

2022 Earth Science Week KUNM Radio Presentation: Kevin Hobbs

Welcome to Earth Matters – field notes on the geology of New Mexico’s enchanting landscapes. Celebrating Earth science week, I’m Kevin Hobbs.

In 1937, President Franklin Roosevelt wrote that “the nation that destroys its soil destroys itself”. His plea related to the extreme climate events occurring in the central United States at that time. These events, referred to as the Dust Bowl, culminated in extensive soil loss in the Great Plains. The dust bowl left around half a million Americans homeless. More tragically, some 7,000 people died from malnutrition and pneumonia.

Eighty-five years have passed since Roosevelt’s call for effective, science-based soil management. However, soil degradation remains a critical and growing problem, in New Mexico and around the world. Soils provide essential functions to the well-being of society, ranging from the obvious, like food production, to the subtle, like carbon storage, flood protection, and biodiversity.

Soils are the link between Earth’s solid rock crust and all its living systems. Soils take millennia to form, but can be lost in an instant. The loss of soils in New Mexico occurs because of overgrazing, wildfires, poor agricultural practices, and other human activities. However, effective land management through science-informed forestry, agriculture, grazing, and construction can not only prevent soil loss, but begin the process of soil formation in altered landscapes. Through such practices, New Mexicans can work to ensure that our society’s future is built upon a sustainable foundation of healthy – and hopefully growing – soils.

Celebrating Earth Science Week, this is Kevin Hobbs with the New Mexico Bureau of Geology at New Mexico Tech.