



FORAGE MARKET PRICE DISCOVERY – SASKATCHEWAN



Winter, 2019

This document details the current market prices and general trends for forage products in Saskatchewan and nearby jurisdictions as at January 21, 2019. Information was obtained through a variety of methods including telephone interviews, personal interviews, electronic correspondence, as well as advertisements found on-line and in newspapers. The goal of this report is to provide an accurate assessment of forage prices across Saskatchewan at this current point in time. All data collected was as current and credible as possible, and each piece was carefully analyzed to determine its relevancy. The Saskatchewan Forage Council, including the author of this report, have made every effort to ensure the accuracy of the data reported, however it does not guarantee and accepts no legal liability arising from or connected to the accuracy, reliability or completeness of any material contained in this document.

A sincere thank you goes out to all of the **forage producers, transporters and livestock producers** that were contacted to share their insight and current perspectives on this valuable industry.
Thank you for taking time out of your busy schedules!



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1. Review of 2018 Growing Season and Forage Production

Saskatchewan's hay yields in 2018 were once again below the long-term average for the third time in four years. Table 1 shows Saskatchewan's dryland yield estimates for the 2018 growing season. Pockets of average yields were seen in the northern grainbelt, and decent greenfeed yields were seen in areas where it rained. Saskatchewan producers had prepared themselves for a drought and poor forage yields in 2018 after the surprise of depressed yields and drought in 2017. The long, cool spring of 2018 was replaced by hot dry conditions nearly province wide. Pasture and hay land growth was slow and plants were stunted nearly everywhere. Mid-September rains slowed crop harvest province-wide but replenished topsoil moisture.

Forages traded quickly and in high volumes from early August through October. Grain crops turned into greenfeed due to drought, hail, or moisture at harvest, did fill gaps in the market. Forage users actively sought product earlier than in 2017 to ensure a proper feed supply. The trade of forages slowed in December and January, with less forages being offered for sale. However, reasonably priced perennial forages continue to move quickly. An abundance of straw is still listed for sale. Where transportation is affordable to the buyer it is continuing to sell.

Table 1. 2018 Saskatchewan Dryland Hay Yield Estimates (tons/acre)

Region	Date	Estimated 2018 Hay Yield (short tons/acre)				On-farm stocks at Nov/18
		Alfalfa	Alfalfa/Grass	Other Tame Hay	Greenfeed	
Southeast	Aug 6	1.5	1.5	1.1	2.2	Adequate
Southwest	Aug 6	0.7	0.7	0.5	1.3	Adequate to Short
East Central	Aug 6	1.3	1.3	1.4	1.6	Adequate
West Central	Aug 6	0.9	0.8	0.5	1.4	Short to Adequate
Northeastern	Aug 6	1.3	1.5	1.1	1.1	Adequate
Northwestern	Aug 6	1.0	1.2	0.8	1.7	Adequate
Provincial AVERAGE	Aug 7	1.1	1.1	0.9	1.6	

Source: Saskatchewan Ministry of Agriculture, August, 2018¹.

Alberta unfortunately sits where Saskatchewan was in 2017- blindsided with below average forage yields on a provincial scale. Drought and unfavorable growing conditions hurt forage production. There are shortfalls in excess of one million tonnes that users are coping with.

Overall the forage industry in Manitoba saw a low production year. Yields were highly variable across the province. While production in western areas was near average, eastern areas experienced some of the worst hay crops in years. Forage producers will be looking for an average year in 2019.

The provincial reports are supported with yield data as reported by Statistics Canada (see Table 2 below). Yields are severely depressed across the prairies. While Manitoba and Alberta reported a decrease in yield from 2017, Saskatchewan's yield was higher than in 2017. However, it is no consolation, as yields are still well below average.

Table 2. Tame Hay Yields in Manitoba, Saskatchewan, Alberta and Canada, 2012-2018

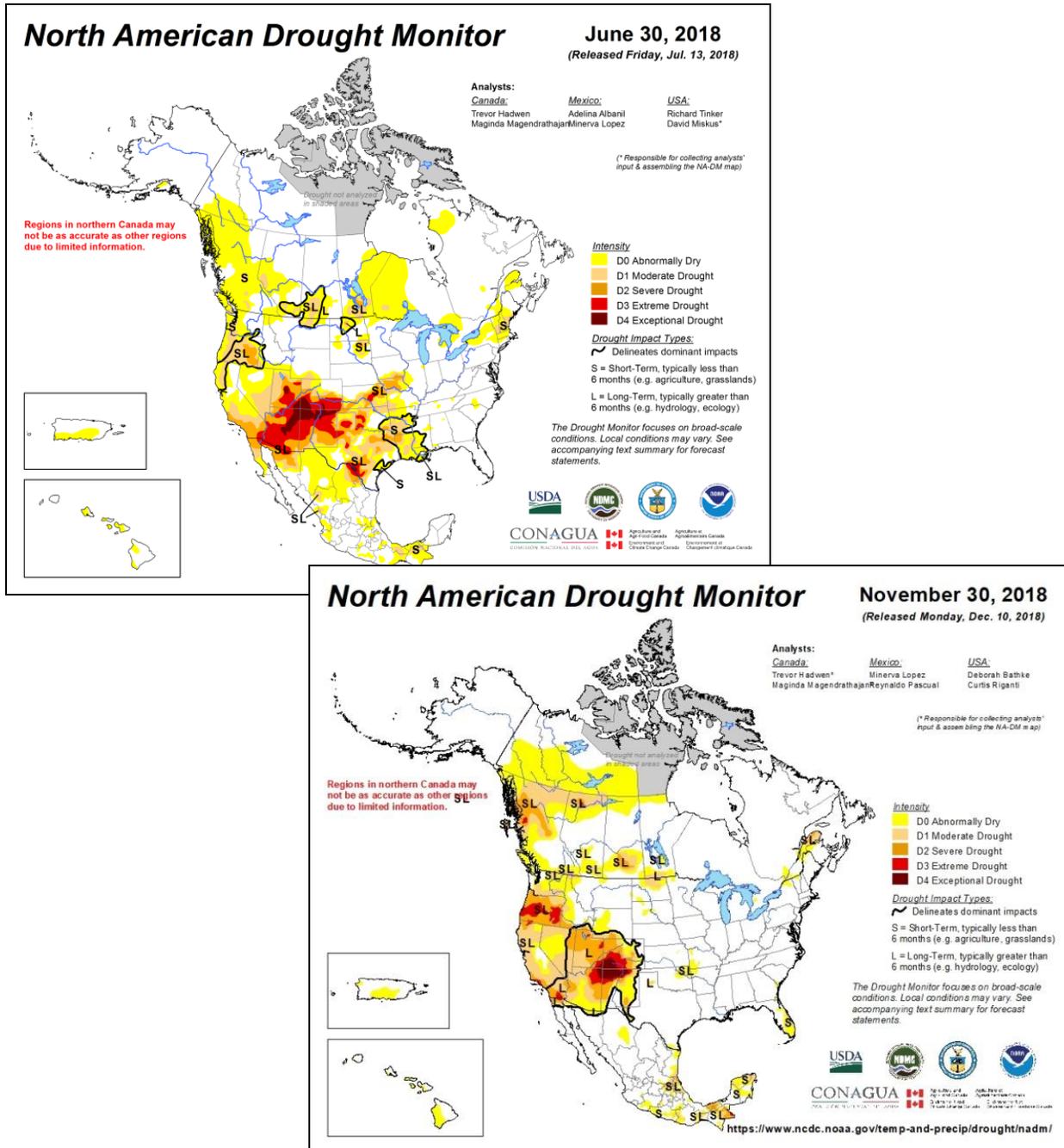
Location	Harvest	2012	2013	2014	2015	2016	2017	2018
Manitoba	('000 metric tonnes)	2,617	2,676	2,903	2,985	3,302	2,994	2,145
Saskatchewan	('000 metric tonnes)	5,121	4,990	5,012	3,642	5,338	3,520	3,902
Alberta	('000 metric tonnes)	7,711	7,589	7,258	4,971	7,819	7,176	6,035
Canada	('000 metric tonnes)	25,259	26,405	25,960	22,526	27,564	24,156	20,698

Source: Statistics Canada, 2019

Second cuts were just not seen in Saskatchewan except under irrigation in 2018. In August and September, caution was being warned from Provincial Forage Specialists about high nitrate levels in greenfeed. As fall feed test results began rolling in, nitrate levels were surprisingly low in the majority of greenfeed samples. Silage from the eastern regions is testing lower in crude protein than usual. Perennial forage samples in the western regions are coming back with generally lower TDN than expected for the decent harvesting conditions. Forage users spent a considerable amount of time sourcing extra feed this fall- from making calls to inquire about and look at product , to baling straw or garbage crops wherever possible, and then trucking purchases from far distances.

