

Collaborative Project Contains An Important Health Message For You and Your Soil

Salem producer helps to initiate effort involving both the South Dakota Soil Health Coalition and Avera Health.

As the summer weather throughout South Dakota really begins to shine, it is important for farmers, ranchers, gardeners, and the general public to examine how to protect not only their own health but the health of the soils around them. Soils are alive, home to a multitude of biological organisms and processes that, similar to the surface of our own body, when properly protected allow for an immensely productive ecosystem to thrive within and beneath their surfaces.

Continued, unprotected exposure to the potentially harsh rays of the sun can cause negative health affects for both our skin and the soils we rely on to power our agricultural systems. Skin cancer is the most common cancer, with over twenty percent of people developing this type in their lifetime. It is estimated that melanoma, specifically, will affect one in twenty-seven men and one in forty women over the course of their lifetime. According to Dr. Mandi Greenway of Avera Medical Group Dermatology, based in Mitchell, SD, there has been a steady decline in the skin health of farmers she has treated in recent years. This is due in part to changes in the type of clothing worn and lack of precautions taken when working out in the sun, but small changes can make a big difference.

Start Protecting Yourself Today

Simple steps can be taken to lower the risk for these health problems and include applying sunscreen, sporting long sleeves, and wearing wider brim hats to increase protection. Studies have shown that every inch of brim on a hat reduces the risk of skin cancer over a lifetime by ten percent. It is because of this metric that farmer Kurt Stiefvater, of Salem, SD, first thought of a collaborative project that would involve both the South Dakota Soil Health Coalition (SDSHC) and Avera Health.

Understanding the Skin and Soil Connection

Stiefvater met with Dr. Greenway for a regular check-up earlier this year. During this visit, she



discussed with him the importance and need for more skin protection. As an active member of the SDSHC, he found himself making the connection between the potentially harmful effects of sun on skin and what can be seen when producers leave soil exposed to the elements. Some bare soils can reach one hundred and forty degrees when left unprotected, hot enough to kill soil organisms and stress crops planted in them due to both heat and excessive soil moisture evaporation. It was when Stiefvater made this connection that he reached out to Cindy Zenk, Coordinator for the SDSHC, to see how connecting these two ideas could benefit agricultural producers and the soils they manage.

Keeping Our Soils Covered and Productive

One of the five basic principles of soil health is to keep them covered as much as possible, whether that be with a living cover or plant residues. This provides numerous benefits such as preventing wind and water erosion, reducing evaporation rates, reducing drastic temperature fluctuations, protecting soils from harmful compaction, suppressing weed growth, and providing habitat for the surface dwellers of the soil food web. More stable soil temperatures increase the survival of microflora, which help with nutrient uptake. This, in combination with many of the benefits listed above, allow for protected soils to be more productive, increasing overall soil health significantly.



In order to increase awareness of these benefits and the importance of increasing skin protection, the “Protect Yourself and Your Soil” collaborative project was created in June. Both Avera Health and the SDSHC will be distributing wider brim hats and educational information throughout the summer, highlighting facts about the skin and soil connection, as well as tips to avoid negative health effects. It is their hope that this unique collaboration will increase the quality of life for South Dakota farmers,

ranchers, gardeners, and the general public while also promoting the protection and enhancement of one of the state’s most important resources.

For more information on how to increase the health of your soils or to receive any of the materials created for the “Protect Yourself and Your Soil” project, please contact the South Dakota Soil Health Coalition at sdsoilhealth@gmail.com, (605) 280-4190 or visit www.sdsoilhealthcoalition.org.