

Frost Seedings

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Frost seedings have been used for decades, are inexpensive and when done at the correct time and managed properly very successful. Frost seedings should be made in January and February when there is little snow and night time frost action is “honey-combing” the soil surface. This will be when night temperatures are in the low 20’s and day temperatures are in the high 30’s.

Correct Soil Fertility and pH

Before using a frost seeding soil test and apply the proper rates of phosphorus, potassium, and lime to meet the needs of the new seeding. For spring seedings, fertilizer and lime should be applied the previous year since it is difficult to get lime trucks out on wet fields in the spring.

Select the Forage Species for the Soil and Management to be Used

Select the legume species that are best adapted to the soil drainage and management to be used in the field. Improperly matching the legumes to the soil and management will result in the untimely death of the seeding.

Legumes that establish easily by frost seeding are red, ladino, and alsike clover. Grasses do not establish as well as legumes using this technique but can be established on open areas using this technique.

Control Plant Competition

There are two types of competition to a frost seeding, **perennial weeds** and **desirable forage grasses**. Remember that many so-called weeds are high-quality forage. When desiring to kill perennial weeds use an appropriate systemic herbicide well enough before seeding to meet label restrictions. Competition to legume seedlings from grasses can be reduced by close grazing in the fall or winter prior to or just after the seeding. Do not use N fertilizer on grass-legume stands since it will cause the grass to shade out the legumes. This is especially deadly to legume seedlings. If a major part of the stand consists of undesirable perennial weeds, consider using no-till or conventional tillage establishment.

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Seed at Proper Rate and Depth Maintaining Good Seed-Soil Contact

Use certified seed of proven varieties to ensure clean seed with known performance. Seed red clover at a rate of 4-8 lbs/acre and ladino clover at 1-2 lbs/acre. Spread the seed over the pasture during the frost heaving period of the winter in January and February.

Manage Grazing and Mechanical Harvest to Maintain the Desired Plant Species

The main reason new seedings are lost is that they are not managed properly after establishment. Graze the field at the appropriate timing and intensity for the forage mixture seeded. Remember that before renovation, a pasture is in balance with the soil fertility and grazing management used. Without changing the

grazing or fertility management, a new seeding will revert back to what was previously there. For tall-grass pastures and hayfield aftermath, turn livestock in when the stand has rested adequately to reach an 8- to 12-inch height and allow the animals to graze the stand to a 2- to 4-inch height where they are actively grazing. Paddocks need to be small enough relative to the number of animals so that this is done in 7 days or less. Then the cattle need to be moved to another paddock, allowing the forage in the rested paddock to reach 8-12 inches in height prior to grazing again. Frost seedings are a cost-effective means of establishing clovers in a grass pasture or hay field. The use of certified seed of improved varieties coupled with good grazing and fertility management will ensure good establishment and production for years to come.

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