The North American Drought Monitor (see Figure 1. below) shows that as of November 30, 2018, the drought conditions in Saskatchewan have improved in the most southern and western portions but have shifted further into the eastern portions of the province. Moisture in September and October replenished some topsoil moisture in many areas. However, without winter precipitation and spring rains widespread drought will be prevalent within weeks. Drought conditions persist in Alberta. Figure 1 also captures the drought conditions seen across the entire western United States.

Figure. 1 Comparison of North American Drought Conditions as at June 30 and November 30, 2018.
(Source: North American Drought Monitor, 2018.)



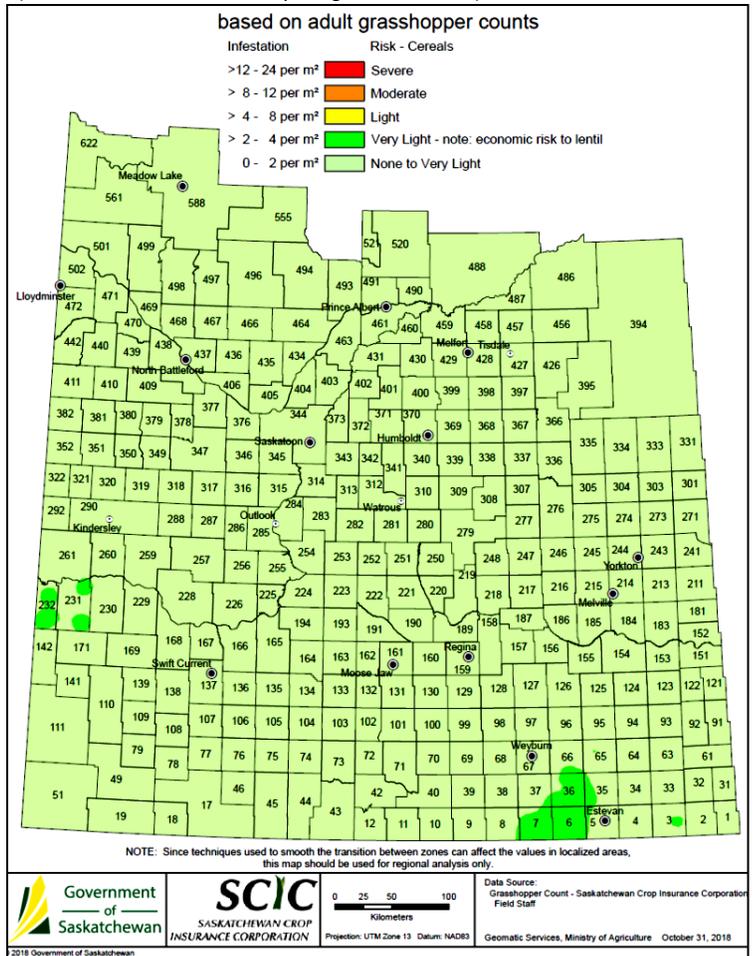
2. Field Pest Impact and Projections for 2019 Growing Season

The Saskatchewan Ministry of Agriculture's 2019 Grasshopper Forecast map demonstrates that the risk of grasshoppers in 2019 is negligible for most of the province. Despite widespread drought conditions during the summer, which were favorable for grasshopper proliferation, infestations are not expected. The province-wide wet fall weather has ensured low fall adult counts. Producers should watch grasshopper infestations locally as they may not be captured within the coarser data. Weather conditions through spring and into summer can effect grasshopper development and change infestation levels during the forage growing season.

Producers have been fortunate to not have widespread infestations of alfalfa weevils, lygus bugs, alfalfa plant bugs and lesser clover leaf weevils all have the potential to cause economic damage to legume forages in Saskatchewan. Scouting for alfalfa weevil in 2019 should still be normal practice for alfalfa producers as localized infestations may reach economic thresholds. As a precautionary note to Saskatchewan producers, wire worm infestations of economic significance have been noted in Alberta timothy crops.

Figure 2. 2019 Saskatchewan Grasshopper Forecast

(Source: Saskatchewan Ministry of Agriculture, 2018²)



If the hot, dry weather pattern holds anti-quality factors such as molds, ergot, and fusarium will likely not be a widespread concern. A large amount of greenfeed will likely be used again in 2019 to make up for low forage carryovers. If a wetter growing season is seen, producers should be mindful of the risks associated with anti-quality factors. Ergot and fusarium become an issue in grasses and cereals when wet periods and heading coincide. Testing forages in 2019 will continue to be the only sure-fire way to determine anti-quality factors in forages.

If spring drought persists in 2019, slough/meadow hay will continue to be available for harvest. Poisonous wetland and riparian plants such as spotted water hemlock, cow parsnip, and seaside arrow grass may pose a risk to livestock in these situations. Those haying wet areas should be mindful of the plants being swathed.

3. Regional Forage Conditions in Saskatchewan

Regionally, forage prices can vary. In 2018-2019, the January price differences between regions are less noticeable than in years past as forage users in every region planned ahead. The demand and prices are higher in the west, with some availability in the east. Perennial forages are in demand everywhere. Straw and greenfeed tend to be available but have normalized in price. Transportation costs remain a hurdle to move forages great distances.

A) South Central and South West Regions

If 2017 was one of the driest years on record, it had stiff competition from 2018. Hay land and pasture topsoil moisture conditions are rated as 39 per cent adequate, 51 percent short and 10 per cent very short at the beginning of November. Despite rain throughout September there is still a long way to go to have enough soil moisture for spring crops. Although there has been many snow fall events in the south west and south central region, mild temperatures saw stubble grazing last longer than producers expected.

Majority of south west producers have acquired their needed forages, but on-farm reserves will be tight by May. Producers are feeding straw, lots of greenfeed and some hay as roughage. Pellets, grain and grain screenings are supplementing cattle. Most feed tests have come back with lower crude protein than anticipated in hay and lower nitrates than anticipated in greenfeed. Forage Specialists note a high number of straight grain farmers consulting them on the bales they are marketing. The western side of the region receives price pressure from demand in Alberta- forages are hard to source in the west. Perennial forage continues to move quickly for \$0.10/lbs in the south west. Demand is high for quality forage for use after calving.



A hard cull of cattle was seen in fall 2017 and spring 2018 out of the south west. In 2018 a typical cull was seen, but producers generally kept less heifers than normal or didn't buy the extra stock to feed out that they typically do. Forage Specialists have been seeing an increased interest in seeding saline areas to perennials and seeding whole quarter sections to hay. Low dugout water levels and pastures with poor carryover are a big concern. Producers have indicated they will once again seed greenfeed. If drought continues through 2019 it is anticipated more cows will be sold.

B) South East Region

The south east received rain and snow during harvest, before freeze up. Hay land and pasture topsoil moisture was rated as 69 per cent adequate, 24 per cent short and seven per cent very short November 5th. Snow cover is currently below normal. Cattle have continued to forage late where crop residue was available.

Producers report regionally that they will have adequate supplies of forages and feed grain for the winter period. Many producers bought any forages they required already. The south east saw a considerable amount of greenfeed seeded in 2018, which yielded excellent (2.2 tons/acre average). Some forage continues to move westward from the region when trucking is affordable. Silage is more common in the region than even five years ago. Nutritionalists note that silage tests in the region is coming back with less crude protein than expected- resulting in additional grain being added to rations.

