



Overlooked links between soils, provisioning ecosystem services, and human health

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Clear connections have been demonstrated between ecosystem services (ES) and human health and between soils and human health. However, despite a rich literature exploring links between ES and human health, few studies have investigated links between soil ES and human health. Viewing the relationship between soils and human health through the ES lens reveals that soil ES such as the provisioning of shelter, clothing, and fuel have been overlooked in the soil and human health literature. Shelter provides protection against inclement weather, temperature extremes, and other potential threats, and therefore supports human health. Clothing provides a more consistent micro-environment around the skin, provides protection from ultraviolet radiation, and also provides protection from some parasites (although it can enhance the presence of other parasites). Fuel is required to warm shelters, which provides refuge from cold temperatures. Fuel also allows us to cook food, which reduces disease. Soils supply materials (wood, straw, cotton, wool, etc.) in support of these functions in ways that are often more environmentally responsible than is the case with many modern building and clothing materials or with fossil fuels. However, it is important to realize that sustainable management practices are critical in order to achieve environmentally responsible production of these products. Future studies are needed that investigate the links between these overlooked soil ES and human health.

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