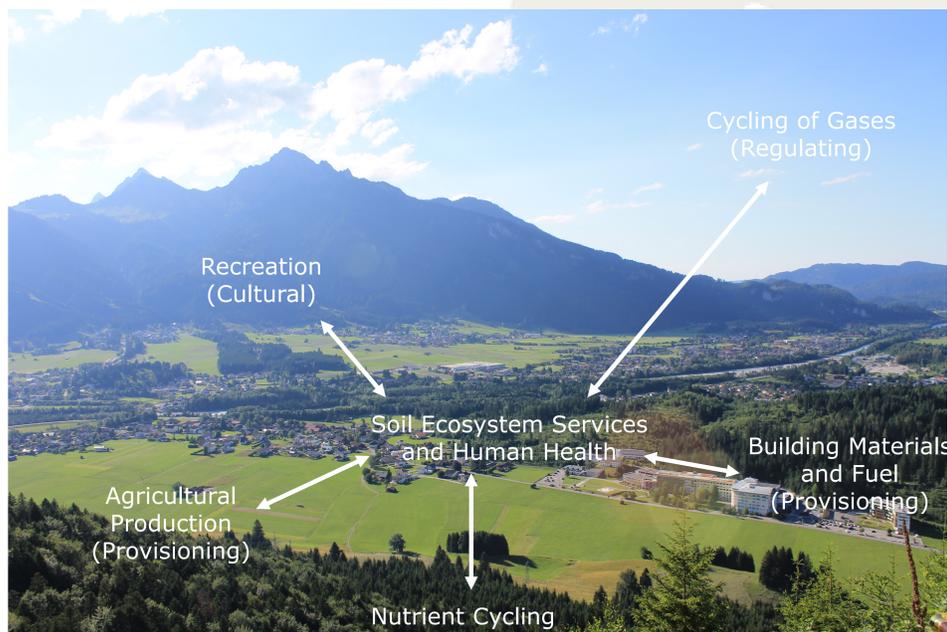


Fig. 1: here are many links between soil and human health. A number of these links are closely tied to soil ecosystem services and soil biodiversity. Some of these links have received a large amount of attention in the soil science and related literature, such as agricultural production and nutrient cycling, while other links have received much less attention, such as the provision of building materials and fuel.

## ACKNOWLEDGEMENT

E. Brevik, J. Steffan, and P. Barnhart were supported by the National Science Foundation EPSCoR program under Grant Number OIA-1355466 during this project.

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Fig. 2: Two examples of social media campaigns promoting soils. Above: the start of a blog post in the Soil Science Society of America's "Soils Matter" blog series. Left: the beginning of a YouTube video prepared by Soil Science Australia. Such efforts can reach a large number of people with much smaller budgets than are required for traditional marketing campaigns.

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