Once again, the lack of (or potential lack of) water for livestock across the landscape come spring is one of the big challenges. Very few inquiries have been made with Forage Specialists on seeding perennial forages in 2019 in the south east region. Producers indicate that cereals for greenfeed or silage will be seeded again with the hope of good spring rains to produce tonnage.

D) North East Region

In the north east region hay harvest conditions were generally good with average to below average yields. September was graced with snow and rain, but luckily October was warm and dry to allow for the completion of crop harvests and baling of salvaged crops, greenfeed and straw.

The preparation that producers did over the growing season and into the fall has resulted in adequate feed supplies on-farm. Straw based rations through the fall and early winter continue to be used more frequently than normal. Greenfeed will tend to be used up before calving when high quality perennial forages will be used. Some producers have had greenfeed test high in nitrates. Early snow fall in the region as resulted in cattle being placed on feed early. Forages continue to trade steadily in the region. Demand is especially high for good quality perennial forages. Forages are not only trading locally but across the region and moving outside of the region. Producers who have excess forages may be contemplating selling forages or acquiring additional head being sold for a cheap price because of feed shortages.

Topsoil moisture conditions at freeze-up sit at 92% adequate or surplus. Subsoil moisture still may be limited in many areas. Snow cover is decent going into January. Little inquiries have been made regarding seeding forages in 2019 to Regional Forage Agrolgists. Although the north east region is relatively 'not dry', some are still looking to prepare. In case of a dry 2019, many producers have indicated they will continue to focus on straw based rations.

E) East Central Region

Moisture conditions continue to be mixed in the east central region. While fall rains replenished hay land and pasture topsoil to be adequate in about 40% of the area, 60% of the area remains short. The current snow cover is well below normal for the time of year. The potential for alfalfa winterkill is high. Runoff will be needed to replenish sloughs and dugouts.

Due to the open fall and winter (to date), many herds are still out finishing fall grazing or bale grazing that has been stretched. Producers indicate that they have sourced sufficient forage supplies. Many cattle in the region are consuming straw in combination with grain, pellets, or hay. Greenfeed, whether planned or salvaged, has tended to be fed on its own and will continue to be a major forage source this winter. Although producers were being cautioned about potential nitrate levels in the fall, most feed has had low nitrates.

Indications from Livestock Specialists are that hard culling was carried out in the region this fall. Reasonably priced forages (5-8 cents/lbs) are trading hands. Without adequate winter moisture pastures will be having a rough spring start. While producers generally have enough forages until May 1st, few are anticipated to have enough forages until June 1st. Producers are once again being encouraged to look at seeding annuals for baling or grazing to take pressure off pastures and ensure adequate forages for 2019/2020.

F) West Central/ Central Region

The west central/ central region continues to deal with drought. Pastures and hay land only produced 25%-50% of normal through 2018, after a tough 2017. At the beginning of November, hay land and pasture topsoil moisture conditions are rated as 55 per cent adequate, 44 percent short and two per cent very short. Livestock were turned onto aftermath grazing early and some still remain out picking with supplementation due to only a light snow cover and warmer conditions. The light snow cover could cause significant alfalfa winterkill if temperatures drop before more snow falls.

A significant percentage of fall/winter rations are straw based (over 50%) and include greenfeed. Good quality hay is being saved for adding to rations post calving or when temperatures drop. Feed grains are filling the protein and energy needs of livestock instead of perennial forages within the region this year. Alfalfa/grass bales are valued at \$0.08-\$0.10/lbs, but in all reality, perennial forages are really not available for purchase in the region. Greenfeed, hailed crops and straw can still be found and are holding steady in price. Straw that is priced at \$20/bale in a normal year is now being marketed for \$30-40/bale. Some greenfeed has tested higher for nitrates and is needing to be mixed off with other feeds, but less issues are presenting themselves than was expected in September.

The fall saw cull cows marketed early and many producers who normally would background their calves sold them this fall instead of purchasing forage and feeding them. Most of the region's livestock and forage producers will be in tough shape if there is no spring rain for hay or pasture growth. If feeding is prolonged past early May, a greater number of forage shortages are anticipated. Very few producers are inquiring about seeding perennial forages. Looking to spring, greenfeed will continue to be planned as a forage source.

G) North West and North Central Regions

Haying conditions and forage growth were both variable in the north west region again in 2018. To the south there was drought and to the north, such as around Loon Lake, pastures and hay were too wet. The north central area had an average year. Fall moisture prolonged crop harvest, but replenished some soil moisture. Hay land and pasture topsoil moisture was rated as one per cent surplus, 76 per cent adequate, 14 per cent short and nine per cent very short at the beginning of November. Snow cover is decent for January with areas north of The Battlefords covered in heavy snow.

Producers are feeding more silage and greenfeed than past years. Straw/grain rations through the fall have been common. The late harvest which lasted until snow fall has meant straw is in shorter supply than normal in the region. There are concerns that many winter dugouts are getting low on water.

Producers pre-planned and will have enough forages and feed grain. Some are still looking for forages if they ran into quality issues such as higher nitrates or lower CP or had to start feeding earlier because crop was un-harvested and stubble was unavailable for grazing (as a generalization). Perennial hay and straw prices are now generally higher than what was seen in the north west in 2017. Reasons noted include the forage shortages in central Alberta- feed cannot be sourced there by Saskatchewan producers and Albertans are coming east to source feed in Saskatchewan. In the north central area alfalfa/grass forage prices have settled within the normal range of \$65-90/tonne.

Most producers in the region are not worried yet about low forage production in spring 2019. Forage Specialists do not have any significant indications of increased perennial forage acres being seeded within the region.



4. Current Forage Freight Rates in Saskatchewan

Fall demand for transportation was high in 2018. There continues to be moderate demand for this time of year. The demand includes moving product previously purchased to its final destination. As always, fuel usage due to lower temperatures is a concern for operators. The September 2018 calculated averages for semi hauling (standard) were \$6.47/loaded mile with a \$120-\$185/hr mobilization charge and \$159/hour for short hauls. Forage transport rates remained relatively stable this past season. The rates held as transporters had adjusted rates prior to the bale hauling season.

Table 3. January, 2018 Hay Transportation Costs in Saskatchewan

	Rate (\$/loaded mile)	Rate (\$/hour)
Provincial Average	\$6.78	\$150
Provincial Mean	\$6.48	\$145

*Note: province-wide average was obtained from all reported values across Saskatchewan regardless of region

Diesel prices continue to be a major factor in forage production costs and transportation costs. Diesel prices continue to plague the industry. From the first week of October through the start of December diesel prices provincially stayed above \$1.22/ litre. On December 28, 2018, Natural Resources Canada reported the average diesel retail price in Regina, SK to be \$1.10/ litre (Saskatoon \$1.117/litre). In December of 2017 prices were equally as high- in 2016 and 2015 prices were significantly lower, below \$1.00/ litre. **Many transporters continue to indicate they have been forced to add fuel surcharges (often 10%), and frequently charge a rate for empty travel from home base. Mobilization charges are still at play and range from \$120-185/hour.**

As was seen in January 2018 and September 2018, there is no regional trend with transportation costs. The demand this fall saw bookings being taken 1-2 months before hay was hauled. Those hauling forage are traveling province-wide for pickups and deliveries. The span of business includes across the province and between provinces. There continues to be movement of forages in and out of the province.



5. Current & Projected Saskatchewan Forage Prices for 2019

Prices were obtained throughout the fall and winter. Prices were assembled from listings, as well as many personal phone calls to producers, nutritionalists, feedlots, hay growers, and transporters.

Last December/January (17/18) there were limited trades occurring. Although many forage shortages have been seen this growing season like in the year previous, current trade is moderate. Communications with hay transporters, forage producers, livestock producers, feedlots, and Forage Specialists have provided insight. Below are the comparative comments between what was noted in 2018 and what is being seen in 2019.

1) 2019- Hay was sold before the crop harvest or was held onto until the 2019 fiscal year began.

2018-Those who had hay for sale sold it early.

2) 2019- Hay is worth a maximum price and this year people spent their maximum price now- not waiting until May; people knew what they needed and what their max price was.

2018- Those with potential hay for sale feel the April/May price will be significantly higher than currently.

