

Planting tips for grasses

Boulder County Extension

Revegetating a pasture in Colorado can be challenging. With our drastic changes in temperatures, precipitation and weather along with the varying topography and soils, simply tossing seed upon the ground will not produce good pasture. For success, the seed must be planted properly, and at the right time of year. The following are items to consider when planting and reestablishing vegetative cover on your property. Grass establishment is a process not a single act and may take multiple years for the final results.

PLANTING WINDOW

Non-irrigated plantings

Mountains: October 15 to April 30

Plains: November 15 to April 30

Irrigated plantings

Mountains: April 1 to July 1

Plains: March 15 to July 15

WEED CONTROL

Prior to planting any seed, the first step should be weed control. Weeds must be identified and a plan for control implemented. The plan may include spraying, light tillage, hand pulling or digging and planting a cover crop. Be aware of potential replant intervals from herbicide applications that will delay reseeding. Once weed control is achieved, then planting can occur.

SEEDBED PREPARATION

The first step is good seedbed preparation. This is the time to do a soil test so that you know what if anything you need to add to the soil prior to planting. Salts are the biggest concern. Nitrogen applications during establishment should be avoided as weeds use nitrogen better than grass seedlings. Take this opportunity to add organic matter to the soil, correct any topography, drainage, or soil compaction issues. Look for high or low spots that will either be difficult to get water to or will tend to collect water. "Ripping" or chiseling to a depth of twelve inches or more should be performed to break up any compacted layers that may restrict root and water penetration. The surface should be relatively smooth and free of rills and gullies. The soil should be relatively firm so that accurate planting depths and good seed-to-soil contact can be achieved.

PLANTING DEPTH

Most grass species including native seed establish most successfully if they are “drilled” into the soil about 1/4 to 3/8 inches deep on medium to fine textured soils. For sandy soils, plant at 1/2 to 3/4 inches deep. Where the use of a grass drill is not feasible, then seed must be “broadcast” and then incorporated into the soil. If “broadcasting” must be used, leave the soil coarser in texture with a less firm seedbed to allow the seed to be incorporated better.

DRILL SEEDING

The best grass seed planting method in most instances is using a “grass drill”. A grass drill is a planting machine that has double disk openers up front that slices open a narrow furrow into which seed is dropped. Depth bands, adjustable for different soil conditions and seed sizes, allow accurate planting depth control. Packer wheels bring up the rear and tamp soil back over the seed. Two separate seed boxes are desirable to facilitate the planting of large and small at the same time. Seed boxes should also be equipped with agitators to keep fluffy seed flowing smoothly out of the boxes.

NOTE: Regular grain drills plant seeds 1” or more deep which is too deep for most grass seed. Regular grain drill may be used to plant the large-seeded species, such as wheat, barley, rye or oats. “Grass drills” should be used to plant small seeds and those, which are “fuzzy” or chaffy species. These include annual ryegrass, all perennial grasses, millet and sorghum.

BROADCAST SEEDING

Broadcast seeding may be accomplished by hand or mechanically with hand-held or vehicle-mounted spreaders. Hydraulic seeding, applying seed in a stream of water and mulch, is another possibility. Seed is broadcast onto a prepared, roughened seedbed, followed by raking, dragging or rolling to cover as much of the seed as possible with about 1/4 to 3/8 inch of soil. Some seed will remain visible and will not germinate. Since broadcast seeding is not as efficient, higher pounds per acre planting rates are required often double the drilled rate.

TEMPORARY COVER CROPS

In some instances, it is necessary to plant a cover crop. If you have a severe weed problem or are unable to plant in a given year, a cover crop can be used to gain control on the weeds and provide protective stubble to plant into. Under most circumstances grass establishment is better with protective cover crop stubble. For fall seeding, mow the stubble to 10 inches and drill grass seed into stubble. The following crops can be used for cover crops. If possible, use sterile varieties to avoid cover crop seed production and potential reseeding of cover crop in areas of establishing grass.

NOTE: Planting Depths:

Wheat/barley/oats/rye:	1-2”
Sorghum/millet:	1/2-3/4”
Ryegrass:	1/2”

For sites needing cover longer than two growing seasons, refer to the bulletin titled *Forage Plants for the Northern Front Range*.