Right for you.

2019 FORAGE | CORN | RANGE & PASTURE

UFA

UFA.com/Forage

FORAGE

CORN

RANGE & PASTURE

Table of Contents

RIGHT FOR YOU

UFA's Customer Account Managers (CAMs) are your partners in the field – your team of knowledgeable pasture and forage specialists. Working alongside producers from seeding to spraying, to baling and harvest and even post-harvest, their local advice and practical experience can help you decide on the forage seed and other crop inputs that are right for you and your farm.

Heading out to the field, rely on that local UFA knowledge and industry experience to be right there beside you.

Talk to your UFA CAM today.
UFA.com/Contact or 1-877-258-4500, Option 1

Pictured: Customer Account Manager Keith Munro, Airdrie with Gord Lunde, UFA member since 1970.

Rely on ProStock™ forage seed genetics

Whether you are establishing new or refurbishing existing pasture and hay land, it is important to start with the best forage seed genetics.

UFA's branded ProStock Forage Seed Mixes, supplied by Northstar Seed, have been tested under Alberta growing conditions to provide livestock producers with the highest quality seed with weather-permitting potential to produce high quality and high yielding forages.

If you are looking for a legume, ProStock has alfalfa varieties that can be matched to a wide range of growing conditions, with enhanced agronomic traits. ProStock also offers pasture and hay legume and grass multi-species seed mixes also adapted for varying growing conditions.

Legumes, Grasses and Forage Mixes

UFA is proud to have both ProStock™ and DLF Pickseed® hybrids available in 2019

PROSTOCK™ FORAGE MIXES

ProStock™ HM Pasture Mix 14 lbs/acre 1131885

- 40% Fleet Meadow Brome
- 20% Yukon Orchardgrass
- 20% WH Orchardgrass
- 15% Cicer Milkvetch
- 5% Titan Timothy

Features:

- Bloat-free blend with 15% Cicer Milkvetch for the higher moisture areas of the province
- Combination of Meadow Brome and Orchardgrass combined with limited timothy for a high quality forage program
- Well suited to hay or pasture production

ProStock™ HM Hay Blend 13 lbs/acre 1131887

- 70% Cornerstone Alfalfa
- 15% Carlton Smooth Bromegrass
- 15% Yukon Tall Fescue

Features:

- Blend of 70% multifoliate alfalfa and 30% grass, blended for a high-quality forage offering
- Excellent for a 2 or 3 cut system and adapted to the mid- to high-moisture areas of the province in addition to irrigation
- Quick regrowth on the Cornerstone Alfalfa allows for the grasses to be vegetative when harvested

ProStock™ DL Pasture Mix 12 lbs/acre 1131886

- 40% Fleet Meadow Brome
- 25% Yukon Tall Fescue
- 15% Kirk Crested WH
- 10% Runner Alfalfa
- 10% Intermediate WH

Features:

- Blend designed for the drier regions of Alberta
- Combined performance of Meadow Brome, Kirk Crested Wheat, Orchardgrass and Intermediate Wheat Grass for more season-long forage production
- 10% of a creeping rooting alfalfa added for nitrogen fixation and to enhance the palatability
- Well-suited to hay or pasture production

ProStock™ DL Hay Blend 10 lbs/acre 1131888

- 45% ProStock Hay Choice Blend Alfalfa
- 20% Carlton Smooth Brome
- 20% Yukon Tall Fescue
- 15% Kirk Crested WG

Features:

- Blend of ProStock Choice Alfalfa Blend combined with 55% grass for maximum production under mid- to dry-moisture conditions
- Utilize 15% Crested Wheat for early growth with Smooth Brome and Orchardgrass for enhanced palatability
- Great blend for range cows for a winter feeding program

ProStock™ Low Area Blend 12 lbs/acre 1133471

- 20% Titan Timothy
- 35% Yukon Tall Fescue
- 35% Carlton Smooth Brome
- 10% Reed Canary Grass

Features:

- Combination of grasses that are wet tolerant
- Persistent blend to advance grass growth in wet areas and reduce moisture levels
- Ability to grow in standing water or areas which are flooding and moist for a short period

ProStock™ Extender Forage 10 lbs/acre 1133473

- 25% Italian Annual Ryegrass
- 20% Proso Millet
- 15% Purple Top Turnips
- 15% Vivant Forage Brassica
- 15% Hairy Vetch
- 10% Kale

Features:

- Blend of annual forages for swath grazing
- Opportunity to double crop under irrigation after a silage crop
- Seed this blend in combination with an annual cereal crop
- Excellent source of nutrition for late-fall and early-winter grazing

ProStock™ Saline Area Blend 14 lbs/acre 1133472

- 30% Yukon Tall Fescue
- 25% Dahurian Wild Rye
- 10% Tall Wheatgrass
- 25% Carlton Smooth Brome
- 10% Slender Wheatgrass

Features:

- Blend of five saline tolerant grass species
- Formulated for varied EC levels in your fields
- Excellent blend for stimulating grass production and reducing saline levels in a discharge area

ProStock™ Soil Builder 8-10 lbs/acre 1133474

- 20% Driller Brand Radish
- 20% Purple Top Turnip
- 20% Forage Rape
- 25% Berseem Clover
- 15% Crimson Clover

Features:

- Annual species to build soil aggregate structure
- Clover inclusion to add in building nitrogen levels in the soil profile
- Great blend to build soil armor and increase organic matter
- Seed into planned rest areas or as a double crop after silage

Treat forage establishment with respect – Be patient when it's dry

To get the most out of a forage stand that may be an important feed source for livestock for several years, pay attention to details in getting it established, whether growing conditions are wet or dry.

The cost of good quality seeds and other inputs can add up, so protect that investment with some important production practices as you prepare to put seed in the ground.

"Getting a good forage stand established may be more of a challenge under drier conditions," says Brian Palichuk, forage specialist with Northstar Seeds. "Most of the proper practices apply whether you are seeding into ideal conditions or drier soils."

Palichuk recommends producers follow some basic steps at seeding to help achieve a solid stand establishment:

- Use good quality seed that tests high for germination.
- Seed into a clean, weed-free field. Especially under dry conditions, "exceptional weed control" is vital.
- Seed into a firm (ideally moist) seed bed to ensure proper seed-to-soil contact.
- Seed shallow. Ideally the typically small forage seeds should be placed no deeper than in the top quarter inch of soil.
- Apply proper fertility. Have soil samples from the field analyzed and apply proper fertility as recommended for forage crops.

"Once a forage stand gets established it can be very competitive and productive, but the stand needs proper management to get it off to the best start."

~ Palichuk

Emerging seedlings can benefit from protection

Seeding into killed out sod or the stubble of crop residue will protect seedlings from wind, heat blast from the sun and also help to conserve moisture. If seeding into bare soil, it is recommended to include a cover crop such as 10 to 15 pounds of oat seed per acre in the seed mix to protect seedlings while they grow.

