The Saskatchewan Hay Report

Volume 3, Number 3 Saskatchewan Forage Council Fall 2002

Provincial Hay Yields

(For the week ending August 26, 2002)
Saskatchewan Agriculture, Food and Rural Revitalization - Crop Report No. 21

Yields of first and second cut brome/alfalfa on dryland averaged 0.9 tons per acre, below the 10-year (1992-2001) average of 1.1 tons per acre. Yields were variable across the province with average to above-average yields reported in the southern crop districts; yields of about 70 percent of average reported in the central districts; and yields about one-half of average reported in northern districts.

Table 1 illustrates the expected hay yields in tons/acre from August 26, 2002 by crop region. An average yield of 1.3 tons/acre was reported for first and second cut alfalfa and brome/alfalfa hay in southern crop districts. This ranged from lows of 0.3 tons/acre in several areas in CD 4b to as high as 2.5 tons/acre in areas of CD 3AS and 3BS. Southeastern and southwestern areas averaged 1.3 tons/acre with south central areas expected to harvest 1.2 tons/acre. There was hay spoilage from the rains of early August and September. An average yield of 0.8 tons/acre was reported for first and second cut alfalfa and brome/alfalfa hay in central areas. This ranges from an average low of 0.4 tons/acre in west-central areas to an average high of 1.0 ton /acre in east-central areas. Mid-central areas expect to harvest about 0.7 tons/acre. In northern crop districts the range was from an average low of 0.4 tons/acre in the northwest (CD 9b) to 0.8 tons/acre in the northeast (CD 8a). Clover, other tame hay, wild hay and greenfeed tonnage was lower throughout most central and northern areas of the province. Many producers have baled greenfeed salvaged from annual crops that have been damaged by drought, insects, frost or late rains, second-cut hay and straw. This has allowed many producers to rebuild forage stocks for the winter. In northern and central areas, cattle have been turned out into un-harvested swathed or standing crops. Water shortages and soil moisture levels are still at lower than normal levels, particularly in the west-central and northwest districts. Rains and damp weather in September and October may lead to improved soil moisture levels in many pastures and hayfields throughout the winter.

Table 1: Expected Dryland Hay Yields in tons/acre from August, 2002 *

Location	Alfalfa	Brome/ Alfalfa	Clover	Other Tame	Wild	Greenfeed
Southern SK	1.3 (0.9)	1.3 (0.9)	1.4 (1.2)	1.1 (0.7)	0.9 (0.7)	1.8 (1.3)
Central SK	0.8 (0.9)	0.8 (0.9)	1.0 (1.1)	0.7 (0.8)	0.6 (0.9)	1.2 (1.2)
Northern SK	0.6 (0.9)	0.6 (0.9)	0.7 (1.1)	0.5 (0.7)	0.5 (0.7)	0.7 (1.1)
Prov Average	1.0 (0.9)	0.9 (0.9)	1.1 (1.1)	0.8 (0.7)	0.7 (0.8)	1.3 (1.2)

* 2001 hay yields are in parentheses

Sask. Forage Council, 72 Campus Drive, Saskatoon, Saskatchewan S7N 5B5

Phone: 306-966-2148 Fax: 306-966-2614 Email: Jbruynooghe@agr.gov.sk.ca

Fall Cutting of Alfalfa

Al Foster and Leroy Bader, SAFRR, Tisdale, SK.

Late summer alfalfa hay crops looked better than they did all year as a result of late summer rains. The good growth and a need for feed had people looking at a fall cut but wondering what the long-term effect on the crop would be.

Alfalfa is a perennial plant that stores carbohydrates or food reserves in the crown and roots. These reserves are utilized for over-wintering purposes and to initiate new growth in the spring or after each cutting. Carbohydrate reserves follow a cyclic pattern of storage and depletion. The appropriate harvest strategy utilizes this pattern to provide acceptable forage yield and quality while maintaining reserve levels that are conducive to stand productivity and longevity.

