



Ministry of
Agriculture,
Food and Fisheries

Forage
Factsheet

Prepared by:
Tom Pittman
District Agriculturist
Fort St. John
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Peace Forage Seeding Recommendations

How to Select the Best Forages for Your Situation

Forage variety and species selection has a large impact on the success and profitability of the forage enterprise. Differences in yield and persistence between varieties usually outweigh the differences in seed costs by a margin of 5 to 10:1. Because new varieties are becoming available all the time, frequent consultation with LOCAL variety test results is highly recommended.

It should be remembered that the true value of a particular forage should take into account the manner in which it is intended to be used. High yielding hay varieties are often not superior in grazing circumstances. There are also notable 'maverick' forage species that are well suited to special circumstances such as water logged soils.

Successful forage establishment is closely related to proper seedbed preparation, prior weed control, proper inoculation of legumes, and soil conditions. A weed content certificate of all seed stocks should be scrutinized prior to purchase and the soil nutrient profile known prior to seeding, particularly where longevity of the stand or satisfactory yields are expected.

Seeding rates given in this factsheet can be reduced under ideal conditions. The higher rates given here cover for a multitude of inadequacies such as less than ideal soil conditions.

There are numerous other forage combinations for special conditions not listed here. See references at the end of this article for other applications.

Perennial Pastures

Species	<i>varieties</i>	Seeding rate (lbs/acre)	Comments
Early (Spring) Pastures			
1. Alfalfa + Crested Wheatgrass	<i>Rangelander, Rambler</i> <i>Parkway, Fairway</i>	2 7	Early spring pasture & very dry areas
2. Meadow Foxtail	<i>Mountain, Dan (?)</i>	5	Wet, heavy soils
Season Long Pastures			
3. Alfalfa + Bromegrass	<i>Rangelander, Peace, Nordica,</i> <i>Anik</i> <i>Paddock, Manchar</i>	3 8	Better soils
4. Alsike Clover + Timothy + Meadow Bromegrass + Creeping Red Fescue	<i>Aurora, Dawn</i> <i>Climax, Tiller, Toro</i> <i>Paddock, Manchar</i> <i>Boreal</i>	2 2 4 2	Heavy or acidic soils
5. Alfalfa + Bromegrass + Creeping Red Fescue	<i>Rangelander, Peace, Rambler</i> <i>Paddock, Manchar</i> <i>Boreal</i>	3 7 2	Soil pH>5.9
6. Orchardgrass + Bromegrass + Timothy + Alsike Clover	<i>Kay, Arctic, Okay</i> <i>Paddock, Manchar, Rebound</i> <i>Tiller, Climax, Toro</i> <i>Aurora, Dawn</i>	5 4 2 2	Clay soils mix
7. Alfalfa + Meadow Brome + Fescue Creeping Red - or Tall Fescue	<i>Peace, Rangelander, Roamer</i> <i>Paddock, Fleet</i> <i>Boreal</i> <i>Courtney</i>	2 6 3 6	Fall production is best when this is pastured midsummer & allowed a rest/growth period
8. Alfalfa + Timothy + Brome	<i>Rangelander, Peace, Nordica</i> <i>Climax, Tiller, Toro, Bottnia II</i> <i>Manchar, Paddock, Fleet</i>	3 2 7	
Horse Pastures			
9. Timothy + Creeping Red Fescue + Bromegrass + White Clover or Alfalfa	<i>Toro, Tiller, Climax</i> <i>Boreal</i> <i>Paddock Carlton</i> <i>(low growing type)</i> <i>Rangelander, Roamer</i>	2 2 5 3	Do not use Alsike Clover in horse pasture mixes

- ↪ Meadow Bromegrass is preferred over Smooth Bromegrass for rotational grazing situations, but for hay, Smooth Bromegrass is the preferred species.
- ↪ Birdsfoot Trefoil should be considered for replacing half the legume portion by weight in the seed mix for heavy soils when bloat is a potential problem.
- ↪ Orchardgrass has reduced winter hardiness in conditions where there may be bare ground exposure or icing through the winter (*example: hilly conditions*).

Annual Crops And Annual Pastures

Species	<i>varieties</i>	Seeding rate (lbs/acre)	Comments
Spring or Fall Supplemental Pastures			
1. Spring Oats Later Oats	<i>Jasper, Foothill</i> <i>Waldern, Cascade, Calibre or Mustang</i>	100	Graze as early as when individual seed rows are no longer visible
2. Fall Rye - (fall seeded)	<i>Kodiak, APPMN-1(?)</i>	80	Seed by Aug 15, fall graze if greater than 6 inches top growth
3. Fall Rye - (spring seeded)	<i>Kodiak, Muskateer</i>	95	Best to graze hard, rest and regraze. Earlier pasture availability if add 25 lbs/acre of oats or barley to this
4. Barley + Oats	<i>Brier, Johnson</i> <i>Foothill, Jasper</i>	65 45	For spring/summer grazing
Swath Grazing			
5. Oats	<i>Waldern, Mustang, Cascade or Caliber</i>	90	Seed by mid-June, swath mid-October depending on conditions
6. Oats + Barley	<i>Waldern, Mustang</i> <i>Brier, Johnson</i>	50 50	Increased seeding rate for mix grazing stands
Combination Uses			
7. Barley + Italian Ryegrass	<i>Kasota, AC Lacombe</i> <i>Maris Ledger</i>	80 12	Silage Barley at early dough stage, then, fall pasture ryegrass
8. Fall Rye + Barley or Oats	<i>Kodiak, Prima, Muskateer</i> <i>Brier, Johnson</i> <i>Waldern, Foothill</i>	60 55	Combo gives extended pasture (earlier & later)
Greenfeed & Silage			
9. Oats	<i>Mustang, Foothill, Cascade, Jasper, Waldern</i>	90	Kasota barley yields well but is rough awned and best
10. Barley	<i>Kasota, AC Lacombe, Johnson</i>	90	harvested early as silage
11. Oats + Barley	<i>As #6 above</i>	45 45	

