Frost Seeding Clover with a Drill

By Wayne Shriver, Eastern Agricultural Research Station Manager, Ohio State University

February 1, 2017 - Here at the Eastern Agricultural Research Station at Caldwell we manage our pastures in an effort to keep them sustainable by including legumes. Sometimes, producers can get too wrapped up in choosing the right legume, when the real issue is just getting something that will thrive. Here, we have some ladino clover, red clover, bird’s-foot trefoil, and a little alfalfa. I like all of them and want between 25% and 40% legume plants in our pastures.

We very seldom renovate a pasture from scratch. Rather, we interseed into pastures and hayfields to get new legume growth. If we completely tear up a field to renovate and then have a very wet spring, we could end up with not much growing there. If we interseed, we will at least still maintain the old growth.

A favorite technique is to frost-seed with a no-till drill when the ground is still frozen. Some might think the drill wouldn’t go into the soil, but all we care about is scratching the surface and putting the seed in soil contact. When the ground thaws, it will close over and give seeds a chance to germinate. We think the drill gets 25% to 50% better germination than broadcast seeding. Of course, the drill takes more time and is more of an investment in equipment. That’s the trade-off.

Another way we encourage legumes is to rotate cattle between pastures quickly, even early in the season. If we let the grass get too tall it starts to crowd out the legumes. If we move the cows every two or three days, it keeps the grass shorter and prevents heading out. I use the illustration of trying to plant a tree seedling into a standing forest of mature trees. It just can’t compete and the secret to maintaining a good stand of legumes is to reduce competition. If we’re concerned about keeping it grazed closely enough in the spring, we’ll start grazing earlier or plan to take a cutting of hay to allow the legumes to come through.

As for fertility, we like to soil-test and to apply nutrients to pastures in the fall. When we interseed in the spring, the fertility is in place to help the new growth get going.