

**Animal Enhancement Activity – ANM03 - Incorporate native grasses and/or legumes to 15% or more of herbage dry matter productivity**



**Enhancement Description:**

Improve pasture by increasing native grasses and/or legumes to 15% of herbage dry matter (productivity by weight) using adapted species and varieties, appropriate seeding rates, and timing of seeding. Pastures containing about 15% native grasses and/or legumes by weight dry matter are approximately equal to 30% foliar cover.

**Land Use Applicability:**

Pastureland

**Benefits**

Enhancing existing pasture by incorporating native grasses and legumes can provide:

1. Improved forage quality and quantity
2. Improved soil fertility (legumes fix nitrogen in the soil), increase organic matter
3. Increased plant diversity and promote wildlife habitat
4. Additional forage during seasonal slump periods
5. Extended grazing season
6. Food source for pollinating insects

**Criteria for Incorporating Native Grasses and/or Legumes to 15% or more of total herbage dry matter productivity**

1. A written grazing management plan that outlines specific goals and objectives.
2. Utilize adapted species, seeding rates and seeding dates according to local NRCS practice standards.
3. Determine species composition before and after seeding. Species composition must be 15% or more of native grasses and/or legumes.
4. If legumes are incorporated, a current soil test is required. Lime and fertilizer application to facilitate establishment and persistence of legumes is required if a current soil test indicates.
5. Livestock stocking rates that will allow for proper forage utilization.

**Note:**

Bloat can be a risk to grazing livestock where legumes make up greater than 50% of the total forage. Legumes with the highest likelihood to cause bloat include white clover, alfalfa, annual medics and Persian clover. Red clover, crimson clover and subterranean clover would be classified as moderately likely to cause bloat, while berseem clover and arrowleaf clover are low risks for causing bloat. Legumes that don't cause bloat are birdsfoot trefoil, sainfoin and crownvetch. Livestock producers grazing alfalfa aftermath in the fall months and should be cautioned of bloat, especially following a killing frost. The recommendation for grazing frost



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killed alfalfa is to wait 5 to 7 days after the killing frost (less than 28 degrees Fahrenheit) before grazing. This will allow the live tissue to fully break down, minimizing the soluble leaf proteins, and making a much safer feed base for ruminant livestock. If bloat is a concern, there are several precautions that can be taken. (A technical reference sheet will be available to address these issues).

**Documentation Requirements for Incorporating Native Grasses and/or Legumes to 15% or more of total herbage dry matter productivity**

A written planting specifications plan identifying:

1. Plant species' to be seeded
2. Seeding rates and dates
3. Site preparations and planting method
4. Amounts of fertilizer and lime to be applied.
5. Map showing locations where seeding activity is applied.



Plant Enhancement Activity – ANM03 – Incorporate Native Grasses and/or Legumes into 15% or more of the forage base

**Reference: 512 – Pasture and Hayland Planting**  
**Seeding Rates for Native Grasses and/or Legumes, Lb. PLS/Acres**

	Pure Stand	% In Mixture	Seeds/Lb
<b>Introduced Legumes</b>			
Alfalfa	12	7	220,000
Red Clover	10	7	275,000
White Clover	3	1	800,000
Alsike Clover	5	2	700,000
Sweetclover	10	3	260,000
Kura Clover	5	4	800,000
Cicer Milkvetch	12	5	130,000
Ladino Clover	3	1	800,000
Birdsfoot Trefoil	10	7	372,000
<b>Native Legumes</b>			
Purple Prairie Clover	6	10-25	290,000
White Prairie Clover	6	10-25	278,000
Partridge Pea	18	10-25	56,700
Canada Tick Trefoil	12	10-25	88,000
Illinois Bundleflower	18	10-25	60,000
Canada Milkvetch	6.5	10-25	266,000
Roundhead bushclover	13.5	10-25	128,000
<b>Native Cool Season Grasses</b>			
Canada Wildrye	15	0-20	115,000
Western Wheatgrass	15	0-50	112,000
Reed Canarygrass	7	5	526,000
<b>Warm Season Grasses</b>			
Big Bluestem	10	0-100	165,000
Indiangrass	10	0-50	175,000
Switchgrass	6	0-50	260,000
Little Bluestem	8	0-30	261,360
Sideoats Grama	8	0-30	191,664

**Pasture Acres:** \_\_\_\_\_ **15% of Pasture Acres:** \_\_\_\_\_

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