3) 2019- Saskatchewan sellers are asking reasonable prices/what buyers are willing to pay.

2018-The price sellers are currently (January) asking very few buyers want to pay.

4) 2019- Forage users took better inventory and planned better all through the growing season and know what they need.

2018-Those who might need hay are hoping to see how far they can get without making a purchase.

5) 2019 & 2018- small transactions of close neighbour to neighbour trades are likely slow but still occurring and cannot be captured and quantified in this report.

Average prices reported in Table 4a are those **collected from December 28th to January 19th**. The average prices collected from August through December were then averaged (5 months) to produce the figures in Table 4b. It is the normal trend usually seen to have prices for most classes of hay gradually soften, however there has been a lesser degree of softening in 2018-19. These current and fall-long average prices can help support current and future price estimates.

Table 4a. Average Current Forage Prices in Saskatchewan as at January 19th, 2019

Forage Type	Simple Average Price (\$/tonne)	Weighted Average Price (\$/tonne)	High (\$/tonne)	Low (\$/tonne)
Grass Hay	\$91.86	\$91.86	\$91.86	\$91.86
First Cut Alfalfa	\$183.54	\$133.99	\$264.55	\$130.90
Second Cut Alfalfa	\$259.04	\$287.39	\$297.62	\$220.46
Alfalfa/Grass mix	\$160.49	\$164.88	\$220.46	\$110.23
Greenfeed	\$128.79	98.89	\$218.78	\$85.00
Clover	NA	NA	NA	NA
Cereal Straw	\$70.16	61.02	\$88.18	\$48.99
Pulse Straw	\$80.83	\$77.78	\$88.18	\$66.14

Table 4b. Average Fall Long (Aug-Dec) Forage Prices in Saskatchewan as at December 28th, 2018

Forage Type	Simple Average Price (\$/tonne)	Weighted Average Price (\$/tonne)
Grass Hay	\$128.13	\$115.36
First Cut Alfalfa	\$168.43	\$138.94
Second Cut Alfalfa	\$215.18	\$189.91
Alfalfa/Grass mix	\$168.19	\$168.64
Greenfeed	\$123.65	\$125.33
Clover	No prices	No prices
Cereal Straw	\$66.70	\$77.63
Pulse Straw	\$88.03	\$91.96

We may once again see significant alfalfa winter kill in 2019. A light snow covering province-wide at January 10th may not have been enough to protect alfalfa crowns from the winterkill seen with extreme fluctuations in temperature (+5 to -35). Loss of alfalfa plants may result in depressed production in perennial stands.

The consistent feedback being received is most livestock producers are comfortable with their on-farm inventory. They have made the required on-farm adjustments over the last twelve months to get to this point. Those requiring large quantities of forage secured it early this fall. Perennial forages continue to be sought provincially and trades occur quickly. Overall demand in the south and west/west central is still high and supplies are much more limited.

On-farm carryover of perennial forage is expected to be minimal province-wide. If there are 'extra' perennial forage bales currently on livestock operations they are not being sold off-farm for concern of 2019/20 shortages. There may be straw and greenfeed carryover on-farm, region dependant. Some straw and greenfeed sales off-farm are anticipated, especially through neighbour-to-neighbour transactions where known parties are helping each other out.

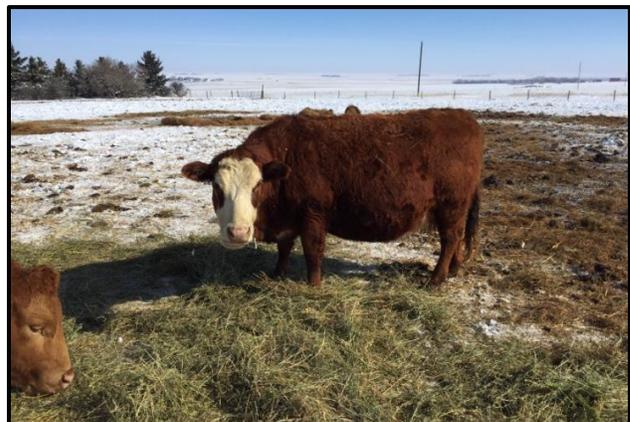
The **0.4 tons/acre negative difference in total provincial alfalfa/grass forage production** in 2018 compared to the eight year average is significant. The Statistics Canada numbers indicate that overall forage production in Saskatchewan **was nearly 1 million MT less** than the "normal" five year average.

Saskatchewan continues to see the effect of consecutive tough production years. 2015 was a low production year in Saskatchewan (about 1.3 million MT below five year average) due to late spring frosts. During that time, forage prices climbed and on-farm reserves depleted. The 2016 growing season had allowed many producers to re-build stocks, but overall forage quality was an issue so producers used up the feed themselves or liquidated it where possible. 2017 saw production at 1.5 million MT (or 0.3 tons/acre) less than normal in Saskatchewan which left forage users scrambling. Using (purchasing) production from previous years which would pull down current prices is just not an option for Saskatchewan forage users.

With below average production in Saskatchewan in 2017 and 2018, and **if production levels mirrors 2018, the value of forages in 2019 can be expected to be very similar to what is being seen provincially now.**

Prices will likely not climb significantly higher in 2019 (if yields are poor) for a number of reasons. The major forage user (cattle) has a maximum price they can pay for forages to break even. Many purchasers have reached that point. Fall 2019 calf prices are not anticipated to climb, and therefore, additional 'extra' income is not expected. Feed grains will remain affordable and feasible to use for the foreseeable future. Forage users got through 2018 by planning ahead and using annual forages. Greenfeed will be a planned move again in 2019. Even if for some reason greenfeed is a total low-yielding disaster provincially, extremely high prices would be unlikely as annual crop failures would be occurring at the same time/alarming rate. Annual crops would be sent for salvage as livestock feed, hence buffering the disaster. The sky is not the limit for forage prices.

Forage users have planned ahead well provincially through one year already. They are prepared to do it again. Adjacent jurisdictions (Alberta) will likely take the cue, and rely on annual forages and alternatives for 2019 forage production. While some forage prices were higher than in fall 2017, prices remain very similar and huge jumps were not seen.



Greenfeed: Listed greenfeed continues to move quickly. Currently, and throughout the fall, average asking prices have been in the \$120/tonne range. Likely, as the price has been steady, it will continue to sit in the \$110-120/tonne range even if winter feeding is prolonged. Good quality greenfeed is an economical forage to use/produce on a temporary basis. Forage users have indicated they will once again prepare to seed greenfeed in 2019. Hailed crops can once again be expected to be salvaged as greenfeed to recapture value as on-farm reserves for 19/20 will be virtually nil.

First and second cut alfalfa: The current asking price for first cut straight alfalfa is \$130-\$265/tonne with a simple average of \$183.54/tonne (\$133.99/tonne weighted). Offers of premium second cut straight alfalfa that is required for the high feed value (dairy, feedlots) were priced at \$220-\$298/tonne. Supplies are tight for this higher quality product not only in Saskatchewan but in Alberta. With Alberta alfalfa prices significantly higher than normal prices in Saskatchewan have remained strong. In the fall prices stayed in the \$215/tonne range for dairy quality and \$168/tonne for first cut alfalfa (not tested). Moving forward, a basic first cut alfalfa can be expected to be in the \$160/tonne range provincially, but superior quality products needed for the dairy industry can still expect to fetch a higher price.

Alfalfa/grass mix: Alfalfa/grass mixed hay continues to have a decent number of listings for the January reporting period. The current weighted and simple averages are \$164.88/tonne and \$160.49/tonne respectfully. The average fall-long weighted and simple average price for alfalfa/grass was \$168/tonne. Trades generally occur very quickly with bales being sold within days of being listed. Demand for alfalfa/grass has remained steady since early fall as this class of forage will be required on most cow-calf operations post calving. Producers indicated this fall that they would be seeking out alfalfa/grass- but for a set budgeted price to complement other forages and alternatives being used. This year's price is higher than the average January 2018 price of \$125-\$130/tonne. Prices have held slightly stronger moving forward than was anticipated in September 2018.