Does cutting affect winter Hardiness?

When an alfalfa plant is cut, the initial re-growth that follows is produced from root reserves. As new leaves are developed, they begin to manufacture their own energy (carbohydrates) for growth. When the stand is about 8-10" tall, it has manufactured enough energy to have once again replenished the root reserves. In the fall this normally takes 4-6 weeks, and must be completed prior to the first killing frost (- 5 degrees Celsius). This period is often referred to as the 'Critical Fall Harvest Period' (CFHP). The final cut should be timed either early enough to allow reserves to build up prior to the first killing frost or late enough that lower fall temperatures prevent additional growth from occurring.

Can I cut my alfalfa stand in the fall?

Present recommendations are to not cut alfalfa stands during the critical fall harvest period. However, you may want to harvest second cut alfalfa in September to maximize production and ensure a window of good harvest weather. Since cutting is just one of the factors that may contribute to winterkill, cutting at this time is a risk that you may be willing to take. Taking a second cut during the CFHP may be a strategy in years, such as this, when feed is in short supply and feed prices are high. Not cutting in the CFHP is advised where stands are seeded on problem soils that may be difficult to work down and re-seed. You need to weigh the risk of the possible loss of a stand or the reduction in stand life against the value of the forage being harvested.

Will nitrates be a problem?

Generally, alfalfa does not accumulate nitrate so the risk of nitrate poisoning of cattle from grazing or feeding fall cut alfalfa is low. If for any reason you suspect nitrates may be a concern, have a representative sample feed tested.

Summary

The decision to cut alfalfa in the fall often becomes a question of economics. Factors such as the value of hay, the age of the stand, the cost to re-establish a stand in the case of winterkill and the potential second cut yield all need to be considered. If the decision is made to cut in the fall then there are some things that can be done to reduce the risk of winterkill or injury. Leave a 4-inch stubble to speed regrowth and catch snow. Another common practice is to leave uncut strips every 30 to 60 feet as a snow trap.

Impact of Drought on Saskatchewan's Cow Herd

Dr. Bart Lardner, Western Beef Development Centre, Saskatoon

Drought conditions have forced many producers to source alternative feeds for their cowherd. In many cases feed prices skyrocketed to the extent that producers were forced to liquidate a portion or all of their entire breeding herd. The question remains however, as to where these cows are being sold and are they simply changing postal codes.

One industry concern has been the effect on cow numbers. Present figures have been circulating that 20 to 30% of the cowherd will be sold or moved. Industry experts have suggested around 10% have gone to slaughter but where are the rest going? With Saskatchewan having a cowherd of 1.1 million that would mean a loss of 200,000 to 330,000 cows. So far only around 8 to 10% of that figure have gone to market. Therefore the rest have been relocated to areas were there is good summer pasture and may possibly stay there throughout the winter.

Most of the lower quality cattle, either older cows or low end breeding stock have gone into the slaughter market. However, producers who received significant rainfall this summer, either in Saskatchewan or Manitoba have bought the really good commercial breeding females. Numerous arrangements were made between those individuals with feed and those producers with cows. There have been a wide variety of open-ended contracts made between producers in drought areas and producers with pasture. Tremendous variability of contracts ranging from simple handshakes to monthly grazing, pasture plus over-wintering, over-wintering and calving out or buy back arrangements. Movement of these cattle prompted by the drought has helped some producers build their herds in certain regions of the province. Areas such as the southeast have seen cattle numbers increase this past summer.

The sell off of cattle during the drought will delay the potential expansion of Saskatchewan's beef industry. Several numbers have been suggested and debated in regards to how big the industry will grow however, in 5 to 10 years, the final provincial cow herd number will be one which is sustainable for the existing producers and new entrants. Many advantages for growth exist in Saskatchewan such as available cheaper land and more acres seeded down to forages. However, only beef industry participants can dictate on how fast or at what rate expansion will occur.

