

Grass and Legume Seedings in Platte County

Ground Preparation

Prior to seeding, the ground must be free of competition (weeds or existing grasses). This can be accomplished through cultivation and/or herbicide application.

A firm seedbed is required for seed establishment. When you walk across the area to be planted, the heel of your boot should slightly depress into the soil (depth of ¼” – ½”).

Seeding (Broadcast, Drill)

Seed can be broadcast or drilled. When broadcast, seeding rates should be doubled. Once broadcast, it is important to lightly cover the seed with soil, likely through a light harrow application. When drilled, seed should not exceed ½” depth in most cases.

Timing

Spring seeding should be completed during the period of March 15 – May 1 on dryland cropland / rangeland environments. On irrigated lands, seeding times can be extended until June 1. Fall seeding can be very successful on irrigated lands with expected fall irrigation water. Typically fall seeding on irrigated lands is best accomplished by seeding into the stubble of an annual crop. When seeding is completed in the Fall, the seedling grasses need to be planted early enough (August 20 – September 5) to ensure plants reach the 3-4 leaf stage prior to dormancy, or seeding should be conducted late enough in the Fall to prevent germination of the seed entirely. On dryland there is higher risk involved with Fall seedings.

Seed Mixes (Dryland, Irrigated)

Following is a species list of cool season grasses and legumes widely adapted to many soil types in Platte County.

Dryland Grasses (Variety)

Intermediate Wheatgrass (Oahe)
Pubescent Wheatgrass (Luna)
Western Wheatgrass (Rosana)
Streambank Wheatgrass (Sodar)
Hybrid Wheatgrass (Newhy)
Thickspike Wheatgrass

Dryland Legumes (Variety)

Alfalfa (Ranger, Ladak)
Sanfoin (Eski)

Irrigated Grasses (Variety)

Orchardgrass (Profile or Paiute)
Meadow Brome (Regar)
Tall Fescue (Fawn or Alta)

PLS vs. Bulk

Seed is tested prior to sale to know the germination percentage and purity of the seed. This is how PLS / “Pure Live Seed” is determined. When ordering seed from a dealer, you should order seed by the PLS, not bulk pounds. Some seed types have low germination percentages, so takes a high bulk poundage rate to achieve your desired seeding rate.

How Much Seed?

The Platte County Resource District and Natural Resource Conservation Service can provide you with PLS rates for different grass species. Is more seed better? No. You can apply too heavy of a seeding rate, which can result in too much competition between plants, resulting in a thinner or “choked out” stand. Stay within established guidelines. Most seeding recommendations are based on drilled seed. If you are broadcasting seed, it is recommended that rates be generally doubled.

When more than one specie is used in the mix, you will need to adjust your PLS rate per specie accordingly based on the percent you wish to have of each specie in the pasture.

Mixing Species / Caution

If you plan to mix species, it is important that the seeds be of “like type”. If your seeds are of many different sizes, the smallest seed will go through the drill first and quickest, resulting in uneven application of seed on the land. This rule also applies for legume seed which is typically very small and heavy for its size, resulting in uneven application of seed when pre-mixed with grasses. If you must mix seeds of different type, mixing only small batches will provide better results.

Interseeding Into Existing Grass Stands

Interseeding into existing grass stands may produce marginal results. Typically, legumes / forbs are more easily introduced into grass stands, primarily because of growth form and root development. Previously established grasses with extensive root systems, will likely outcompete any introduced drilled grasses, unless the existing stand is extremely sparse. Setting back the existing grass stand through a herbicide application or mechanical treatment (i.e. light disking) may be advantageous. If you want to try and interseed grasses, you need to pick species (i.e. crested wheatgrass) that will compete early in the growth period for moisture and nutrients. While cool season and warm season grasses do inhabit the same ground in native pasture situations in the county, it is very difficult to mix cool and warm season species together in new plantings and/or interseedings.

Post Seeding Management

After seeding, it will be important to control competing vegetation. New grass seedings can be hurt by herbicide applications specifically targeted for broadleaf weeds. In the first growing season, it is more beneficial to mow the site to decrease weed competition. Livestock grazing **MUST** be deferred for a minimum of one full year, to allow for root establishment. In the second year, it is advised that grazing be delayed until seed head development has occurred. In the second year, your grass stand should be able to tolerate herbicide application targeted at broadleaf weeds. Follow herbicide label directions carefully.

Promoting Grass / Legume Stand Longevity

Continuous season-long grazing by livestock will decrease the life span of your stand substantially. Grazing systems that promote rest and recovery opportunity in the active growing season are critical for continued root development and maintaining overall plant health and vigor. Seed is expensive.....management of your grass stand will reduce your input costs in the future!

Questions: Contact Dallas Mount 307-322-3667 or Ryan Amundson 307-322-2605