Grass: Quality and value of grass hay is particularly subjective, as some producers report seeded tame grass while others may actually refer to slough or wet meadow grass hay when buying or selling grass hay. Although the January grass listings are for \$91.86/tonne, fall-long, the average prices of \$115-\$128/tonne have been steady. Moving forward the good quality, tame grass hay will likely hold true to the fall price range. Demand, while not in excess, appears to be steady.

Straw: Straw has become the staple of winter 2019. Straw was seen baled up across the province by straight grain producers and mixed producers. There are numerous straw listings. Straw is generally sold on a per bale basis with the current asking price of \$22-40/bale- an increase over previous winters. The current January simple average is \$60.43/tonne, and fall-long average price on cereal straw is \$52.74-54.70/tonne. Pulse straw has remained of higher value in the \$30-40/bale or \$80-88/tonne range throughout the fall and now. Its value is anticipated to hold. It can be expected that there will be cereal straw remaining unsold come April due to the amount available, which in turn may lower fall 2019 prices if it is on the market for a lower price than new straw.

Clover: Clover is a product of low demand. Greenfeed has filled the forage gap that clover had previously filled in the 1990's. No listings of clover were offered during the reporting period. Clover remains a lower priced feedstuff.

Silage: The re-birth of silage continues across the prairies. Indications from feed companies, agrologists and producers are silage acres will continue to increase through spring 2019. Silage in the east and south east has tested lower in crude protein than anticipated this winter and is being fed with more grain or alternatives. In September 2018 **cereal silage (i.e. barley, or mixed grains) had an average value of \$56.25/tonne at the pit and corn silage was estimated to be worth an average of \$63.30/tonne at the pit.** These figures remain reasonable for January 2019 usage. The January 2019 Cattlemen Magazine (Canfax report) reported the Alberta barley silage value at \$68.50/ton (\$75.50/tonne) compared to \$67.00/ton (\$73.85/tonne) in August and \$70.50/ton (\$77.21/tonne) in September. This is an additional indication that silage values remain consistent. Through the 2019 growing season diesel prices and carbon taxation implementation may significantly raise the cost of producing silage- this is still a large unknown.

Certified Organic Hay: Often listings claim forage is organic but are found to not be certified upon further investigation. Premiums for organic hay lack. Organic prices fell within the average range for non-certified forages in September 2018.

Standing Hay: Standing hay was reported in September 2018 as a mean price of \$63.49/tonne for alfalfa/grass- up from a mean of \$40.85/tonne in 2017. The approximate per acre rates varied from \$10-\$85/acre when sold at strictly fee per acre rate (does not fluctuate based on production), and \$10-136/acre when sold as a cost/tonne harvested. Many producers have long-term contracts for standing forages, and use per acre rates, per bale rates or other formulas specific to their arrangement. There are currently listings on Kijiji.ca and in the Western Producer looking for standing hay in 2019. Some advertisements indicate a willingness to travel over an hour for hay land.



Small Square Bales

The price for small square bales reported is based on listings from December 20, 2018 to January 18, 2019 and were obtained primarily from on-line classified ads. Current small square bale prices have climbed significantly from the fall 2018 prices according to listings. Alfalfa/grass bales have seen a marked continued increase since September 2018- from an average of \$6.20 to \$8.57/bale at January 2019. This is reflective of the general market. There is a higher demand due to general shortages if buyers did not plan purchases in the fall. More straw is listed for \$4/bale at present compared to September when most straw was listed closer to \$2.50-\$3.00 per bale when it was still in the field.

Assuming an average square bale weight of 65lb/bale, average small square alfalfa and alfalfa/grass hay is priced at \$316.44/tonne and \$290.67/tonne respectively.



Table 5. Square Bale Asking Prices Across Saskatchewan from December, 2018 through January, 2019

Forage Type	Average Price (\$/bale)
Alfalfa	\$9.33
Alfalfa/Grass	\$8.57
Grass	\$7.00
Greenfeed	\$3.50
Straw	\$3.56

Dehydrated Alfalfa and Timothy Products

There are currently three alfalfa and timothy processing plants located in Saskatchewan.

Little supply of alfalfa pellets available domestically in Saskatchewan due to large export contracts based out of Saskatchewan in 18/19. Plants are seeing a high number of new inquiries domestically for product. Production is anticipated to be higher in fall 2019 as one of the major plants completes plant upgrades. Agreements with alfalfa producers are long standing and do not fluctuate from year to year- \$35/tonne has remained steady. Section 7 on Alternative Feedstuffs further discusses the alfalfa pellet market trends.

Table 6 depicts the average price for suncured and dehy products in Saskatchewan from the 2018 growing season. It should be noted however, that there is currently no product available for purchase.

Table 6. Average Saskatchewan Processed Alfalfa Product Prices for 2017-2018

Product Type	Price (\$/Tonne)
Dehydrated Alfalfa Pellet (16-17% Crude Protein)	\$285.00
Suncured Alfalfa Pellets (15% Crude Protein)	\$265.00
Organic Suncured Alfalfa	not priced in 2018

Compressed timothy production is an active sector in Alberta. Timothy sales representatives (processors) reported 2018 saw extreme challenges with drought and wire worm issues domestically, but strong demand and sales abroad. Since 2017, top end Alberta processed timothy has continued to go into the premium pet food market in North America. The Canadian industry benefits greatly from this market as there is not sole reliance on overseas buyers.

Demand for product has far outweighed the supply of unprocessed timothy and alfalfa. The demand derived from drought across the prairies and in the western United States was such that the alfalfa market was extremely short and tight. Alfalfa was trading for \$1.50+/RFV (premium alfalfa). Currently no alfalfa products are available. Unprocessed timothy was priced as \$350-400/tonne based on quality, with a utility grade closer to \$230/tonne. Estimated compressed timothy prices are seen in Table 7 below. It should be noted however, that there is currently no product available for purchase from the Alberta processors surveyed. Virtually all product produced has been allocated/sold.

Demand for compressed timothy is still strong from Japan, Taiwan and Korea. Drought in Australia and poor quality coming out of Washington has allowed for Alberta products to trade at higher prices. Processors are quick to note that the current prices are unsustainable and won't last. Worries for timothy production are high going into 2019. They include: that newly seeded timothy stands will not establish; winter kill will be high; early spring wire worms will kill timothy stands; and continued drought will severely decrease production.

Table 7. Estimated Alberta Compressed Timothy Prices for 2018-2019

Product Type	Price (\$/tonne)
Premium compressed timothy (pet food products)	\$475 range (high)
Choice compressed timothy	Below \$475
Standard compressed timothy	Above \$420
Utility compressed timothy	\$300 range

6. Additional 2019 Provincial Forage Market Considerations

Saskatchewan reported below average hay yields in 2018. In addition to price trends, there are other forage market considerations for 2019.

The 2018 steer calf run was not disappointing for cow/calf producers. Price consistency has added stability for on-farm cash flow and purchasing ability. According to Canfax (pers. comm., 2019), cow slaughter was up in 2018 by 13% across Canada- 12% in the west and 15% in the east. This pushed the beef cow cull rate up to 13.5% which is liquidation levels and the highest since 2014. Cows without calves were culled hard prior to spring turnout. Saskatchewan producers indicate that their 2018 fall cull rate was average, while Alberta producers indicate a fall cull rate close to 20%. Saskatchewan cull cow prices have dropped through 2018. There was substantial expansion of dairy cow herds in the US mid-west and north east between 2009 and 2018 but lower milk prices have resulted in the US dairy herd being liquidated over the last year putting significant downward pressure on North American cow prices (Canfax pers. comm., 2019).

Uncertainty is high in the agricultural community on how carbon taxation schemes will impact production costs. Forage production is no exception. Forage producer's end users are generally livestock producers. Livestock producers have an inability to pass on costs to their end users (beef consumers) through current mechanisms. Greater clarity in the coming months may be expected.

Although there are adequate feed supplies on-farm currently, spring 2019 climatic conditions will impact the likelihood of producers running out of feed before pasture turn-out. While there will likely be straw available, higher quality forages will still be needed on-farm. Another cold, dry spring will slow spring grass growth once again. Delaying pasture turn-out may not be an option for some livestock owners. Pasture or hay stands hurt by poor climatic conditions and over use may get to the point where they are unable to recover and regain their production potential. If pastures do not grow in the hardest hit regions (south west and west central) operators will be forced to dry-lot feed livestock, sell livestock, or graze cropland.