Ducks Unlimited Canada's 2002 Drought Response Program

Brent Kennedy and Keith LePoudre DUC, Regina and Saskatoon

The Drought Response Program (DRP) was developed by Ducks Unlimited Canada (DUC) in response to extremely low precipitation in many parts of the Prairie Provinces. DUC's primary goal in owning and managing land is to provide optimum nesting habitat for waterfowl and other wildlife. The potential severity of the drought motivated DUC to sacrifice some of this value to help our neighbours and partners on the landscape. DUC believes that as a corporate citizen we had a duty to contribute our limited resources.

To help producers develop their management plans in response to the drought, DUC chose to announce our intent as early as possible. Our initial announcement occurred in early April with most land tendered by mid May. DUC

committed to make 40% of the land we own and/or manage available for haying or grazing in areas of extreme drought. PFRA *Drought Watch* maps were utilized to establish areas of extreme or record drought. All projects outside the extreme and record drought areas were evaluated for their waterfowl productive capability. If waterfowl productive capability of these projects was compromised by the drought, they were also made available to local producers.

DUC enlisted the assistance of many producer groups to review our approach to offering our lands. We have also utilized these same groups to help determine where the funds generated by DRP are reinvested. All revenue generated, minus direct program costs such as advertising, will be invested into projects that benefit the livestock industry and environment. DUC is seeking input from agriculture stakeholder groups in determining the projects that are of greatest interest provincially.

In Saskatchewan, approximately 60,000 acres of DUC upland acres were grazed or hayed under the DRP program. This represents not only 40% of DUC lands in extreme or record dry areas but 40% of all DUC owned and leased upland acres in Saskatchewan. The tendering process utilized by DUC staff gave preference to local producers, which will hopefully reduce the impacts of drought to producers in areas particularly important to waterfowl. The public response to DRP was overwhelming, with DUC offices throughout the province fielding over 1800 calls during April and May.

DUC believes that the use of our lands during the drought of 2002 demonstrated how a forage reserve could be managed as an asset to Saskatchewan producers. Lands that are not used annually for agriculture provide ecological goods and services to all citizens of Saskatchewan while simultaneously providing a forage reserve in times of need.

DUC Drought Response Program - Bid Prices Received for Hay and Grazing - Quality Considerations

Phil Curry, Melfort, SK.

Tables 1 and 2 outline the range of bids received for hay and grazing on DUC lands in Saskatchewan.

Early bids tended to be lower due to slow growth in the spring, making it difficult for producers to estimate yield or quality. Yields were in the 0.5 ton/acre range for poor fields to 1.0-1.25 tons/acre for better fields cut later in the season. The $103/acre bid received at Melfort was for a pure alfalfa field yielding approximately 1.75 tons/acre. This hay therefore would be priced at approximately $60/ton standing or $90/ton cut and baled ($0.045/lb). This is lower than the July-August average market price for hay of $120-$130/ton ($0.06 - $0.065/lb). Bids received in the North Battleford area averaged slightly higher than the rest of the province ($60/ton standing; $90/ton cut and baled) but were substantially lower than the market price of $160 - $200/ton ($0.08 - $0.10/lb)

The prices received for hay under the drought response program did increase throughout the growing season but were substantially lower than the spot market price for hay.

Most grazing tenders were awarded by mid May to allow producers time to rotate cattle through the several paddocks and to ensure that each field was evenly grazed. This also allowed for rest and re-growth on paddocks

grazed early. Virtually all the land was offered to local livestock producers or previous landowners. Bids received for grazing were slightly lower to average than the market rate for private pasture. As expected the demand and prices were highest in the northern parkland areas where pasture availability was limited.

The relative feed value (RFV) of the hay from three fields in the northeast varied due to several factors including the proportion of alfalfa in the mix and time of cutting (Table 3). RFV ranged from 60 - 66 for hay cut in the first week of July to 59- 71 for hay cut in the third week of July. This slight improvement in RFV was due to improved growth of alfalfa after rains in mid-July.

