



## What Should I Plant in My Pasture?

### 1. What are my grazing goals?

- Type & Class of livestock \_\_\_\_\_
- Livestock nutritional needs (forage quality range):  Low  Medium  High
- Livestock grazing habits (potential for close grazing):  Low  Medium  High
- Grazing management:

Target residency period : \_\_\_\_\_ days

Target rotation length: \_\_\_\_\_ days

Target residual height: \_\_\_\_\_ inches

Residency period – days on a paddock before rotating, recommended: 1-3  
Rotation length – days of rest before grazing again, recommended: 30+  
Residual height – inches of forage left after grazing, recommended: 4"+

To get the most out of this exercise, select targets that are realistic for the level of management that will occur.

### 2. What are my farm's existing resources?

- Forage species on existing pastureland & hayfields \_\_\_\_\_
- Forage species prevalent in seed bank \_\_\_\_\_
- Soil types & drainage (select all that are prevalent):  
 Sands (Droughty)  Clays (Poorly Drained)  Silt Loam (Well Drained)
- Critical & sensitive areas (areas of the farm that should be treated/grazed differently)  
 \_\_\_\_\_

### 3. Can I work with what I've got?

Does the farm have existing pastureland and hayfields compatible to the grazing goals?

- No → plant new pasture       Yes → work with existing pastureland or hayfield  
 Yes, but not enough acres → plant new pasture

### 4. What should I plant in my pasture? (see tables on back of page)

If you need to plant new pasture, choose species that are compatible to the farm and complimentary to each other.

Grass 1: \_\_\_\_\_

Legume 1: \_\_\_\_\_

Grass 2: \_\_\_\_\_

Legume 2: \_\_\_\_\_

Grass 3: \_\_\_\_\_

Legume 3: \_\_\_\_\_

% Grass desired in mix: \_\_\_\_\_

% Legumes desired in mix: \_\_\_\_\_

5 = highest rating  
1 = lowest rating

Regrowth Potential    Winter Hardiness    Ease of Establishment    Droughty Soils    Poorly Drained Soils    Tolerance to Close Grazing    Species Persistence    Legume Palatability    Legume Compatibility

**Grasses**

Festulolium	4	2	5	3	3	4	2	4	5
Kentucky Bluegrass	3	5	4	1	3	5	5	5	2
Meadow Fescue	4	4	4	3	4	4	4	5	4
Meadow/Creeping Foxtail	3	3	2	3	4	2	3	2	2
Orchardgrass	5	4	4	3	3	4	4	3	4
Perennial Ryegrass	5	1	5	2	3	4	1	4	5
Quackgrass	4	5	NA	4	3	4	5	3	3
Reed Canarygrass	4	5	1	4	5	3	5	2	1
Smooth Brome	2	5	3	5	2	3	3	3	3
Tall Fescue	5	3	5	4	3	5	4	1	3
Timothy	3	4	4	2	4	2	3	2	4

**Legumes**

Alfalfa	4	2	4	5	2	2	2	3
Alsike Clover	3	4	5	2	4	3	2	4
Birdsfoot Trefoil	3	5	3	3	3	2	3	3
Kura Clover	5	5	1	3	3	5	5	3
Ladino Clover	3	4	5	3	3	4	4	5
Red Clover	4	3	5	3	3	3	2	5
White Clover	3	5	5	4	3	4	3	4

**Grass Seeding Rates (lbs/acre)**

	Pure	Mix
Festulolium	25	5
Kentucky Bluegrass	15	1
Meadow Fescue	15	6
Meadow/Creeping Foxtail <sup>1</sup>	3	
Orchardgrass	10	4
Perennial Ryegrass	25	2
Quackgrass <sup>2</sup>		
Reed Canarygrass	6	5
Smooth Brome	16	5
Tall Fescue	15	6
Timothy	8	3



**Legume Seeding Rates (lbs/acre)**

	Pure	Mix
Alfalfa	15	8
Alsike Clover	3	1
Birdsfoot Trefoil	8	6
Kura Clover <sup>3</sup>	6	
Ladino Clover	3	1
Red Clover	10	7
White Clover	3	1

<sup>1</sup> Meadow/creeping foxtail is not recommended in a new seeding mix. <sup>2</sup> Quackgrass seed cannot be legally purchased or planted in many states, but existing quackgrass can be grazed successfully. <sup>3</sup> Kura clover should be included in a new seeding mix with caution due to poor establishment under competition.

- ✓ Seeding rates assume new seeding into prepared seedbed
- ✓ Broadcasting: increase rate by 50%
- ✓ Interseeding with no-till drill to renovate: use 50% of new seeding rate

				
<u>Beef</u>	<u>Dairy</u>	<u>Sheep</u>	<u>Droughty</u>	<u>Poorly Drained</u>
Orchardgrass Timothy Red Clover Ladino Clover	Meadow Fescue Festulolium Perennial Ryegrass Red Clover Ladino Clover	Kentucky Bluegrass Perennial Ryegrass Festulolium White Clover Birdsfoot Trefoil	Smooth Brome Orchardgrass Quackgrass* Alfalfa Red Clover	Timothy Reed Canarygrass* Meadow Foxtail* Ladino Clover Alsike Clover
<u>Average Soil, Average Management</u>		Initial Seeding Mix: 50-60% Grass 40-50% Legume	<b>Species combinations that are compatible &amp; complimentary</b>	
Orchardgrass Timothy Smooth Brome Red Clover Ladino Clover		Result will be 15-30% legumes after first established year		
* Not recommended for new seeding, but well-suited for grazing under these conditions, especially if already existing				

				
	<b>Developing a renovation plan for when new seeding isn't necessary</b>			
<b>Renovation Setting:</b>	<b>Desirable Grass, Thinning Legumes</b>	<b>Desirable Grass, Thinning Grass &amp; Legumes</b>	<b>Undesirable Grass, Patchy Stand</b>	<b>Undesirable Grass, Thick Sod</b>
<b>Renovation Goal:</b>	Fill-in or maintain legumes	Thicken with grass and legumes	Introduce desirable grass and legumes	Replace undesirable with desirable grass/legumes
<b>Setting Up for Renovation:</b>	Graze normally through end of season	Graze normally through end of season	Graze tight in late-fall	Graze tight in late-fall, "intentionally overgraze"
<b>Seeding Method &amp; Timing</b>	Frost seed or no-till in spring	No-till grass/legumes in spring or dormant season	Frost seed legumes or no-till grass/legumes in spring or dormant season	No-till grass/legumes in spring or dormant season if grass <50% stand
<b>Important Consideration:</b>	High success with legumes, low with grass	Select grass species with similar palatability	Must observe exposed ground for success	If grass >50% stand, terminate and reseed; spray, till, outwinter, etc.

**Authors**

**Jason Cavadini**, Grazing Outreach Specialist, UW-Madison Division of Extension

**Adam Abel**, Grazing Specialist, USDA-Natural Resources Conservation Service

**Laura Paine**, Grazing Outreach Coordinator, UW-Madison Division of Extension

An EEO/AA employer, University of Wisconsin-Madison Division of Extension provides equal opportunities in employment and programming, including Title VI, Title IX, the Americans with Disabilities Act (ADA) and Section 504 of the Rehabilitation Act requirements.



**GO.WISC.EDU/EXTENSIONGRAZING**