- ↪ Interseeding ryegrass with other cereals requires ample soil moisture conditions. Greatest success occurs when the cereal portion is harvested early for silage and the ryegrasses regrowth is used for fall pasture. Italian rather than Westerwold types are preferred in this region.
- ↪ Combinations of spring and winter cereals can be used to extend the forage availability over a longer grazing period due top differences in the maturity dates.
- ↪ When choosing barley varieties for forage, use smooth awned types to eliminate the risk of mouth and throat sores in livestock.
- ↪ Smoothed awned barley varieties will usually outyield oats in total nutrient yield when cut for silage except where poorly drained soils are a concern. In addition, barley is usually earlier maturing. However, the taller, non lodging oat varieties (*such as Waldern or Mustang*) may provide better late harvested greenfeed yields than the shorter earlier maturing barley varieties (*such as Kasota, Brier or Johnson*).

Perennial Hay or Perennial Silage

Species	<i>varieties</i>	Seeding rate	Comments
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		(lbs/acre)	
1.	Alfalfa	<i>Peace, Rangelander, Heinrichs, Nordica</i>	10 Soil pH>5.9
2.	Alfalfa +	<i>Peace, Nordica, Rangelander</i>	7
	Smooth Brome	<i>Carlton, Manchar</i>	5
3.	Alsike Clover +	<i>Aurora, Dawn</i>	4 Areas subject
	Timothy +	<i>Climax, Farol, Tiller</i>	2 to flooding
	Reed Canary	<i>Palaton, Rival</i>	4
4.	Red Clover +	<i>Altaswede</i>	3 Best suited for clay soils
	Timothy +	<i>Climax, Bottnia II, Farol, Tiller</i>	3 or where alfalfa stands
	Bromegrass +	<i>Carlton</i>	3 traditionally have done
	Alsike Clover	<i>Dawn</i>	3 poorly

GENERAL COMMENTS:

- ↪ Peas are susceptible to drought and may not compete well when interseeded with other cereals or weeds. We recommend combinations be used only in conditions of superior soil moisture and that the peas are well inoculated.
- ↪ Red Clover single cut varieties are generally more winter hardy regionally than are double cut varieties.
- ↪ Increase seeding rate by at least one third if broadcasting the seed and harrowing it into the soil.
- ↪ When using propriety coated seeds increase the seeding rate to account for reduced numbers of the coated seed per round.
- ↪ Avoid combining legume seed with granular fertilizers in the same seed row as reduced inoculation and seedling toxicity may result.
- ↪ Increased productivity and persistence of all forage varieties used for hay production the BC Peace is closely related to adequacy of replenishing crop nutrients removed through crop harvesting. Nitrogen and phosphorus commonly become depleted and other nutrient deficiencies such as potassium and sulphur are not uncommon.
- ↪ Other sources of information:
 - ↪ Forage Seed Recommendations for Reclamation Purposes on ALR Land In Northeastern British Columbia
 - ↪ Annual Field Crop Variety Trial Results from the BC Ministry of Agriculture
 - ↪ Current Listing of Seed Trade Companies Active in the Peace Region
 - ↪ Forage Associations Variety and Agronomic Trial Results

Top Forage Varieties From Test Trials and Field Observations

ALFALFA - *Peace, Rangelander, Rambler, Nordica, Heinrichs, Roamer*

ALSIKE CLOVER - *Aurora, Dawn*

ANNUAL RYEGRASS - *Maris Ledger, Aubade*

BARLEY - *Kasota, AC Lacombe, Johnson, Brier*

BIRDSFOOT TREFOIL - *Upstart, Leo*

CREEPING RED FESCUE - *Boreal*

CRESTED WHEATGRASS - *Fairway, Parkway*

FALL RYE - *Muskateer, Kodiak*

MEADOW BROMEGRASS - *Paddock, Fleet, Regar*

REED CANARYGRASS - *Palaton, Rival*

RED CLOVER - *Altaswede*

SMOOTH BROMEGRASS - *Manchar, Carlton, Bravo*

TIMOTHY - *Tiller, Climax, Tiiti, Bottnia II, Richmond*

TALL FESCUE - *Courtney*

OATS - *Waldern, Mustang, Cascade, Jasper, Foothill*

ORCHARDGRASS - *Arctic, Kay, Okay*

PEAS - *Grande, Patriot, Carneval, Radley*