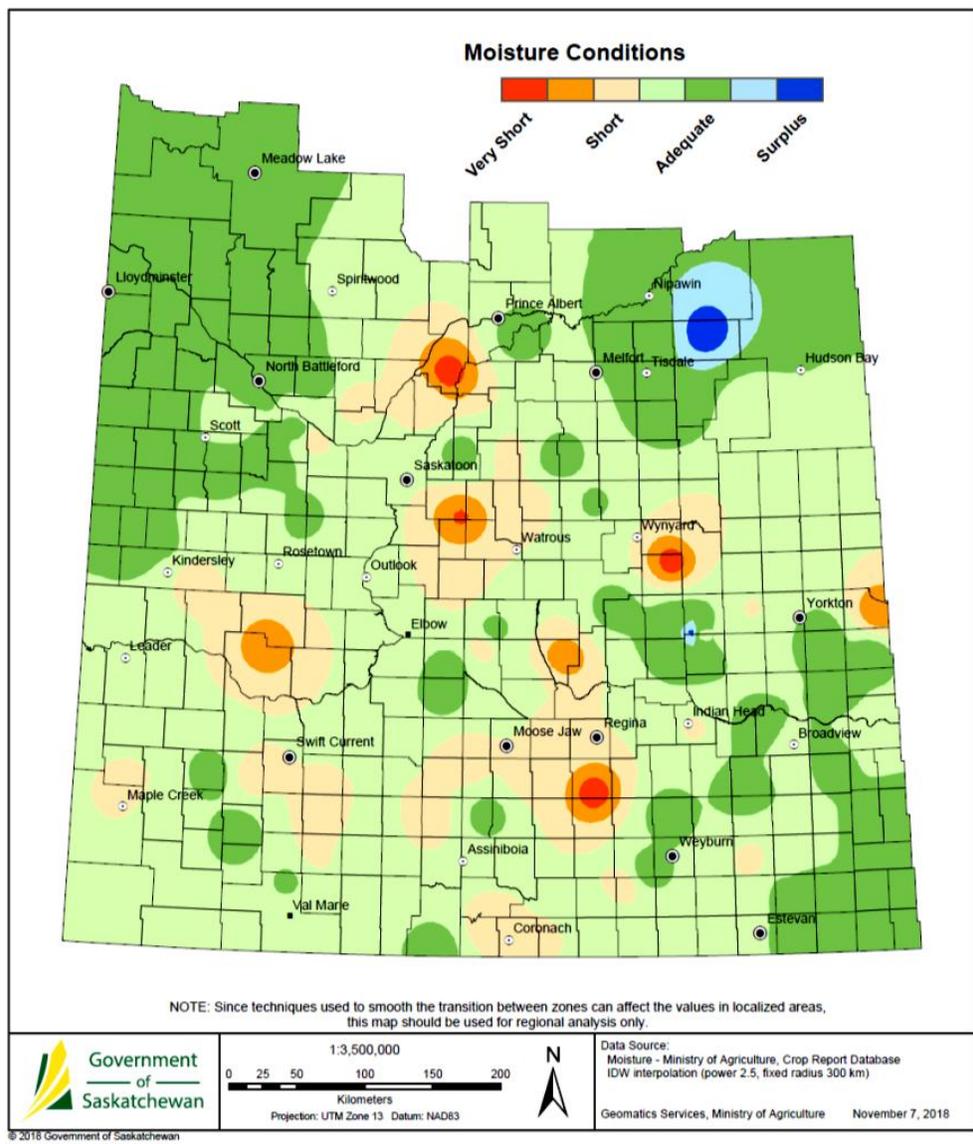
As discussed in the September Forage Market Report, if the production potential for existing perennial stands is not maximized and perennial forage acres decrease as is the trend, shortages will be ongoing. Shortages mean increased prices for forages per tonne but can also mean lower returns per acre. Age, composition, fertilization and use/management of hay stands are all things forage producers can control. In their 2007 research, Jefferson and Selles paper analyzed the annual decline in forage yields from 1973 to 2003 and found the accurate long-term yield loss was 0.5 ton/acre. While field crop yields increased, forage yields dropped. Their conclusion was "Precipitation during AMJ was positively correlated to hay yield, but the difference between maximum and minimum temperatures (⊗temperature) was negatively correlated. Fertilizer Price Index was negatively correlated to hay yield, suggesting that producers are reducing fertilizer input to this crop resulting in lower yields. Step-wise regression analysis suggested that fertilizer cost was the most important variable, which explained 38% of the variation in hay yield. When fertilizer price was combined with ⊗temperature, the Value of Land and Buildings and AMJ precipitation, 65% of the variation in Saskatchewan hay yield could be explained". This research begs the questions, If management improvements would be made, would yields be higher?, and would Saskatchewan be looking at lower forage prices or would demand just have increased to use up all production?

Although there is some uptake in forage seeding with CAP, drought hampers additional perennial seeding plans. Marginal annual cropland is being seeded to greenfeed to fill the perennial forage 'gap'

instead of being seeded to new perennial stands that may take a year to establish with little production. Although this is a short-sighted mentality, while drought conditions persist, seeding new perennial stands is too risky for some producers and annual production remains economical.

As demonstrated in Figure 3, hay and pasture topsoil conditions are still not where they should be for nearly the entire province as of the final Crop Report dated November 5, 2018. In last year's report forage users consistently commented that 2017 was doable, but a repeat in 2018 would be devastating for the forage and livestock industries. Unfortunately, there was repeat but forage users had well prepared themselves and were not surprised. It is expected users will be well prepared for drought and poor conditions in 201- adding stability to forage markets.

Figure 3. Hay and Pasture Topsoil Moisture Conditions as at Final 2018 Crop Report -November 5, 2018 (Source: Saskatchewan Ministry of Agriculture, 2018³)



7. Current Alternative Feedstuff Prices

The dry growing season mixed with hail and then a period of wet weather in harvest increased the number of 'salvaged' feedstuffs entering the market in the fall of 2018, as compared to 2017. The fall moisture was similar to what was seen in 2016. Straight grain farmers and mixed producers baled significant acres of straw in hopes to fill the feed gap and add profit to depressed grain returns. Good October weather allowed for straw to be baled for use in combination with alternatives.

Feed barley is currently (Jan 16th, 2019) priced at \$202.43/tonne, compared with the price at this time last year reported as \$173.23/tonne and \$126.49/tonne in 2017 (Saskatchewan Ministry of Agriculture, 2019², 2018²). This is considerably higher than last year and the year previous. As a main ingredient in many alternative feeds, the feed barley price contributes to the pricing of other alternatives.

In October 2017, a fire at BASF's Citral plant in Ludwigshafen, Germany, led to a global shortage of vitamins A & E. Feed/supplement prices increased in Saskatchewan. Production has resumed and supplies are no longer limited for vitamin fortified products.

Those producing alternative feeds provided valuable feedback on what indications they are receiving about the forage supply/demand through winter 2019. All have reported 15-20% new customers or customers they haven't dealt with in a number of years. Silage CP% in the east regions is lower than anticipated and has required additional alternatives to be fed. In the west TDN is lower in general than anticipated but nitrate levels are by and large within acceptable levels. Reported averages for pellets vary according to plant location but are generally higher than last year. An increased demand was cited, as were the additional cost for trucking raw product to the plants, diesel costs and operating costs such as power.

Table 8 lists average prices for a variety of alternative feed sources in Saskatchewan. Unless otherwise specified, they are reported as picked up at the plant (FOB).

Feed grain prices can impact forage and livestock prices. Feed grains of decent quality are readily available, but not in excess. The wet fall moved some grains into the feed market that was originally grown for higher grade markets. Barley is sitting in the \$202/tonne range, as compared to \$173/tonne in 2018 and \$126/tonne in 2017. Current feed wheat prices are at \$207.60/ tonne compared to \$172.23/tonne last year. Feed grains do go into the pelleting and DDGS process, which can contribute to the rise in prices of those alternatives. Forage users are adding feed grains to cow rations and silage rations that had lower crude protein. Feedlots are staying the course on feedlot rations.

