



**October 5, 2018**

## FARMER PODCAST REVEALS COVER CROPS EFFECTS

Farmers are beginning to capture more energy from the sun for their soils to increase soil health by having living plants in the fall and early spring. Chad Dane, a farmer from Clay County, discusses his experience using cover crops in a corn-soybean rotation on this week's UNL BeefWatch podcast. Beef Extension Educator Aaron Berger talks with Dane about why he first started using cover crops and what he's learned along the way from planting to germination and from soil benefits to grazing cattle. He never used to let his neighbors graze cattle on his fields.

Don't underestimate the effect of cover crops on our soils. There was a farmer near Wilber this year that had comments from neighbors why his dryland corn handled a dry stress period better than theirs. The answer was corn crop roots following cover crop roots deeper into clay soils extracting more soil moisture deep in the profile.

Our soil, as a living ecosystem, reflects a fundamental shift in the way we care for our farm ground. Soil isn't an inert growing medium, but rather is teaming with billions of bacteria, fungi, and other microbes that are the foundation of a special symbiotic ecosystem under our feet. If you want to find earthworms in the spring or fall, dig in a cover crop field. They handle Mother Nature's tillage. Mechanical tillage decreases earth worm populations. Crop roots contribute biologically active chemicals into the environment known as root exudates. Root exudates are known to influence growth and establishment of crops and these are released from living root systems. So the longer we are having a living root in the soil, the better, and over time will increase soil organic matter content. If our weather is changing with milder winters we can take advantage of this by utilizing cover crops.

Dane farms 3,600 acres, about 800 to 1,000 of which is seed corn, with the remainder in corn and soybean. About 90% is irrigated.

One of the first years Dane grew seed corn there was a massive hail storm in August that left just 600 acres to harvest. The ground was bare and he knew he needed to do something to hold the soil in place until planting time the next spring. He flew on turnips and radishes at a cost of \$32/acre, more than twice what he paid this year at \$15/acre including application. From that year, he's expanded and fine-tuned his use of cover crops, adding cereal rye to the mix as well as grazing cattle.

He charges \$15/acre for neighbors to graze the seed corn fields that have cover crops or the cost of the cover crop seeding. This year he is lowering the cost to \$10 per acre only if the owner of the cattle moves every 30 days. The effect of this change is leaving more protective cover (or blanket so to speak) for his living soil.



Basically from a disaster, it turned into a positive for his farm operation. Today Chad talks about how crop rooting depth and yields have responded on some challenging new ground that he now farms. I made a short link to his podcast (audio with no picture) to make it easy for you to listen to Chad's information. It's worth listening to what he has experienced over the last five years at: <https://go.unl.edu/dane> The podcast is 19 minutes.

Randy Pryor, Extension Educator  
University of Nebraska-Lincoln Extension in Saline County · 306 West 3<sup>rd</sup> Street, Wilber, NE 68465  
Phone (402) 821-2151 · Fax (402) 821-3398 · e-mail: [randy.pryor@unl.edu](mailto:randy.pryor@unl.edu)