- Early spring seeding is usually preferred to take advantage of potential moisture. Fall or dormant seeding can work well too. Seed late enough to ensure the forage seeds won't germinate and risk being killed by frost.
- To optimize stand establishment, also plan for in-crop weed control options that can be used with forages.
- Vary seeding rate to correspond with seeding conditions. With reasonable moisture rate plan for a heavier seeding rate, and under dry conditions a lower seeding rate.
- Grazing or cutting of any newly established perennial forage stand should be delayed during the establishment year until the stand has gone dormant at the end of the growing season.

PROSTOCK ALFALFA

CORNERSTONE 14 lbs/acre 1131890

- Tap rooted variety with extreme drought tolerance
- Fine-stemmed multifoliate variety with high palatability
- Fall dormancy 4 with excellent yield and can be used in a 3 to 4 cut system
- More suited for the higher moisture areas or irrigation
- Dairy Potential

DAKOTA 12 lbs/acre 1131891

- Tap rooted trifoliate variety with excellent yield
- Has root rot resistance, even under flooded conditions
- Fall dormancy 4 variety with excellent forage quality and a comprehensive disease package with the added resistance to Pea Aphid
- Strong variety for the medium-to high-moisture areas of the province

CHOICE BLEND 10 lbs/acre 1131889

- A blend of trifoliate, multifoliate and creeping root characteristics
- Blended variety for performance and value
- Strong traits for winter hardiness and fall dormancy blend from 2 to 4
- Well suited for the drier areas of the province or even 1 cut systems

MULTIFOLATE MIX 12 lbs/acre 1133470

- High Multifolate Expression with great regrowth
- Superior disease resistance package
- Winter hardy with a fall dormancy rating of 3
- Makes a great addition to a grass blend or a straight alfalfa stand

MEADOWVIEW 12 lbs/acre 1133505

- New acid tolerant alfalfa for soil pH of 4.5 to 6
- Deeply set crown structure with a strong disease package
- Excellent winter hardiness rating with strong regrowth after cutting
- Intended for the Foothills and the Peace regions of Alberta

New alfalfa option for low pH soils

For livestock producers over a large area of Alberta, who have been limited to forage legume options due to low soil pH levels, a new alfalfa variety in now available that's been developed to grow in acidic soils.

AAC Meadowview, developed by Surya Acharya, a forage plant breeder at the Agriculture and Agri-Food Canada Lethbridge Research Centre, was first introduced to the market in 2018 by Northstar Seed.

This alfalfa variety is well-suited to a large area of the Eastern slope, Alberta Foothills region, and on up into the Peace River region. It has even been tested and found to do well on low pH soils as far west as Prince George, B.C.

Low soil pH, (4.5 to 6) affects as much as 2.4 million hectares in Western Canada. Until the introduction of AAC Meadowview, only certain legumes such as clovers would grow in low pH soils. "AAC Meadowview, which to our knowledge is the first cultivar developed for acid soils in North America, appears to have the best fit on soils where soil pH are in the 4.5 to 6 pH range," says Acharya.

For producers familiar with Beaver Alfalfa, AAC Meadowview has similar growth and flowering characteristics, fall dormancy rating, and a slight increase in freezing tolerance combined with an increase in yield of five per cent over the check variety.

The Western Forage Testing trials (7 location years) showed ACC Meadowview produced as much as 11.35 tons of dry matter forage per hectare under irrigation and just over 8 tons dry matter per hectare on dryland. With the moderate resistance to Verticillium Wilt and improved winter hardiness, the stand life is expected to be longer than many existing varieties. Combined with the ability to produce under acidic conditions, AAC Meadowview will be the variety of choice.

PICKSEED®
good things growing...

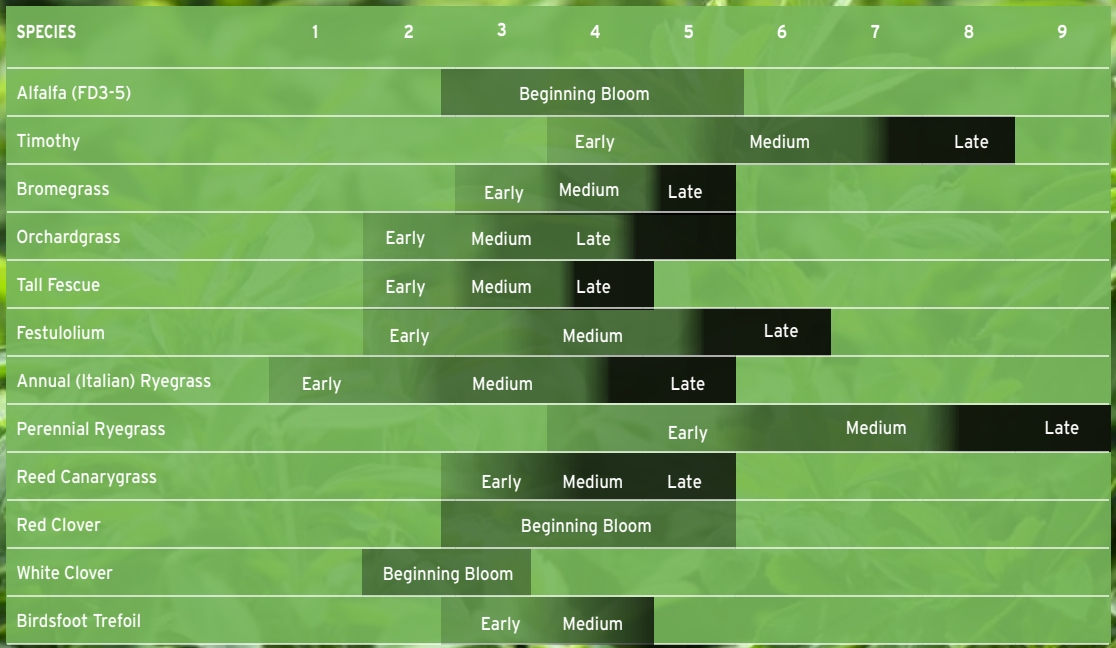
DLF Pickseed Canada is a leader in the development, production and distribution of forage crop, turfgrass, hybrid corn and native seed. Our brands are backed by a trusted and proven reputation for quality, agronomic advice and a commitment to research and technology.

DLF Pickseed Canada operates the most extensive private forage testing program in Canada, providing an unmatched ability to identify varieties with superior yield and persistence, faster regrowth, exceptional forage quality and superior disease resistance.

Hybrid seed corn varieties are selected for both grain and silage purposes and must demonstrate high yield capabilities. Silage hybrids must also show improved digestibility, increased dry matter intake and increased milk production for dairy.