Grain screenings include cracked or broken grain and pulse seeds as well as chaff, weed and other crop seeds. Many grain handling facilities contract their screenings out ahead of time to existing customers and unprocessed screenings are usually moved out quickly. Pelleters indicate that the supply of screenings is good and there is no trouble securing pulse screenings. Vomitoxins in screenings are not a concern as in previous years.

Table 8. Alternative Feedstuff Prices and Availability as at January 20, 2019

Commodity	Winter 2019 Price	Details	Availability	Winter 2018 price
Barley Pellets	\$264.50/tonne average	Barley pellets, up to 20% CP, fortified with vitamin, minerals and Rumensin	Good (1+ week wait). Low demand; companies phasing out of producing this	\$245-280/tonne
Canola Meal	\$345-375/tonne	Loose	Good	\$290/tonne
Canola Meal	Not produced locally currently	Pellets	NA	\$290/tonne
Alfalfa Pellets	\$285/tonne	16-17% CP – dehydrated	Sold out- until fall 2019	\$265-270/tonne
Alfalfa Pellets	\$265/tonne	15% CP – suncured	Sold out- until fall 2019	\$240-245/tonne
Alfalfa Cubes	\$560/tonne	Cow 7/8" cubes; produced in Legal	good	
Oat Hulls (ground)	\$30-35/tonne	Hulls ground. 31MT/ superB	Short / 1+month wait	\$20/tonne
Organic Oat Hulls (ground)	\$50/tonne	Hulls ground. 31MT/ superB	None available	\$40/tonne
Grain and Grain Screening Pellets	\$170-215/tonne \$200/tonne average	12-14% CP, bare with no add-ins	Short. 4+ week wait. Most use pulse screenings with feed grains.	\$169-195/tonne
Fortified Grain and Grain Screening Pellets	\$227-273/tonne \$244/tonne average	12-13% CP, fortified with Rumensin, vitamin/mineral (backgrounder type)	Short-Average (1-4 wks) plant dependant; wide range in pricing between plants.	\$217/tonne average
Fortified Grain and Grain Screening Pellets	\$250-316/tonne \$275/tonne average	14% CP, fortified with Rumensin, vitamin/mineral mix (range/cow type)	Short-Average (1-4 wks) plant dependant; wide range in pricing between plants.	\$224-282/tonne \$263.40/tonne average
Fortified Grain and Grain Screening Pellets	No demand- not produced except for special orders. No price currently.	<u>High Energy</u> , fortified with Rumensin, vitamin/mineral mix Suited for heifer development or other high energy uses.	Produced special order	\$229-373/tonne \$292/tonne average
Fortified Grain and Grain Screening Pellets	\$228-374/tonne \$312/tonne average	Bull Development and Show Rations, 12-20% CP, with Rumensin, vitamin & mineral	Average. 2 week wait.	\$468/tonne
Corn Dried Distillers Grains	\$260/tonne		Short. 3+ month wait	\$255/ tonne
Wheat Dried Distillers Grains	\$245-265/tonne		Short. 3+ months wait for forward pricing for delivery.	\$212-225/tonne

Grain and grain screening pellets are available to producers from numerous retailers across Saskatchewan. Pellets may be used in feedlot, backgrounding, cow-calf, range or finishing operations. Although there is variability in product consistency, amount of grain present and guaranteed percentage of crude protein (CP), standardization is being seen- likely as buyers look to compare products. Pellets may be fortified with vitamins, minerals and an ionophore additive (such as Rumensin™), which accounts for about \$20/tonne of the cost (was \$40/tonne in 2018). Despite the lower costs of 'fortifying' ingredients, pellet prices are \$15-30/tonne higher than January 2018. Current prices for a variety of different types of pellets are listed in Table 8. The higher usage by cow-calf producers in winter 2019 is noticeable. At mid-January there was anywhere from a 1 to 4 week wait from when orders are placed until shipping. Demand is sighted as reason for waits (demand exceeds production & ability to deliver/transport product). Prices have increased \$15-20/tonne over the past 3 months. Prices are expected to remain steady or continue to rise through spring as cattle producers continue to feed high straw diets.

Canola meal is the protein-dense product left remaining after canola is crushed for oil. There are several canola crushing facilities across Saskatchewan. As of January 16, 2019, the Saskatchewan Ministry of Agriculture reported canola trading for \$452.57/tonne- down from \$469.65/tonne in 2018 and \$485.72/tonne in 2017. Despite canola's decrease, the price of canola meal has increased \$40-80/tonne since January 2018. Crushers indicate there is a higher demand for meal both from livestock producers and as a product going on to further processing.

Alfalfa pellets include dehydrated alfalfa or suncured alfalfa pellets. Prices are slightly higher than 2018 at \$265-\$285/tonne currently. Long-term alfalfa supply agreements in the range of \$35/tonne in-field remain for pelleters. Diesel prices overall are a major input through the production chain. The USDA Kansas City Ag Market News (2019) is reporting a tight supply of alfalfa pellets valued at \$230-290 USD/ton (\$336-423 CDN/tonne) and suncured alfalfa pellets at \$252-262 USD/ton (\$368-384 CDN/tonne).

Distillers grain products are the by-products remaining following ethanol production. Different distillers products that can be used as livestock feed supplements include wet distillers grains, distillers syrup, and dried distillers grains (DDG). DDG is the only one readily available. Current customers use up majority of supply, although many new customers are trying to acquire product. The demand is currently high for DDGS with forward contracted prices (3 month wait) at \$245-265/tonne for wheat DDGS - approximately \$30-40/tonne higher than in 2018, just as feed wheat is \$30-40/tonne higher too.

8. Forage Price Trends in Neighbouring Jurisdictions

After all provincial data was summarized late this fall, as expected, Alberta and Manitoba both experienced below average hay yields overall in 2018. Stateside, forage production was average to above average in most Montana and North Dakota counties.

Due to the US government shut down, the projected May 1, 2019 forage stocks across the US have not yet been release and analysis not completed by The Livestock Marketing Information Center. Large cull rates and lower cow prices are all factors to be considered in the US currently.

Currently, Alberta has a plentiful number of forage listings from across the province which moves off listing quickly. Montana and North Dakota have a decent number of forage listings, while listings and trades are sparse in Manitoba. The listings in Table 9 were collected December 1, 2018 through January 19, 2019.

Table 9. Forage (Asking) Prices in Adjacent Provinces and States (Winter)

Forage Type	Alberta		Manitoba		Montana*		North Dakota*	
	Price Range	Avg Price (\$/Tonne)	Price Range	Avg Price (\$/Tonne)	Price Range	Avg Price (\$/Tonne)	Price Range	Avg Price (\$/Tonne)
Alfalfa (1 st cut)	\$94-309/T	\$220	NA	\$167	\$117-241/T	\$163	\$97-175/T	\$126
Alfalfa (2 nd cut)	\$248-309/T	\$273	\$190-287/T	\$238	\$143-256/T	\$180	\$101-183/T	\$165
Alfalfa/Grass	\$102-311/T	\$206	\$37-265/T	\$153	\$110-329/T	\$151	\$70-175/T	\$122
Grass	\$80-352/T	\$226	\$94-220/T	\$161	\$110-255/T	\$147	\$85-122/T	\$106
Cereal Straw	\$33-117/T	\$74	\$44-99/T	\$88	\$72-103/T	\$85	\$58-102/T	\$78
Pulse Straw	\$60-132/T	\$87	-	-	NA	\$129	-	-
Green-feed	\$73-220/T	\$166	NA	\$193	\$102-263/T	\$155	\$73-142/T	\$113

*American prices have been converted to week average January 14-18, 2019 current CDN currency values at \$1USD = \$1.3267CDN

Alberta

Alberta experienced widespread drought throughout the 2018 growing season. Forage production was hit the hardest and producers were not prepared. Provincially, it is estimated only 5% of livestock operators are in a surplus forage situation, with 70-80% short. Most are making up shortfalls with straw, grain and supplements. Others culled hard at 20% or more and did not retain calves or heifers. September and early October rains saw the soil moisture condition improve to near normal provincially except for pockets in the southern and Peace regions. A mild winter to date has been a mitigating factor

allowing for aftermath grazing and lowered forage consumption. In January 2018, Alberta sellers were moving forages into Saskatchewan, but at this time, although some forage continues to be moved into Saskatchewan, Alberta's local demand is strong. Saskatchewan forages may also be moving into Alberta. Perennial forages at 8-10 cents/lbs continue to trade - while 12 cents prices many out of the purchasing market except for equine. Forage production in 2019 could once again be drastically impacted by drought. However, unlike in 2018 when users were caught off guard, forage users have already began planning for spring 2019- annual seed for greenfeed and silage are being sourced and cocktail cover crops are being planned.

