

PASTURE AND HAYLAND PLANTING 512-1

SOIL CONSERVATION SERVICE

WEST VIRGINIA

PASTURELAND AND HAYLAND PLANTING (ACRE)

STANDARD

Definition

Establishing and reestablishing long-term stands of adapted species of perennial, biennial, or reseeding forage plants. (Includes pasture and hayland renovation. Does not include grassed waterway or outlet on cropland).

Purpose

To reduce erosion, to produce high quality forage, and to adjust land use.

Condition Where Practice Applies

On existing pasture and hayland or on land that is converted from other uses.

Effects on Water Quantity and Quality

After establishment there will be reduced runoff and increased infiltration. During planting there may be a temporary increase in runoff even though the long-term effect will be a reduction in surface water and an increase in ground water.

The long-term effect will be an increase in the quality of the surface water due to reduced erosion and sediment delivery. Increased infiltration and subsequent percolation may cause more soluble substances to be carried to ground water.

SPECIFICATIONS

I. Soil Treatment:

Lime - Lime requirements should be based on a soil test.

Lime will be applied to correct pH within the range for each species as follows:

Alfalfa and Birdsfoot trefoil	6.5-7.0
All other legumes, smooth brome grass, reed canarygrass, orchardgrass, switchgrass, big bluestem, and caucasian bluestem	6.0-7.0
Kentucky bluegrass, tall fescue, timothy, and redtop	5.5-6.5

Fertilizer - Apply fertilizer based on results of soil tests made by West Virginia University, other land grant institutions, or competent private laboratories. For general recommendations in the absence of a soil test, use information contained in current Agronomy Guides.

PASTURE AND HAYLAND PLANTING 512-2

II. Methods of Seeding

A. Conventional

1. Plowing and disking should be done deep enough to kill all existing vegetation and to incorporate lime and fertilizer into the top 4-6 inches of the surface soil. Any existing rills and gullies should be obliterated and a firm seedbed prepared. The surface should be reasonably smooth, free of ridges, rocks, and other obstructions.
2. The seeding may be done with a drill, cultipacker-seeder, cyclone seeder, hydro-seeder, or other suitable equipment. The seed should be covered to a depth of 1/4 - 1/2 inches in a firm seedbed. A roller or cultipacker will ensure a good seed to soil contact.

B. No-tillage

When stands are to be established by no-till seeding methods, the following requirements must be met:

1. Eliminate competitive vegetation by heavy grazing, mowing and/or herbicides.* When pure stands of alfalfa or warm season grasses are being planted, competitive growth must be destroyed completely.
2. Broad leaf and other undesirable weeds should be eradicated by applying proper herbicides* at least 2 weeks before seeding date.
3. Insecticides* should be applied to control potential insect infestations. This is especially needed when pure stands of alfalfa are seeded.
4. Seed must be placed in firm contact with the mineral soil and at a depth of 1/4 to 1/2 inch of the surface soil. Depth control bands or other controls should be used to insure proper placement of seed. Packer wheels are essential.!!

III. Time of Seeding

Cool Season Species

March 15 - April 15
August 15 - September 15

Warm Season Species

April 1 - May 15

IV. Seed Mixtures and Rates

See attached list for seed mixtures and rates which may be used. Follow recommendations in current Agronomy Guides for species site selection according to soil depth and drainage characteristics.

V. Inoculation

Inoculate all legumes with proper species of inoculant.

VI. Weed Control During Establishment

Mowing

Clip 5-8 inches high for grassy weeds when shading and competition starts suppressing growth of seeded species. Mow at normal height, 3-4 inches, for broadleaf weeds. Do not clip new seedlings four to six weeks before a killing frost to allow a buildup of root reserve for winter.

Chemical

Follow recommendations in the current Agronomy Guides and WVU Extension Service Agronomy Memo 325 for herbicides and insecticides.

II. Management

See Pasture and Hayland Management Specifications ⁵¹¹ ~~(510)~~.

- * Follow recommendations in the current Agronomy Guides and WVU Extension Service Agronomy Memo 325 for herbicides and insecticides.

NOTE: SCS employees who give assistance to landusers are to stress the importance of following the directions and precautions on the pesticide container label.

PASTURE AND HAYLAND PLANTING 512-4

SEED MIXTURES

Species and Rates Per Acre

<u>1 Year Hay or Pasture</u>			<u>Permanent Pasture</u>		
1.	Red Clover	8 lbs.	15.	Ladino Clover	2 lbs.
	Timothy	4 lbs.		Orchardgrass	8 lbs.
2.	Alsike Clover	4 lbs.	16.	Ladino Clover	2 lbs.
	Timothy	4 lbs.			
<u>2 Year Hay or Pasture</u>			<u>Mixtures 9, 10, 11, 12, 13, 14, 15, 16, plus:</u>		
3.	Red Clover	6 lbs.	17.	Birdsfoot Trefoil	8 lbs.
	Alsike Clover	2 lbs.		or	
	Orchardgrass	4 lbs.		White Clover	2 lbs.
4.	Alfalfa	10 lbs.		and	
	Orchardgrass	4 lbs.		Orchardgrass	5 lbs.
5.	Alfalfa	10 lbs.		Kentucky Bluegrass	5 lbs.
	Timothy	4 lbs.	18.	Crownvetch	10 lbs.
6.	Orchardgrass	10 lbs.	19.	Switchgrass	8 lbs.**
7.	Alfalfa	16 lbs.	20.	Big Bluestem	8 lbs.**
<u>3 or More Years Hay or Pasture</u>			21.	Caucasian Bluestem	6 lbs.**
8.	Alfalfa	10 lbs.			
	Smooth Brome	12 lbs.			
9.	Birdsfoot Trefoil	8 lbs.			
	Timothy	4 lbs.			
10.	Reed Canarygrass	12 lbs.			
11.	Birdsfoot Trefoil	8 lbs.			
	Orchardgrass	6 lbs.			
12.	Birdsfoot trefoil	8 lbs.*			
	Tall Fescue	8 lbs.			
13.	Ladino Clover	2 lbs.*			
	Tall Fescue	10 lbs.			
14.	Tall Fescue	15 lbs.*			

* Use only endophyte free seed.

** PLS - Pure live seed.