Table 1 - Summary of hay bids received by area for three tender dates (Prices are on a per acre basis for standing crop; prices per ton are in parentheses).

Tender Closing Date	Mid June		Mid July		End July	
Area	**Range**	**Average**	**Range**	**Average**	**Range**	**Average**
North West (N.B. - Shell Lk.)				$48 ($60)		
Allan Hills (Saskatoon)	$6 - $50	$32 ($26)				
North Central (Melfort - P.A.)	$4 - $40 *	$15 ($19) *	$10 - $41	$20 ($25)	$10-$103	$36 ($45)
Central (Wadena-Wynyard)	$0.46-$33	$13 ($16)				
E.Central -greenfeed (Yorkton)	$1.18-$23	$8.55 **			$6 - $12	$10
E.Central - hay			$0.31-$46	$21 ($21)		
South Central (Lk. Alma-Chaplin)	$15 - $30	$20 ($20)				

* 1st tender for north central closed May 31/02
** 1st tender for greenfeed in east central closed May 10/02
- average yields are 0.75 tons/acre; for south and east central 1.00 ton/ac

Table 2 - Summary of grazing bids received by area for two tender dates (prices are on a cow/calf pair per day basis; prices per acre in parentheses)

Tender Closing Date	Mid May		Mid July	
Area	**Range**	**Average**	**Range**	**Average**
North West (N.B. - Shell Lk.)		$0.50		
Allan Hills (Saskatoon)	$0.10-$1.00	$0.20 ($3.35/ac)		
North Central (Melfort - P.A.)	$0.25-$1.63 ($2.40-$9.10/ac)	$0.88 ($6.03/ac)	($2.90-$7.13/ac)	($4.57/ac)
Central (Wadena-Wynyard)	$0.20 - $0.80	$0.45		
East Central (Yorkton)	($1.39-$12.50/ac)	($3.82/ac)	($0.45-$8.46/ac)	($3.38/ac)
South Central (Lk. Alma- Chaplin)	($8 - $10)	$0.35 ($8.50/ac)		

Table 3 - Quality of hay from three fields in northeast SK cut on July 2 and July 23, 2002 (all results are on a 100% Dry Mater Basis)

Field	Protein %	NDF %	ADF %	Nitrate %	RFV	TDN %	DE Mcal/kg	NEl Mcal/kg	NEm Mcal/kg	NEg Mcal/kg
Kehrig July 2	5.4	72.9	53.6	0.04	60	41.35	1.81	0.89	0.64	0.11
Kehrig July 23	5.0	74.3	53.7	0.05	59	41.24	1.68	0.89	0.64	0.11
Miller July 2	7.7	71.7	51.0	0.05	64	44.18	1.94	0.96	0.75	0.22
Miller July 23	6.8	68.5	48.4	0.05	70	46.88	2.03	1.03	0.83	0.29
Sjolin July 2	8.3	68.3	52.1	0.08	66	42.96	1.85	0.93	0.68	0.15
Sjolin July 23	7.4	67.2	48.5	0.07	71	46.78	2.03	1.03	0.83	0.29

NDF=Neutral Detergent Fibre; ADF=Acid Detergent Fibre; RFV=Relative Feed Value; TDN=Total Digestible Nutrients; DE=Digestible Energy; NEl=Net Energy for Lactation; NEm=Net Energy for Maintenance; NEg=Net Energy for Gain

October 2002 Hay Prices

Phil Curry, Saskatchewan Forage Council, Melfort

Hay prices escalated throughout the early summer to unprecedented highs throughout Saskatchewan and Alberta, but appeared to peak by the second week of August.

Reduced yields throughout central and northern areas of Saskatchewan and Alberta put upward pressure on hay prices this season. This has not been offset by higher than average yields in southern Saskatchewan with the result that the overall provincial hay yields are slightly lower than the long-term average. Much of the shortfall in hay throughout Alberta and Saskatchewan will be made up through an increased supply of greenfeed and annual crops salvaged for forage. High nitrate levels were reported in some cereals, particularly when there were high levels of green material that had been frozen.