The dedicated team at DLF Pickseed provides practical and effective solutions whether that be for forage crop, turfgrass, corn or native seed and reclamation purposes.

FORAGE MATURITY MATRIX



1: Earliest to 10: Latest; ▬ = Maturity range of available species Source: DLF Pickseed

LEGUMES - CLOVER & TREFOIL

RENEGADE
Red Clover

- Multi-cut, diploid variety
- Excellent forage yield
- Improved disease & insect resistance
- Excellent winter hardiness
- Early flowering

ALTASWEDE 1126952
Red Clover

- Multi-cut variety
- Very good forage quality
- Excellent companion for alfalfa
- Rapid establishment
- Late flowering

CRESCENDO
Ladino White Clover

- Vigorous, large leaved variety
- Good forage yield
- Grazing tolerant
- Good winter hardiness
- Erect growth

BELLE 1126951
Red Clover

- Multi-cut, diploid variety
- Very good forage yield
- Improved disease & insect resistance
- Excellent winter hardiness
- Medium flowering

DAWN 700726
Alsike Clover

- Vigorous, large-leaved variety
- Good forage yield
- Grazing tolerant
- Good winter hardiness
- Erect growth

BULL 1130523
Birdsfoot Trefoil

- Good stress & grazing tolerance
- Good forage yield
- Non-bloating legume
- Excellent winter hardiness
- Excellent forage quality

LEGUMES - ALFALFA VARIETIES

INSTINCT 1126948

- Excellent disease resistance
- Highly resistant to Aphanomyces Race 1 & 2
- Excellent forage yield
- Improved forage quality
- Very high multifoliate leaf expression

ABLE 946230

- Partially creeping rooted
- Very good winter hardiness
- Adaptable to many different soil conditions
- Good forage yield
- Good forage quality

AC® GRAZELAND BR 840077

- Bloat reduced variety
- Very good forage quality
- Good disease resistance
- Good regrowth
- Good forage yield

VISION 1104555

- Excellent forage yield
- Excellent disease resistance
- Improved forage quality
- Very high multifoliate leaf expression
- Very fast regrowth

ASSALT ST 1104557

- Tolerant to low pH soils
- Adaptable to many different soil conditions
- Very good disease resistance
- Good forage yield
- Good forage quality

PICKSEED 3006 171600

- Creeping rooted
- Multifoliate leaf expression
- Very good disease resistance
- Good forage yield
- Good forage quality

PICKSEED 2065MF 534194

- Very fast regrowth
- Very good forage yield
- Excellent disease resistance
- Improved forage quality
- Very high multifoliate leaf expression

WESTSTAR BLEND 539545

- High quality blend of alfalfa varieties
- Good forage quality
- Multifoliate expression
- Adaptable to many different soil conditions
- Good forage yield

GRASS PROPERTIES

SPECIES	YIELD	FEEDING VALUE	SPRING GROWTH	SEASONAL GROWTH	WINTER HARDINESS
Timothy					
Meadow Bromegrass					
Hybrid Bromegrass					
Smooth Bromegrass					
Orchardgrass					
Tall Fescue					
Festulolium (Fescue type)					
Festulolium (Ryegrass type)					
Annual (Italian) Ryegrass					
Perennial Ryegrass					
Reed Canarygrass					

GRASSES

RICHMOND 482837
Timothy

- Very good forage quality
- Early maturity
- Very good forage yield
- Very good spring vigour
- Very good winter hardiness

TOWER
Tall Fescue

- Late maturity
- Soft leaf provides very good forage quality
- Endophyte free
- Excellent disease resistance
- Very good stress tolerance

MAHULENA 1130524
Festulolium (Fescue Type)

- Tall Fescue X Perennial Ryegrass
- Late maturity & excellent forage yield
- Very good forage quality
- Endophyte free
- Very good stress tolerance & persistence

COMTAL 854383
Timothy

- Late maturity
- Excellent disease resistance
- Very good forage yield
- Good forage quality
- Very good winter hardiness

SAVORY 1126959
Tall Fescue

- Medium-late maturity
- Soft leaf provides very good forage quality
- Endophyte free
- Excellent disease resistance
- Very good stress tolerance

PERSEUS 1126957
Festulolium (Ryegrass Type)

- Meadow Fescue X Italian Ryegrass
- Excellent forage yield in seeding year
- Excellent forage quality
- Excellent disease resistance
- Excellent seasonal growth pattern

GRASSES

MBA 1126949
Bromegrass

- Excellent forage yield
- Excellent winter hardiness
- Early spring growth
- Good forage quality
- Good seasonal growth pattern

AC® SUCCESS 1104559
Bromegrass

- Interspecies cross of Smooth & Meadow Bromegrass
- Excellent winter hardiness
- Very good forage quality
- Early spring growth
- Good seasonal growth pattern

RADISSON 1130526
Bromegrass

- Excellent forage quality
- Very good winter hardiness
- Early spring growth
- Good forage yield
- Good seasonal growth pattern

ENDURANCE 1126972
Orchardgrass

- Medium-late maturity
- Very good forage yield
- Excellent winter hardiness
- Very good disease resistance
- Very good seasonal growth pattern

ATHOS 1130528
Orchardgrass

- Late maturity
- Good forage yield
- Excellent winter hardiness
- Good disease resistance
- Very good seasonal growth pattern

ECHELON 1126971
Orchardgrass

- Very late maturity
- Very good forage yield
- Excellent winter hardiness
- Very good disease resistance
- Very good seasonal growth pattern

GRASSES

FIRKIN 1126974
(Italian) Ryegrass

- Excellent forage quality, tetraploid
- Excellent forage yield in seeding year
- Will not set seed in seeding year
- Excellent disease resistance
- Excellent seasonal growth pattern

BELLEVUE 704759
Reed Canarygrass

- Excellent stress tolerance
- Low alkaloid content improved forage quality
- Very good forage yield
- Excellent winter hardiness
- Very good seasonal growth pattern

MATHILDE
Perennial Ryegrass

- Excellent forage quality, tetraploid
- Improved winter hardiness
- Improved forage yield
- Very dense growth habit
- Late maturity

CHIEF INTERMEDIATE 854864
Wheatgrass

- Suitable for hay and pasture grass
- Grows well with alfalfa
- Very good forage yield
- Good winter hardiness
- Good drought tolerance

VALUE-ADDED FORAGE MIXTURES

Cattlemans 483024

- 40% MBA Meadow Bromegrass
- 15% Kirk Crested Wheatgrass
- 15% AC Grazeland Br Alfalfa
- 15% Carnival Tall Fescue
- 8% Dahurian Wildrye
- 7% Slender Wheatgrass

Seed at 6.5 kg/14 lb per acre
Ideal grassland pasture. Quick regrowth, good drought tolerance and season long growth. Built for Beef!