Alberta forage prices in 2019 far exceed winter 2018 prices in all classes. Forages listed for an average price are sold quickly and ads are removed within hours or days. List prices are highly variable. The current average asking price of mixed hay is \$226/tonne compared to the January, 2017 price of \$107/tonne. First/second cut alfalfa is significantly higher than 2017- \$220/\$273 per tonne in comparison to prices last year of \$178/\$183 per tonne. Greenfeed asking price average is \$166/tonne compared to \$97/tonne at this time last year. Greenfeed is a good measure of the change in the mainstream market- as it enters the cattle feed market and is not a forage going into a niche equine market.



Manitoba

Manitoba saw lower forage yields than normal in 2018. The severity of dry conditions varied greatly across the province and even within regions. In the western regions (closest to Saskatchewan) the forage supplies are short to adequate, and yields were below average. Straw and alternatives are being used by livestock producers to ensure forage supplies can last through spring. Late season pasture growth was non-existent even where fall moisture was received. Further east in Manitoba conditions worsen with continued drought and short forage supplies. Demand province-wide was higher for straw than normal (resulting in less fall burning of field residues). The November 2018 North America Drought Map shows that Manitoba's southern grainbelt was abnormally dry at freeze up like in November 2017. It is yet to be seen if Manitoba producers are preparing for another year of potentially low forage production in 2019. On-farm forage reserves will likely not be in excess going into summer.

The Manitoba market is fairly flat with not a significant number of public trades- likely due to a limited supply and users sourcing needed forages this fall. Prices are strong however. Currently, mixed hay is averaging \$153/tonne compared to its January 2018 price of \$93/tonne. Straw is on offer for a strong price average of \$88/tonne- over double of what it was trading for in January 2018 (\$40/tonne). This price difference really does demonstrate that straw is/will be filling a forage gap in Manitoba through spring 2019.

Montana

The reprieve from drought was welcome across Montana this summer and fall. Mild fall and winter weather to date has made for lighter feeding and feedstocks being easily stretched. Many forage offerings are available and movement is decent on reasonably priced forages (United States Department of Agriculture, January, 2019²). Forages are currently moving northward into south central/ south west Saskatchewan when reasonably priced (\$80/ton US= \$106/ton CAD) and trucking is reasonable. The asking prices of forages stateside have dropped compared to last year at this time.

North Dakota

While the majority of North Dakota experienced a break from drought and exceptional forage yields, many counties close to the US/Canada border still remain in a drought situation. Average priced forage continues to trade (via online listings) at a normal pace. The winter to date remains relatively warm and open. It is forecast to remain warmer and drier than normal in North Dakota (National Weather Service, 2018). South Dakota hay markets report that demand is steady. Straw prices are significantly higher than those noted in 2018- likely indicating that straw is being used to ensure adequate forage stocks on farm.

The CDN and USD continue to be far apart in value- as has been seen more often than not for the past number of years. For the week ending January 18, 2019 the CDN was trading at \$0.753 USD (\$1 USD= \$1.3267 CDN) compared to \$0.8012 USD the same week ending in 2018. Forage prices are significantly stronger than in 2018 and 2017. Trade may be feasible close to the border region if a good price can be found- trucking dependant. Demand from the US in winter 2019 is not a significant factor playing into Saskatchewan forage prices.

9. Forage Seed Prices

The average retail price of commonly purchased and seeded forage species in Saskatchewan is presented in Table 10. This information is meant to reflect general forage seed prices at the current time. Prices represent certified #1 seed, unless otherwise specified.

Table 10. Forage Seed Prices in Saskatchewan as at January 18, 2019

Class	Species	2019 Average Price \$/lb	2018 Average Price (\$/lb)
Grasses	Certified Smooth Brome ****	\$4.69	\$4.96
	Smooth Brome (Common)***	\$4.79	\$4.98
	Certified Meadow Brome ****	\$5.18	\$5.28
	Meadow Brome (Common)***	\$4.68	\$4.83
	Hybrid Brome***	\$5.95	\$5.96
	Russian Wildrye ****	\$8.50	\$6.79
	Tall Fescue *****	\$3.33	\$3.24
	Fairway Crested Wheatgrass***	\$6.01	\$6.03
	Kirk Crested Wheatgrass ****	\$5.42	\$4.87
	Crested Wheatgrass (Common)***	\$5.02	\$4.40
	Intermediate Wheatgrass *****	\$4.31	\$3.80
Pubescent Wheatgrass ****	\$6.35	\$7.46	
Legumes	Alfalfa - hay variety *****	\$4.75	\$4.87
	Alfalfa - creeping root *****	\$4.81	\$4.93
	Alfalfa (Common) *****	\$4.08	\$4.57
	Cicer Milk Vetch ****	\$6.06	\$6.05
	Sainfoin *****	\$3.80	\$3.91
	Alsike Clover ****	\$4.32	\$4.32
	Norgold Sweet Clover***	\$2.83	\$3.78
	Common Sweet Clover *****	\$2.51	\$2.58
	Hairy Vetch****	\$3.37	\$3.54
Native	Western Wheatgrass ****	\$13.07	\$11.82
	Northern Wheatgrass ****	\$15.90	\$15.60
	Slender Wheatgrass ****	\$4.85	\$3.79
	Green Needlegrass ****	\$20.17	\$19.89
	June Grass ****	\$36.03	\$30.30
	Canada Wildrye****	\$16.43	\$18.74
	Purple Prairie Clover (legume)***	\$61.56	\$63.84

* denotes the number of companies reporting price for that species.

Producers should contact seed companies or distributors for specific information related to product attributes and availability as well as any guarantees of quality, certification or other parameters that are specific to that company, species or variety.

Native seed prices listed are current January 2019 prices as per the major forage retailers. However, prices fluctuate regularly for these species depending on demand and availability. There are several native seed growers who harvest and market seed directly across western Canada. A listing of native seed producers may be found through the Native Plant Society of Saskatchewan at <https://www.npss.sk.ca/native-plant-sources>.

Over the past two years, forage seed prices have stayed relatively static for the majority of tame perennial species. Seed supplies are adequate throughout the prairies moving into spring 2019- hence consistent retail prices. The stand out species for 2019 is Russian wildrye, which has seen an average price increase by \$1.70/lbs. New alfalfa varieties with increased tolerances and production are continuing to enter the market. Demand for non-invasive creeping root grasses is expected to remain steady as CAP forage seeding programs still require their use. These species include hybrid brome, intermediate wheatgrass, and pubescent wheatgrass.

Retailers indicate demand for native forage seed is high. The current price is a far cry from the prices it retailed for 5-10 years ago that were comparable to certified tame grass. Unfortunately, many native grass species had lower production and a poorer harvest year this past summer. Some small price increases have been seen on many species, but are still within reason of the 2017 and 2018 prices. An emerging trend is the increased demand for native forbs and wildflowers by customers of the major seed retail companies (instead of niche demands on small growers).

Novel or 'cocktail' mixes of annuals/biennials are being seeded at a staggering rate for soil improvement and livestock feed on cropland. Demand for these forage seeds has increased significantly but seed is available from production in Eastern Canada or the United States. Caution should be taken regarding using potentially invasive plant species- something that is not often noted. Hairy vetch has begun to invade into ditches, wetland margins, and waste areas. Vetch seeds can be toxic, and the quality as a forage is less than other standard legumes.

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