There has been increased movement of hay and greenfeed from northeast and east central areas of Saskatchewan to central Alberta. The price for good quality hay has remained steady and at relatively high prices since August. Some producers are still asking $0.05 - $0.06/lb ($100 - $120/ton) but many livestock producers are opting for lower cost greenfeed, straw and grain supplements. This will tend to put downward pressure on hay over the winter months.

The current average price for greenfeed in the northeast is $0.03/lb ($60/ton). This is down from the September price of $0.04/lb ($80/ton). Straw is currently selling for $0.025-$0.03/lb ($50 - $60/ton). Long-haul trucking costs are $4.00 per loaded mile with slightly lower costs for hauls that are less than 100 miles. Short-haul charges are usually calculated on a price per bale plus loading and can vary from $3.50 - $9.50/bale (average $5.50-$7.00/bale) plus a charge for loading.

In many northern and central areas substantial acres of cereal, oilseed and even peas remain unharvested. Estimates are as high as 30% in some areas. Grazing may be the only option to salvage any value from some of these fields, many of which have been written off by Crop Insurance. Prices for swath grazing range from $0.56 - $1.16/animal/day depending on whether the Crop Insurance settlement is included.

Prices for hay at the Oct. 30, 2002 hay auction at *Vold, Jones & Vold Auction Co. Ltd.* (Ponoka, AB) are as follows:

- Grass/alfalfa or alfalfa hay (good quality)
  - rounds (1200 lbs) - $79 - $132/bale
  - med. to large squares - $57/bale
  - small squares (50 - 60 lbs) - $6.25-$7.75/bale

November prices for hay F.O.B. plant from Tisdale Alfalfa Dehydrating Ltd.

- Alfalfa (good quality)
  - $0.04 - $0.05/lb depending on quality

Montana Hay Report

(Friday, Nov. 1, 2002)
USDA Market News Service, Billings, MT.

Sales for hay are slow to moderate. There is still demand for hay but actual sales are hard to find in many areas as many producers are simply waiting until the last minute to buy hay. An early winter storm struck Montana in late October with cold temperatures and snowfall in many areas. All sales FOB the stack and per ton basis in large rounds or large square bales unless otherwise stated.

Alfalfa: Premium 100 - 130 (U.S.$)
Good quality 85, delivered at 100. Good alfalfa delivered to western Montana from Idaho 80; fair to good 65-70. Small squares for horses 100-130.

Grass: Good, small bales horse quality, 90-100, delivered 130-135; Large squares 60. CRP hay 50.

Timothy: Premium 130 for horse quality small bales.

Alfalfa Relative Feed Value (RFV):
Supreme over 180; premium 150-180; good 125-150; fair 100-125; low < 100.
Grass Hay Crude Protein Scale: Premium Over 13; good 9-13; fair 5-9; low < 5.

We would like to acknowledge and thank the following contributors to this issue of the Saskatchewan Hay Report: Terry Karwandy, Al Foster, Leroy Bader, Brian Harris - SAFRR; Bart Lardner - WBDC; Brent Kennedy, Keith Lepoudre - DUC; Nicole Holinaty - Tisdale Alfalfa Dehydrating Ltd.; Vold, Jones & Vold Auction Co. Ltd.; Dwayne Mooney - Ag Com Transport Ltd.; U.S.D.A. Market News Service

The Saskatchewan Hay Report *is published monthly from July-October by the Saskatchewan Forage Council. Comments and suggestions are appreciated. If you wish to be placed on an electronic mailing list or have articles and suggestions for upcoming issues, please send them to the editor:*

Philip Curry
Saskatchewan Forage Council
Phone: (306) 752-2791
P.O. Box 2139
Fax: (306) 752-9799
Melfort, Saskatchewan, S0E 1A0
E-mail: p_curry@ducks.ca