HayGraze 1126968

- 60% AC Grazeland Br Alfalfa
- 30% AC Success Hybrid Bromegrass
- 10% Athos Orchardgrass

Seed at 6 kg/13 lb per acre
Rapid regrowth and great quality. Use as multi-cut hay and still have extra to graze in the fall.

Stockmans 482980

- 35% MBA Meadow Bromegrass
- 20% Athos Orchardgrass
- 20% Oxley II Cicer Milkvetch
- 10% Carnival Tall Fescue
- 10% Polim Perennial Ryegrass
- 5% Richmond Timothy

Seed at 6.5 kg/14 lb per acre
Widely adaptable. A well balanced mixture. non-bloating Cicer Milkvetch utilized to increase quality.

HayGraze Dry 1126969

- 50% AC Grazeland Br Alfalfa
- 40% MBA Meadow Bromegrass
- 10% Kirk Crested Wheatgrass

Seed at 5 kg/13 lb per acre
Obtain superior yield and quality in drier conditions without sacrificing bloat safety.

PasturePro 531927

- 30% MBA Meadow Bromegrass
- 20% AC Grazeland Br Alfalfa
- 15% Athos Orchardgrass
- 10% Carnival Tall Fescue
- 10% Polim Perennial Ryegrass
- 10% Mahulena Festulolium
- 5% Richmond Timothy

Seed at 5.5 kg/13 lb per acre
Widely adaptable. Highest yielding pasture blend. Season long performance. Designed for maximum growth.

Horsemans 837722

- 35% MBA Meadow Bromegrass
- 20% Forage type Kentucky Bluegrass
- 20% Athos Orchardgrass
- 15% Richmond Timothy
- 10% Polim Perennial Ryegrass

Seed at 7 kg/15 lb per acre
Well balanced. Stands up well to heavy grazing. Excellent Spring, Summer and Fall growth. Adaptable and suitable for all acreage ruminants.

RangePro 855293

- 50% MBA Meadow Bromegrass
- 10% Fairway Crested Wheatgrass
- 10% Athos Orchardgrass
- 10% Carnival Tall Fescue
- 10% Mahulena Festulolium
- 5% Richmond Timothy
- 5% Swift Russian Wildrye

Seed at 6.5 kg/14 lb per acre
Long-term pasture with no legume. Adapted to the drier areas of the Prairies.

DairyPro 482935

- 90% Vision Alfalfa
- 10% Richmond Timothy

Seed at 5 kg/12 lb per acre
Highest quality hay. Custom designed for dairy production needs.

SaltPro 855239

- 20% Radisson Smooth Bromegrass
- 20% Tall Wheatgrass
- 15% Dahurian Wildrye
- 15% Slender Wheatgrass
- 10% Carnival Tall Fescue
- 10% Assalt ST Alfalfa
- 10% Norgold Sweet Clover

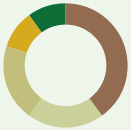
Seed at 6 kg/14 lb per acre
Formulated for salinity prone pastures.

HayPro T5 1104553

- 80% Vision Alfalfa
- 15% Athos Orchardgrass
- 5% Richmond Timothy

Seed at 5.5 kg/12 lb per acre
Rapid establishment with great persistence. Very adaptable.

Drylands 482855



- 40% MBA Meadow Bromegrass
- 20% Kirk Crested Wheatgrass
- 20% Pubescent Wheatgrass
- 10% Dahurian Wild Ryegrass
- 10% PICKSEED 3006 Alfalfa

Seed at 6.5 kg/14 lb per acre
Use for long term production Excellent persistence season-long growth.

HayPro T10 597198

- 60% WestStar Alfalfa Blend
- 30% AC Success Hybrid Bromegrass
- 10% Richmond Timothy

Seed at 6 kg/13 lb per acre
Highest yielding for regular rotations. Extremely adaptable with multiple disease resistance.

Lowlands 522303

- 30% Meadow Foxtail
- 25% Carnival Tall Fescue
- 15% Richmond Timothy
- 10% Boreal Creeping Red Fescue
- 10% Bellevue Reed Canarygrass
- 10% Dawn Alsike Clover

Seed at 6 kg/14 lb per acre
Use for long-term production Excellent persistence season-long growth

HayPro Dry 1126967

- 40% Radisson Smooth Bromegrass
- 30% Kirk Crested Wheatgrass
- 30% PICKSEED 3006 Alfalfa

Seed at 7 kg/15 lb per acre
Well suited for dry sandy soils. Great for single-cut hay systems that require fall grazing.

Introducing Dieselex Gold.

More Power. Greater Efficiency.
Lasting Protection.

Dieselex® Gold
Power ◆ Efficiency ◆ Protection

Exclusively from UFA
Available at select locations. **UFA.com/Dieselex**

PROPERTIES OF COVER CROPS

	SPECIES	WINTER HARDY	DROUGHT TOLERANT	FIGHTS COMPACTION	NITROGEN SOURCE	NUTRIENT SCAVENGER	EROSION CONTROL	ORGANIC MATTER	WEED SUPPRESSION	BIO FUMIGANT	BEST TIME TO PLANT
LEGUMES	Red Clover										LW, SP, EF
	Crimson Clover										LSU, LW
	Berseem Clover										LW, SP, EF
	Hairy Vetch										ESP, LS-F
NON-LEGUMES	Chicory										SP, EF
	Ryegrass										SP, LSU-EF
	Millet										SP, ESU
	Sorghum										SU
BRASSICAS	Tapper Radish										LSU-EF
	Kale										LSU-EF
	Turnip										LSU-EF
	Rapeseed										LSU-F

Lowest score of character

Highest score of character

E: Early **L:** Late **SP:** Spring **SU:** Summer **F:** Fall **W:** Winter

Annual forages can deliver the goods

More livestock producers are turning to the newer annual forage seed blends that are fairly adaptable to a wide range of growing conditions.

"These annual forage blends that include a mix of five to 10 species or more have a fit on several fronts," says Kevin Dunse, forage specialist with DLF Pickseed Canada. "They can be spring seeded and serve as productive high-quality forage during the growing season, or seeded in late summer to provide just fall and winter grazing, or depending on the circumstance, can serve as emergency forage."

While most annual forage blends are a combination of both warm and cool season forage varieties — legumes, grasses and several broadleaf varieties that are part of the brassica family — they offer a range of adaptability from drought to flooding conditions, but they are not bullet proof. As with virtually all crops, annual forage production can be reduced during an extremely dry growing season.

"There are dozens of forage species that can be used in annual forage blends, but the key," says Dunse, "is to include variety — biodiversity. The idea is, under average growing conditions with decent moisture, everything will produce well. But most blends also include both warm and cool season crops so if moisture trends one way or the other, at least some varieties will excel."

