

# Pasture and Hay Planting

## Montana Conservation Practice Job Sheet

**512**

### Definition

Establishing native or introduced forage species.

### Purpose

The purpose of the Pasture and Hay Planting practice is to establish adapted and compatible species, varieties, or cultivars for forage production. Additionally, the practice serves to improve or maintain livestock nutrition and/or health, balance forage supply and demand during periods of low forage production, reduce soil erosion and improve water quality, increase carbon sequestration, provide food and cover for wildlife, and improve soil quality.

### Where used

This practice may be applied on lands where forage production and/or conservation are needed and feasible.

### Resource management system

Pasture and Hay Planting is established as part of a conservation system to address the soil, water, air, plant, animal, and human needs as related to the owner's goals and objectives. It is important to consider crop rotation, nutrient and pest management, agricultural waste utilization, soil quality concerns, and other supportive conservation practices when designing a pasture and hay planting.

### Wildlife

Properly designed pasture and hay plantings can also provide food and escape cover for wildlife. Forage production and its management can enhance targeted wildlife objectives depending on the species and management practiced. Consider using forage species that provide food and cover for important wildlife at critical times of the year.

### Specifications

Site-specific requirements are listed on the specifications sheet. Additional provisions are entered on the job sheet. Specifications are prepared in accordance with the NRCS, Field Office Technical Guide (FOTG). See practice standard Pasture and Hay Planting - Code 512.

Plant species and their cultivars are selected based upon climatic conditions, precipitation, growing season length, humidity levels, day length, radiation, heat, wind, temperature extremes and the USDA Plant Hardiness Zones.

Other considerations to include when selecting species are soil condition and position, attributes such as pH, available water holding capacity, texture, aspect, slope, drainage class, fertility level, salinity, sodicity, depth, flooding and ponding, and levels of toxic elements that may be present.

Montana Plant Materials Technical Note No. 46 provide seeding rate specifications and recommended cultivars for all vegetative practices and is required to be used for design purposes.

Seeding rates will be calculated based on a Pure Live Seed (PLS) basis.

For planting mixtures of two or more species, determine the total pounds of PLS required by multiplying the full seeding rate of each species by the percentage desired within the total mixture.

Plant to proper depth ensuring seed or planting material will contact soil moisture uniformly (seed to soil contact). Small grass, forbs, and legume seeds will be planted no deeper than ½-inch. Large grass seed will be planted no deeper than ¾-inch.

Seedbed preparation should be completed that provides a firm, weed-free seedbed that eliminates seedling competition from weedy species. A seedbed is sufficiently firm when an average sized man sinks to approximately ¼-inch into the soil.

**Pasture and Hay Planting – Job Sheet**

Landowner \_\_\_\_\_ Field Number(s) \_\_\_\_\_  
 Tract number \_\_\_\_\_ Design Soil Map Unit(s) \_\_\_\_\_

Purpose (check all that apply)	
<input type="checkbox"/> Forage production	<input type="checkbox"/> Reduce soil erosion and improve water quality
<input type="checkbox"/> Improve or maintain livestock nutrition	<input type="checkbox"/> Balance forage supply/demand during low production times
<input type="checkbox"/> Provide food and cover for wildlife	<input type="checkbox"/> Increase carbon sequestration

**PLANNED SEEDING**

Plant Species (1)	Cultivar	LBS. PLS/Acre <sup>1</sup> (pure stand) (2)	Percent of Mixture (3)*	PLS/AC. Needed In Mixture (LBS.) (col. 2 X col. 3) (4)	Acres to be seeded (5)	Total PLS Needed (LBS.) (col. 4 X col.5) (6)

Planner \_\_\_\_\_ Date \_\_\_\_\_ Producer \_\_\_\_\_ Date \_\_\_\_\_

**CERTIFICATION**

Plant Species (a)	Cultivar	Acres Planted (b)	Bulk LBS. Planted (c)	From Seed Tag		Total PLS Planted (LBS.) (col. c X col. d X col. e) (f)	% Planted VS Planned (LBS.) (col. f ÷ col. 6)
				% Pure (d)*	% Germ (e)*		

<sup>1</sup> PLS (Pure Live Seed) = Germination x Purity  
 \* Need to be converted to decimal form for calculations.

Planner \_\_\_\_\_ Date \_\_\_\_\_ Producer \_\_\_\_\_ Date \_\_\_\_\_

1. **Planned Planting Dates**

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2. **Seedbed Preparation.**  cultivated seedbed  seed into stubble  
 seed into chemical fallow  other seedbed prep.

Description: \_\_\_\_\_

3. **Fertilization.** Nitrogen fertilizer is not normally recommended, however, if soil analysis shows a severe deficit a light rate may be applied prior to seeding.

Soil test analysis: \_\_\_\_\_ N; \_\_\_\_\_ P; \_\_\_\_\_ K

Recommendations: \_\_\_\_\_ N; \_\_\_\_\_ P; \_\_\_\_\_ K

4. **Seeding.** Small grass, forbs, and legume seed will be planted no deeper than ½-inch. Large grass seeds shall be planted no deeper than 1-inch.

Planting implement  
\_\_\_\_\_

5. **Management** of this planting during establishment will be in accordance with the following provisions:

Weed Control:

Grazing:

Haying:

Other: