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Consider Frost Seeding or Interseeding Pastures This Spring

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Abstract
Producers wanting to add to or improve forage in their existing pastures should consider using either the frost seeding method in February and early March, or interseeding in later spring months. The frost seeding method involves spreading forage seed on existing pastures during the late winter or very early spring while the ground is still frozen. Freeze-thaw cycles, with help from early spring rains, then provide shallow coverage of the seed.

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By Stephen Barnhart, Department of Agronomy

Producers wanting to add to or improve forage in their existing pastures should consider using either the frost seeding method in February and early March, or interseeding in later spring months.

The frost seeding method involves spreading forage seed on existing pastures during the late winter or very early spring while the ground is still frozen. Freeze-thaw cycles, with help from early spring rains, then provide shallow coverage of the seed.

Frost seeding is the easiest method producers have to add new forage grasses or legumes to their pasture, and is likely the least expensive method.

To increase this method's success, one should spread seed on the thinnest pasture sod areas first and on areas where bare soil has been exposed due to heavy grazing or disturbance.

One common misconception about frost seeding is that spreading the seed on top of snow works best. The goal of frost seeding is to get seed on bare soil. This is more effectively and safely done without snow cover.

Red clover has been the forage species of choice in Iowa for frost seeding. Other legumes, such as white clover, birdsfoot trefoil and alfalfa also can be frost seeded but with less success than red clover. In general, frost seeding does not work as well with grasses.

Research has found that following a few steps will improve the success of frost seeding. See Iowa State University Extension PM 856 - Improving Pasture by Frost Seeding for suggested seeding rates and guidelines.

Interseeding offers an opportunity for improving pasture productivity too. Interseeding involves using a no-till drill to aid in the incorporation of a legume or a more productive grass into an existing pasture sod. Interseeding is normally done from mid-March through early May, when soil moisture and temperature are more suitable for rapid seedling establishment.

Interseeding can be accomplished with relatively few field operations. Opening of the grass sod, shallow seed placement, and seed cover¬age are required. A number of drills are available that can be used in sod-seeding efforts. Some of these drills may have improved features related to sod penetration, depth control, seed metering, or coverage that improves their effectiveness in sod seeding situations. Equipment limitations for sod seeding implements sometimes are overcome by operator experience and home shop modifications.

Legumes interseeded into grass sod should increase pasture yield, improve forage quality, and eliminate or minimize need for nitrogen fertilizer. Clovers,

alfalfa, birdsfoot trefoil have been successfully interseed. The more efficient seed placement provided by a no-till drill allows many of our more productive perennial forage grasses to also be successfully established by interseeding. Thin, low-producing, grass sod might best be improved by interseeding a grass legume mixture.

Delaying seeding into late spring to improve growing conditions will often lead to greater competition from the existing grass sod. Close grazing in the fall or spring, ahead of interseeding, will help reduce sod competition. Contact herbicides are sometimes also used to temporarily further reduce competition from plants present in the stand.

Interseeding success depends on paying attention to details, timeliness, careful management of sod completion, controlling seeding depth to no deeper than ¼ to ½ inch, and a little bit of luck with weather.

Interseeding research has been conducted in many parts of the U.S. and around the world. It shouldn't come as a surprise that the conclusions from these efforts all point to several very important issues that must be met for successful interseedings. See Iowa State University Extension PM 1097- Interseeding and No-Till Pasture Renovation for more suggested seeding rates and guidelines.

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