The biodiversity not only produces high-quality forage for cattle, but is also valuable for improving soil health. The forage brassicas, for example, particularly the forage radish and turnips aren't your garden-variety vegetables. These brassicas have large diameter and deep-rooted bulbs that penetrate and open the soil profile, benefitting moisture penetration and breaking up compaction. Legumes in the mix also help to fix nitrogen.

The annual forage blends can be tailored to be fairly simple or complex, depending on farmer needs, with blend costs ranging from economy to more expensive, again depending on the blend composition.


"Annual forage blends make for quick-to-establish pastures, ready within about 30 days. They offer plenty of versatility."
~ Dunse

A few key points Dunse recommends when considering annual forage blends:

- Spring seeding – seed into a firm, moist seedbed and apply proper fertility
- Select as diverse a blend as practical for your needs, but try to include both warm and cool season crops and aim for a mix that includes the large, leafy, more succulent, highly-nutritious Brassicas; one or two grassy type forages; and legumes.
- Be vigilant – under decent growing conditions, a lush forage stand is not only productive, but it can pose a bloat risk to cattle. Management strategies such as feeding cattle hay or straw prior to turning into pastures so their stomachs are somewhat full; including 40 to 50 per cent of cereals such as oats or barley in the annual seed blend; and/or limit feed cattle using temporary cross fencing can help reduce the risk of bloat.
- These lush pastures can also be a risk of developing high nitrates – especially if stressed by drought, hail or frost. Have forages tested and only graze after the risk of nitrate poisoning has passed.
- Mineral supplements should be supplied to make sure cattle are getting the proper mineral mix. Many of the annual forage blends can be high in sulphur and low on other essential nutrients such as copper, magnesium and selenium.

UFA offers a range of ProStock bagged minerals and tubs that help improve digestion of forages and optimize reproduction. They are specially formulated for Alberta forage conditions to ensure the correct nutrients are being consumed. The larger particle size help reduce weather-related losses.

Corn

Whether you are growing corn for grain, silage or grazing, we have a corn hybrid suited to your area and operation. We can help select the right one for you, based on heat unit requirements and agronomic characteristics.

DEKALB® early season corn is in huge demand this year. The DEKALB corn lineup keeps growing in sales because of strong, consistent performance. With excellent standability and stalk strength for Alberta, as well as excellent test weight and dry down, there's never been a better time to grow DEKALB brand corn on your farm. If you want corn for grain, silage or grazing, there's a product in the DEKALB corn lineup that you can put to work on your farm next year.

	DEKALB® DKC23-17RIB 1121139	DEKALB® DKC23-21 1123037	DEKALB® DKC26-25 1102262	DEKALB® DKC27-55RIB 1102285
CHU	2075	2075	2125	2200
Value-Added Trait	VT2P	RR2	RR2	VT2P
Seedling Vigour	4	3	2	2
Root Strength	3	3	3	3
Stalk Strength	2	3	3	3
Plant Height	Medium	Medium	Medium-Tall	Medium-Tall
Test Weight	1	2	3	1
Silage Yield	2	3	4	2
Milk/Acre	2	2	4	1
Overall Comment	An early flowering and early maturing hybrid that brings improved yield potential to its maturity zone. Excellent test weight and is a quality silage option in low heat unit areas.	Fast dry down and excellent test weight, making it a quality silage option in low heat unit areas. Early maturing with very good harvest appearance and agronomics.	Performs well as dual purpose silage product in short season zones. Excellent emergence and early season vigour, and performs well across all soil types and in high yield environments.	Medium-to-tall hybrid with excellent early vigour and harvest appearance. It flowers late, but will dry down to favour high test weight. Excellent dual-purpose silage product in short season areas.

Rating Scale: 1 = Excellent,; 9 = Poor

New DEKALB® DKC29-89RIB 1133461	DEKALB® DKC30-07RIB 1102286	DEKALB® DKC32-12RIB 1121141	DEKALB® DKC34-57RIB 1132126
2275	2350	2450	2575
VT2P	VT2P	VT2P	VT2P
3	2	2	2
2	2	2	3
2	2	2	3
Medium	Medium – Tall	Medium – Tall	Tall
3	3	2	2
	2	2	1
	1	2	1
A NEW hybrid with excellent root and stalk strength as well as excellent dry down and harvest appearance. It has late flowering timing for its maturity but dries down very quickly.	Excellent late season health for high-end yield capture in cold zones. Excellent harvest appearance, top end yield, and plant heath for quality silage and grain. Performs well in clay and at high populations.	Excellent stalk strength from a medium-to-tall statured plant.	Performs best on loamy soils and has strong performance in all yield environments. Flowering and dry down is on target for maturity. Excellent drought tolerance and has Silage Ready™ designation with excellent silage and feed value.

PICKSEED®

"Innovation, Dedication, Integrity, Loyalty, Teamwork", these are our Values. DLF Pickseed Canada, formed in 2013, is headquartered in Lindsay, Ontario with products being marketed utilizing the DLF Pickseed and Mapleseed brand names. Our brands are backed by a trusted and proven reputation for quality, agronomic advice and a commitment to research and technology. Our dedicated team provides practical and effective solutions to improve your profitability and reduce your operating risk.

	PS 2262 RR 1104349	PS 2210 RIB 1130246	PS 2320 RR 1125887
CHU	2075	2125	2200
Value-Added Trait	RR2	VT Double Pro	RR2
Seedling Vigour	Very Good	Very Good	Very Good
Root Strength	Very Good	Very Good	Good
Stalk Strength	Very Good	Excellent	Very Good
Plant Height	Medium – Tall	Tall	Tall
Test Weight	Good	Good	Excellent
Silage Yield	Very Good	Excellent	Excellent
Milk/Acre	Good	Excellent	Excellent
Overall Comment	Very good emergence and seedling vigour, best performance at higher populations.	Outstanding yield for an early maturity. Tall plant height with excellent dry down makes it a very good option for an early grain or silage hybrid	Impressive dual purpose option. Flowers and black layers exceptionally early. Exhibits slow dry down due to flint kernel inFulence. Tall stature with staygreen.

PS 2332 1125888	PS 2420 RR 1133463	PS 2552 RR 1133465
2250	2300	2475
	RR2	RR2
Very Good	Very Good	Very Good
Very Good	Good	Good
Very Good	Very Good	Excellent
Medium	Tall	Medium – Tall
Excellent	Excellent	Good
Very Good	Excellent	Very Good
Very Good	Excellent	Very Good
Early flowering hybrid with a flint type kernel. This conventional corn has a dual purpose nature that can be used for grain or silage.	Impressive dual purpose option. Flowers and black layers exceptionally early. Exhibits slow dry down due to flint kernel inFluence. Tall stature with staygreen.	Outstanding top-end yield potential with fast dry down. Good late season staygreen and intactness. Widely adaptable.

CANTERRA SEEDS is proud to distribute PRIDE Seeds hybrid corn and soybean seed.

PRIDE Seeds celebrate more than 65 years in Canadian agriculture, a history built on high-quality production and state-of-the-art technology. As a leading supplier of high-performing corn hybrids and soybean varieties, PRIDE Seeds is an ideal partner, with a quality-focused business that rounds out CANTERRA SEED'S portfolio of products.

	AS1017RR EDF 1133468	A4415G2 RIB 1130001	A4705HMRR 1130002
CHU	2150	2200	2300
Value Added Trait	Roundup Ready®	VT Double Pro® RIB Complete®	Roundup Ready®
Spring Vigour	Very Good	Very Good	Excellent
Root Strength	Very Good	Excellent	Excellent
Stalk Strength	Very Good	Excellent	Excellent
Plant Height	Tall	Tall	Tall
Drought Tolerance	Very Good	Very Good	Excellent
Milk or Beef Tonne	Very Good	Very Good	Very Good
Crude Protein	Very Good	Very Good	Very Good
Overall Comment	NEW introductory early silage, high moisture corn offering opportunity in shorter season growing areas. Slow grain drying rate preserves reliable and consistent feed quality at ideal moisture content. Uniform plant height. Consistent ear size producing flint kernels on white cob.	A high performance, multi-purpose grain, silage and grazing hybrid. Strong stalks and root strength. Visually attractive with fixed ear type.	Benchmark product for the silage, grazing and high moisture corn grower. Delivers unbeatable high energy, high quality silage. Features slow drydown for a wide harvest window.

A4939G2 RIB 1125770	AS1037RR EDF 1133469	A1047RR EDF 1121973
2400	2475	2500
VT Double Pro® RIB Complete®	Roundup Ready®	Roundup Ready®
Very Good	Excellent	Excellent
Excellent	Excellent	Very Good
Very Good	Excellent	Excellent
MediumTall	Tall	Very Tall
Very Good	Excellent	Very Good
Very Good	Excellent	Excellent
Very Good	Very Good	Very Good
An excellent dual purpose grain or silage hybrid choice for varying soil types. Maximum starch yield with rock solid performance. Consistent top-end tonnage punch with flex ears. Outstanding health and agronomics. Good option for high quality silage with a high energy content and starch levels.	NEW introductory choice for silage, high moisture corn or grazing feed. Consistent ears that produces flint kernels on white cob. Slow drydown preserves reliable and consistent feed quality at ideal moisture content. Additional staygreen nature for a wider harvest window.	Premium choice for high moisture corn or silage, with big, very tall plants and girthy ears on a white cob. Features consistent heavy top-end tonnage. Effective digestible fibre hybrid with outstanding yield per acre for beef/milk producers.

Selecting the right hybrid

Select a corn hybrid according to heat unit ratings most suited to your growing area, keeping the end use in mind.

Depending on the seed supplier, some hybrids are rated as suitable for grain corn, others have a rating as silage corn and still others have a dual-purpose rating suitable for grain, silage or grazing purposes.

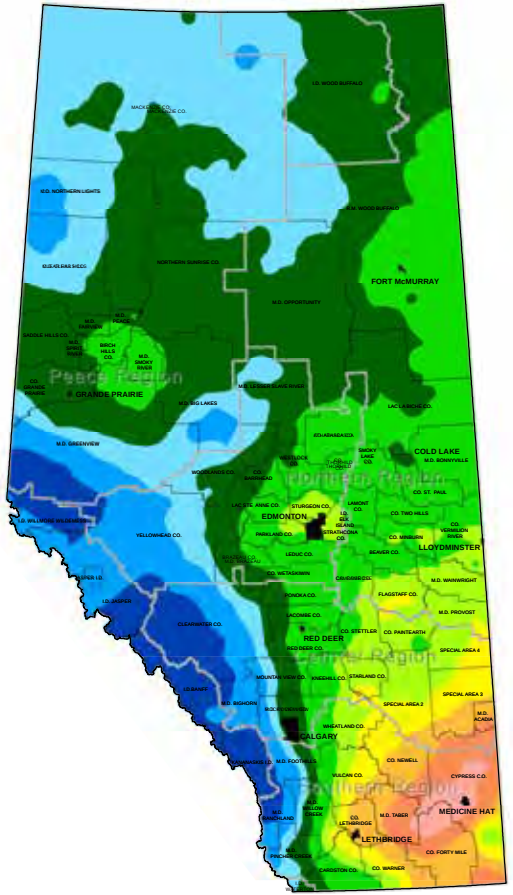
Each seed supplier's heat unit rating may differ in meaning or range. For example, hybrids from DEKALB show the CHU (Crop Heat Unit) needed for grain production, meaning if you're using that hybrid for silage you can go 150-200 CHU higher than your area as you'll be chopping prior to grain maturity. As each season differs greatly in growing conditions, placing more than one hybrid on the farm is always recommended to optimize the conditions of the season. Having a 100-200 CHU spread is a great way to hedge against Mother Nature.

Corn Heat Units are based on 1961-2016 historical weather data interpolated to township centers using ABClime-3.2.
Maps, weather and climate data are available at weatherdata.ca

Compiled by Alberta Agriculture and Forestry, Environmental Stewardship Branch, Engineering and Climate Services
Created on September 14, 2017

Average Corn Heat Unit Accumulations Killing Frost -1C

Corn heat units accumulated after April 15 following three consecutive days with daily average temp >= 2.8C and end with the first fall frost (-1C) Observation Period: 1961-2016



As each season differs greatly in growing conditions, placing more than one hybrid on the farm is always recommended to optimize the conditions of the season.

Getting corn off to a good start

Whether livestock producers are planting corn for silage or grazing purposes, it all begins with the same starting point – getting the crop planted and growing with the recommended production practices is essential.

"Ideally, plant early into a firm, moist seedbed, but not too early," says Meghan Desjardins, a technical agronomist with DEKALB based in southern Alberta.

"Corn should be managed similarly to canola. Corn germinates with warmer soil conditions so make sure soil temperature is 10 C or warmer. You also need to look ahead to the weather forecast for assurance there is no snow or freezing temperatures expected in the 48 hours following planting."

Follow a proper planting rate

Although it will vary with different hybrids, the seed count on average for Alberta growing conditions will be somewhere between 32,000 and 38,000 seeds per acre to achieve the optimum plant stand. Use a planting system that places corn seeds 1 to 2 inches deep.

"Corn has a fairly high nutrient requirement so it is best to soil test fields and any manure being applied for an accurate recommendation," says Desjardins. Again, on average, looking at the usual NPKS macronutrient package, the crop will need about one pound of nitrogen for every bushel of grain produced.

And apply proper weed control. Use a pre-seeding burnoff with an effective tank mix partner to control early germinating seeds along with recommended in-crop herbicides to start the corn off clean and keep it clean, it is not an overly competitive crop.

Tips for harvesting silage corn

To check for proper silage staging, remove the top one-half of the ear and view kernels on the broken end of the top half.

Darold Niwa, UFA Agronomic Specialist explains further, "A milk line appears across the individual kernel opposite the embryo side. This line advances down toward the cob with maturity and dry down. When the hard starch line approaches the cob, the black layer will form. Silage when the milk line is one-third the way down to the cob, but before the black layer forms."

Ideally silage corn should be harvested at 60 to 70 per cent moisture. If harvested too wet, many of the nutrients will leach out as moisture seeps from the packed silage. If harvested too dry, the chopped corn won't ensile properly and will have reduced feed value.

While corn height and biomass may stand out, he says really it is the ears that produce 60 per cent of corn yield (45 per cent from kernels and 15 per cent from the shank/husk).

Once the corn is chopped it needs to be stored in an oxygen-deprived – anaerobic – environment such as an airtight silo, or packed into a sealed silage bag, or quite commonly a silage pit. In the pit, for example, the chopped corn is usually packed by running over the pile with a heavy tractor to get as much air out of the pack as possible. Once the pit is full, the pile needs to covered and sealed with plastic or tarps, again to keep out oxygen. Under average conditions the ensiling (fermentation) process takes a minimum of three to four weeks to complete.

When feeding silage – particularly from a pit – it is advised that in order to protect feed quality, to leave as much of the tarp or plastic in place and only open as much of the silage pit face as needed to remove silage.

Tips on grazing corn

"Seed a large enough area to meet the grazing needs of your herd for a typical winter grazing period," says Meghan Desjardins, a technical agronomist with DEKALB. With an average crop of a forage-type corn hybrid, properly managed, that roughly works out to about 75 acres needed to feed 150 cows for a 90-day winter feeding period.

"That's based on an older formula that doesn't consider some of the newer hybrids, but it gives producers a starting point," says Desjardins.

The formula looks like this:

# of expected grazing days
x # of cows in the herd
= x grazing days

Divide the grazing days by 180 and that figure will tell you the number of acres.

Example:

90 day grazing period
x 150 cows grazing = 13,500

Divide 13,500 by 180 = 75 acres

Protecting all that you care for.

Visit **UFA.com/Build** or talk to your UFA Buildings Specialist today to get a quote and construct exactly what you need for your operation.

"It is important to limit feed corn access to avoid waste. If just turned loose in a corn field, cows might be a bit like kids in a candy store – they will go through and eat all the ears first." ~ Desjardins

Once the corn has grown, Standing grazing corn is ready for cattle when the ground freezes, says Desjardins. Grazing before ground freezes can result in muddy field conditions for cattle and increase feed losses as early season corn is easily trampled into the mud. Grazing corn is a great way to reduce winter chores and winter fuel consumption – use it to get through some of those winter months!

Use a portable electric fence to hold cattle into an area that will provide sufficient feed for two or three days. And ease them into it. If they are coming from late fall grass or stubble, feed them a ration of grain for a few days or a week until their rumen adapts and is ready for feeding on the corn grain.

Desjardins says with corn being high on energy and lower on protein, producers need to keep a frequent eye on the body condition score of their cattle. Providing a good mineral mix and even a protein supplement may be needed.

"It is recommended producers do a feed analysis on the standing corn so they know what they have," says Desjardins. Collecting a sample involves harvesting a few corn stalks from across the field, running them through a wood chipper and then sending a chopped sample to a feed test lab.

Range & Pasture

Quick Reference Guide

	Reclaim™ II HERBICIDE	Restore™ II HERBICIDE	Grazon™ XC HERBICIDE	Tordon™ 22K HERBICIDE
Segment	Broadleaf weed and brush control.	Broadleaf weed control.	Broadleaf weed and tree control.	Deep-rooted, hard to control perennial broadleaf weeds.
Packaging	Sold by the case only. 1.84kg Reclaim II A 2 x 6.8L Reclaim II B A non-ionic surfactant such as Intake is required. Sold separately.	2 x 9.71L jugs/case	2x10L jugs/case	2x10L jugs/case
Broadcast rate: Recommended minimum 20 gal/ac total spray solution.	93 g/ac Reclaim A 0.8L/ac Reclaim B 0.2% v/v of surfactant = 200 ml/ac provided using 20 gal/ac water volume	1 L/ac	Broadleaf weeds: 1.9L/ac Trees: 2.5L/ac NOTE: Height restrictions apply. Surfactant required for tree control.	1.8L/ac
Acres/jug or case at broadcast rate	20 ac/case	10 ac/ jug or 20 ac/case	Weed Rate: 5.2 ac/jug Tree Rate: 4ac/jug	5.6 ac/jug
Backpack/Spot Application Rate Mixing in 10L water	2.3g of Reclaim II A; 17ml of Reclaim II B and 20 ml of surfactant.	24ml	Weed rate: 67ml	50 ml For control of leafy spurge, field bindweed, and toadflax only, a spot treatment rate of 90ml per 100m+ may be used provided no more than 50% of a hectare is treated.
Application Recommendation	Thoroughly & uniformly wet the foliage, but not to the point of run-off.	Thoroughly & uniformly wet the foliage, but not to the point of run-off.	Apply to foliage until wet, up to the point of run-off.	Apply to foliage until wet, up to the point of run-off.

Always read and follow label instructions.

Range & Pasture Products

The most effective control of the toughest weeds and shrubs in rangeland and permanent pasture, providing increased grass production and extended control. Recommended rate for extended weed and shrub control is 20 ac/case.

The cost effective choice for invasive weed control and increased grass production. Recommended rate for weed control is 20 ac/case.

Broad-spectrum control of undesirable pasture species. Recommended rate for weed control is 1.9 L/ac. For tree recommendations, please contact your local UFA Customer Account Manager (CAM).

Longest-lasting control of deep-rooted leafy spurge and toadflax. For rate recommendations, please contact your local UFA Customer Account Manager (CAM).

Broadcast & Spot Spraying

	Broadcast Application 20 gal/ac water volume	**Spot Application** Mixing in 10 L water
Restore II*	• 20 ac/case	• 24 ml
Reclaim II*	• 20 ac/case PLUS 0.2% v/v non-ionic surfactant	• 2.3g (1 tsp) Reclaim II A • 17 ml Reclaim II B • 20 ml Surfactant
Grazon XC†	• 1.9 L/ac for weed control Tree rates: contact your UFA CAM.	• 67 ml (i.e. 0.67% solution)
Tordon 2K†	• 1.84 L/ac	• 50 ml (i.e. 0.5% solution)

For Backpack/Spot Application:

*** Thoroughly and uniformly wet the foliage, but not to the point of run-off.**

† Apply to foliage until wet, up to the point of run-off. Maximum one application per year for all treatments.

