Clover, the perfect pairing to your pasture.

Renovating Pastures with Clovers
By Don Baune

Every late winter and early spring I get numerous phone calls with one recurring topic. Can I over seed my pastures or hayfield with clovers during the winter and early spring months?

It is well known that overseeding can result in an increase in both quantity and quality of forage produced. So, does overseeding pay? Research across the country strongly suggests it does. These grazing studies from across the United States have shown an increase in animal performance when they have been grazed on pastures with ryegrass with clover added to it. In a 2016 Mississippi State University cattle study, daily live weight gains were recorded on cattle grazing a mixture of Frosty berseem clover and Lonestar annual ryegrass. Frosty extended the grazing period and lowered nitrogen costs by 14%! Cattle grazing the ryegrass + berseem mix gained 0.87 lbs/day more than the straight ryegrass with commercial fertilizer. In the subsequent trial the grass following the Frosty plots showed an increase in growth and quality.
Benefits of adding clovers to pastures or hay fields can produce four ways:

(1) Increase yield- Research has shown that tall fescue and orchardgrass over seeded with clovers, will produce more forage than a pure tall fescue or orchardgrass pasture fertilized with 60 pounds of nitrogen per acre.

(2) Improve animal performance- Research has shown that clovers improve animal gains and conception rates. High quality feed is important for a calf to gain well and for a cow to rebreed after calving. Clovers are more digestible and contain more nutrients than grasses. Their presence in a pasture improves the palatability of the forage, which will increase the amount and quality of the forage the animal consumes.

(3) Nitrogen- Nitrogen fixation is another characteristic that makes legumes a desirable component of a pasture or hayfield. Not only is the nitrogen available to the legume, but the surrounding grass plants can use this nitrogen when the annual covers die out. Annual legumes such as Frosty berseem, Fixation balansa and Kentucky Pride crimson clover can produce approximately 150 to 200 pounds per acre each year. If nitrogen costs 25 cents per pound, this would be a savings of $37.50 to $50.00 per acre each year.

(4) Improve summer growth- Most of the growth from cool-season grasses such as tall fescue and orchardgrass occurs during the spring and fall. During the summer, high temperatures and drought cause these grasses to slow or stop producing. Legumes such as white clover and annual clovers (AberLasting, Frosty, Fixation, and Kentucky Pride) can extend the grazing season and provide high quality pasture that is missing during the summer forage slump in tall fescue or orchardgrass pastures.
Clover is a valuable addition to any pasture or hay mix. Being in the legume family, they supply lots of high quality protein, relative feed value, and other nutrients and they’re very palatable, too. But not all clovers are not created equal. White, red, berseem, balansa and crimson clovers are safe additions to any pasture or hayfield, but the closely related alsike clover has been connected to health problems in livestock. One problem linked to alsike clover is photosensitization. Livestock that ingest alsike clover in the summer months and are exposed to sunlight, can develop red, blistered muzzles and sun burned skin, especially if they have white markings with pink skin underneath their fur. Early symptoms may include drooling and reluctance to eat, and swelling of the affected animal’s tongue or muzzle. Alsike poisoning can affect cattle, swine, and sheep, but is particularly brutal for horses.

Over seeding is simple, effective and a low-cost way to improve old pastures without tilling and re-seeding. To many farmers, over seeding has advantages over the cultivating. It’s cheap, quick and low risk. With the existing grass being kept and improved without loss of forage or time. To get the best results you can follow our guidelines.

**Get the Timing Right-**

The seed is dependent on soil moisture to help it germinate and establish. Good seed-to-soil contact is also vital for establishing a strong seedling stand. There are several approaches to inter planting into an old pasture. A simple but effective way is to frost seed it, by broadcasting the seed over the ground when it is frozen. As the soil thaws and freezes, the seed will be worked into the ground. Or it can be planted into open pastures when soil temperatures start to get above 52°F. If the pasture sod is dense, it may need to be disked or harrowed to open areas for the seeds to contact the soil to establish. Seed can also be planted at any point through the summer if there is enough soil moisture. However, aggressive growing pastures should not be seeded during May and June when excessive grass growth will smother any new seedlings.
How to Plant-

Seed may be broadcast or drilled into recently grazed or cut pasture. A spinner spreader is good for applying low rates and will distribute clover seed up to 30 feet. Seed broadcasted into open pastures may have to be worked into the soil with either a harrow. This is good for opening thicker sod pastures. On the other hand, a grass drill can be used and will set the seed right into the soil.

What to Plant-

The best results come from vigorous strains of tetraploid ryegrass (Albion and Oro Verde). They the quick to establish and ideal for grazing pasturelands. White and red clovers (Domino, Ladino, AberLasting, Dynamite) usually give good results when sown into warm, moist soils and especially where grazing management is practiced. Annual Clovers (Frosty, Fixation, Kentucky Pride) can be planted to improve feed quality during the summer slump.

Do not allow the grass in the field to grow tall and get too mature. Not only will this result in poor quality pasture or hay, but will result in the shading of the legumes. If the pastures reach 8 to 10 inches tall, either graze them down to 3 to 4 inches or mow them for hay. This will prevent the spring flush of growth from shading the clovers. A good rotational grazing plan will help preserve the clovers.

Legumes should be a component of any pasture or hay field. They help to improve animal performance and reduce the need for nitrogen. Either one of these benefits alone is enough to make legumes profitable in your pasture. With both it makes them a necessary component of any pasture.