

Dormant-Seeding and Frost-Seeding Pastures

If you are thinking about thickening your pasture or hayfield, winter may be the perfect time and lends itself to two opportunities – dormant seeding and frost seeding. Both allow you to get the seed in the ground in time for the first of the spring weather and the very start of the growing season, which can be a significant advantage over a spring seeding. Spring planting requires waiting for the right conditions to plant, whereas it's much easier to get into the field during the winter, when the ground is firmer and less muddy.

For these reasons, dormant seeding and frost seeding have considerable overlap. Both involve planting a seed that will have to sit dormant and wait until favorable weather to germinate and grow, so it should be a crop that will germinate and grow well in the cool moist conditions of early spring. If broadcasting a dormant seeding of small-seeded legumes, you are also relying on freezing and thawing of the soil to work the seed in. If frost or dormant seeding is done into an existing stand, there has to be enough bare soil exposed that most of seed can reach the soil. Seed-to-soil contact is always critical to success.

Dormant seeding means planting in early winter, before ground has frozen, but while it's cool enough to prevent germination. The seed sits dormant over the winter and germinates early in the spring, once it gets enough warmth and moisture.

We recently heard from a customer in Bradford County (Northern PA) who successfully thickened a hayfield with dormant seeding of red clover on December 26, 2012. He drilled the clover into his existing hay field, and found this was more effective than frost seeding.

For dormant seeding, make sure that you are not planting too deep. If it's warm enough for dormant seeding, the soil will likely be softer than at other times of the year. Clover and grass seed are very small seed and should not be planted deeper than ¼".

Please note that dormant seeding can be quite a gamble. If you get a very warm few weeks in late winter, followed by a cold spell, your seeds can germinate and then be killed as small seedlings. Ideal conditions for dormant seeding are a consistently cold winter (the more snow cover, the better), followed by consistent warmth in the spring, so that germination is delayed until it's warm enough. Be especially careful with cool-season grasses and legumes, which can germinate in soils as cold as 35 degrees.

While most dormant seeding is done in early winter before the ground freezes (or during a period of thaw and dry conditions), frost seeding is usually done in late winter. In early morning, ground is still frozen enough to drive over. Broadcast seed, usually from a seed spinner mounted to the back of a

tractor (this can also be done with a hand-spinner) then the freezing and thawing of the soil surface helps to work seed into the ground.

Clay and loam soils are ideal for frost- and dormant-seeding, since they heave the most with frozen moisture, helping to work seeds into the ground. Sandy soils are less favorable.

You will likely want to use clover for frost seeding, since seeds are smaller, don't require much soil coverage, and find exposed soil more easily when scattered. Dormant seeding gives you more options, since you may be drilling instead of broadcasting, so larger seeds can be used. Broadcasting relies on freeze-thaw cycles to work the seed into the soil, while drilling opens a furrow and gives more accurate and consistent seed placement.

Clover is ideal for a winter seeding, and is a forgiving crop. It's shade tolerant and aggressive, growing low and thriving when interseeded, yet it works well on ground with less than ideal drainage. And you get the added benefit of a nitrogen fixing crop, and one with high nutritional value. If establishing clover in a grass pasture, you will likely find increased yield and quality. As a cover crop or hay crop interseeded in wheat, it will fix nitrogen for following crops.

Premium Clover Blend is ideal for frost seeding, or a mix of 4 pounds of red clover with 2 pounds of white clover. Three-Way Clover Mix can also be frost-seeded to get an early spring clover cover crop established.