Simple steps to calibrate sprayer

In working to control those tough bushy plants and wolfy perennial weeds on pasture, the key points to remember are:

- Proper product — check the herbicide label and talk to your local UFA Customer Account Manager.
- Proper timing – this might vary, but usually for most weeds early- to mid-summer is best. Wait a bit later for controlling Canada thistle however.
- Proper rate — it is important to read the product label and correctly calibrate the sprayer.

That last point on calibrating the sprayer might seem to be the one most daunting for producers who may not be out every year trying to control pasture brush and weeds, says Candice Manshreck, a Strategic Account Manager with Corteva Agriscience™, the agriculture division of DowDuPont.

Calibration made easy

Tools exist to help make sprayer calibration easier. An example is Corteva's easy-to-use sprayer calibration calculator on their website as well as a link through on **UFA.com/Forage**.

"For proper weed and brush control, it is important to get the product applied properly," says Manshreck. "And we want to make it simple."

Calibration boils down to four easy steps:

1. Measure the width of the sprayer boom (the calculator can be used with either boomed or boomless sprayers)
2. Measure the nozzle output. Run the sprayer just with water and collect the output from a nozzle in a collection pan.
3. Select the water volume to be used with the herbicide product. For most effective coverage, Corteva recommends using a 20-gallon per acre water rate with all its products.
4. Know the total volume of the sprayer tank.

Enter those key pieces of information into the calculator and it will determine the travel speed of the sprayer unit and how much product is needed to deliver the proper herbicide rate.

Manshreck recommends using the higher water volume to achieve proper coverage. The herbicide needs to penetrate down through a dense leafy canopy when used on brush, for example. And perennial weeds such as Canada thistle can be a challenge too. Perennial weeds can have extensive growth above ground as well as a deep-reaching root system.

"Because these range and pasture products have extended control, we want the product to make contact with the soil so it's available for uptake if weed seeds germinate in the following growing season," says Manshreck.

Timing, sufficient water volume and proper rate are the keys to success when controlling range and pasture weeds.

Invasive Weeds and Shrubs

Invasive plants can thrive and spread aggressively and can have the ability to reduce the quality and quantity of forage available, by making them less accessible or attractive to grazing animals and by competing with desirable range plants. Here are the top weeds in the prairies to watch out for.

Rate Recommendations for Best Results

Best Practices for Control

WEED
Canada Thistle

- Reclaim II: 20 ac/case
- Grazon XC: 1.9 L/ac
- Restore II: 1 L/ac

- Spray once all thistles have emerged, typically in mid-June to late July. For infestations that have been established for >2 years, either broadcast or spot applications may be required in subsequent years to manage the problem and to remove heavy infestations.
- Add a non-ionic surfactant such as Intake at 0.25% v/v to Reclaim II.

WEED
Absinth Wormwood

- Reclaim II: 20 ac/case
- Restore II: 1 L/ac
- Grazon XC: Control has been observed when applied at 1.9 L/ac for a wide variety of susceptible species.

- Treat in the juvenile stage, when actively growing. Best timing: early to mid-June.
- Add a non-ionic surfactant such as Intake at 0.25% v/v to Reclaim II.

WEED
Oxeye Daisy

- Reclaim II: 20 ac/case
- Restore II: 1 L/ac
- Grazon XC: Control has been observed when applied at 1.9L/ac for a wide variety of susceptible species.

- Apply when actively growing, prior to flowering.
- Add a non-ionic surfactant such as Intake at 0.25% v/v to Reclaim II.

DEEP ROOTED PERENNIAL
Leafy Spurge

- Tordon 22K: Broadcast - 1.8L/acre; Spot spray 3.6L/ac where no more than 50% of an acre is treated.
- Grazon XC: 1.9L/ac

- Apply when actively growing when in full true flower, prior to seed set.
- Grazon XC will provide seasonal control of leafy spurge. Subsequent treatments may be required.
- Add a non-ionic surfactant such as Intake at 0.25% v/v to Grazon XC.

WEED
Hawkweed

- Reclaim II: 20 ac/case
- Restore II: 1 L/ac

- Apply when actively growing, prior to flowering.
- Add a non-ionic surfactant such as Intake at 0.25% v/v to Reclaim II.

WEED
Tall Buttercup

- Reclaim II: 20 ac/case
- Restore II: 1 L/ac
- Grazon XC: Control has been observed when applied at (1.9 L/ac) for a wide variety of susceptible species.

- Apply anytime from early spring when rosettes are first emerging up to the later stages of flowering. Typically late May to mid-July.
- Add a non-ionic surfactant such as Intake at 0.25% v/v to Reclaim II.

WEED
Tansy

- Reclaim II: 20 ac/case
- Grazon XC: Control has been observed when applied at 1.9L/ac for a wide variety of susceptible species.

- Apply from rosette to bolt.
- Add a non-ionic surfactant such as Intake at 0.25% v/v to Reclaim II.

WEED
Wild Caraway

- Reclaim II: 20 ac/case
- Restore II: Control has been observed when applied at 1 L/ac for a wide variety of susceptible species.

- Apply when actively growing, prior to flowering.
- Add a non-ionic surfactant such as Intake at 0.25% v/v to Reclaim II.

WEED
White Cockle

- Reclaim II: Control has been observed when applied at 20 ac/case for a wide variety of susceptible species.

- Apply when actively growing and prior to flowering.
- Add a non-ionic surfactant such as Intake at 0.25% v/v to Reclaim II.

SHRUB
Wild Rose

- Reclaim II: 20 ac/case

Apply to actively growing plants, after full leaf expansion. Typically June to mid-July.
- Add a non-ionic surfactant such as Intake at 0.25% v/v to Reclaim II.

DEEP-ROOTED PERENNIAL
Yellow Toadflax

- Tordon 22K: Broadcast - 1.8L/acre; Spot spray - 3.6L/ac where no more than 50% of an acre is treated.
- Grazon XC: 1.9 L/acre

- Apply to actively growing plants, after full leaf expansion at the flowering stage. Grazon XC will provide seasonal control of yellow toadflax. Subsequent treatments may be required.
- Add a non-ionic surfactant such as Intake at 0.25% v/v to Grazon XC.

Notes

Notes

UFA offers you:

the right product
local advice
competitive price

Connect with us today.
Visit **UFA.com/Forage**
Contact your local UFA Customer Account Manager