

The Saskatchewan Hay Report

Volume 4, Number 3

Saskatchewan Forage Council

October 2003

Saskatchewan Hay Summary 2003

*Michel Tremblay, Forage Specialist,
SAFRR, Regina*

Moisture conditions in spring of 2003 were adequate in most areas. However subsoil moisture in many areas was not fully recharged. Spring rains were variable, with hot, dry weather settling in by mid-June in most regions, reducing yield potentials. Hay yields in southern Saskatchewan were above average, while yields in central and northern Saskatchewan were below average, however, they exceeded the dismal yields observed in 2002.

Quality of the 2003 hay crop was generally good, with little damage from rain. However, hot, dry weather caused dry matter losses to the standing crop as well as during field operations. Increasing grasshopper pressure also caused reduced hay quality due to leaf- loss by feeding.

Approximately 14,000 acres of timothy are grown for export markets in Saskatchewan. Irrigated hay yielded three tones per acre in the first cut, and approximately 2 tonnes in the second cut. Hot dry weather made for ideal harvest conditions, allowing growers to obtain premium quality on 50-60% of the

Alberta Forage Situation – 2003

*Arvid Aasen, Alberta Agriculture,
Food and Rural Development*

The 2003 growing season started with good moisture due to the late spring snows. The cool spring delayed legume growth but had no effect on the grass production. Hay fields

first-cut production. Dryland production is located predominantly in the northeast part of the province. There are approximately 7000 acres of timothy grown in northeast Saskatchewan.

Production in 2003 was poor, with average production of 1000 lbs/ac. Many fields were grazed. New seedings exhibited poor establishment due to drought and grasshopper damage.

Markets in 2003 were less dynamic than in 2002. Less hay moved shorter distances as the wide-scale drought occurring in 2002 eased. Generally, good quality hay traded hands for \$65-\$85 per ton. The BSE crisis introduced new uncertainty into the marketplace in 2003. Lower volumes of hay traded in late summer, even as many pastures were emptied early due to continued hot, dry weather.

Looking ahead to 2004, many hay fields seeded in 2003 will have to be evaluated for establishment. Many fields exhibited weak establishment due to the heat and grasshoppers. Many areas again find themselves in the situation of little reserve moisture, making next year's hay crop nearly entirely reliant on rain and snow from October to next cutting date.

and pastures which had been abused the previous year from the drought, were able to bounce back. In some areas of the province the initial growth was exceptional. The dry



conditions through the summer months reduced the re-growth and second cuts were generally poor. In many parts of the province grasshoppers continued to be a problem.

Domestic Hay

Yields of domestic hay were average for most of the areas of the province with a high initial cut and a low 2nd cut. On the eastern side of the province yields were normal (1 ¼ - 1 ½ tons/acre). There were pockets of dry areas in the region where yields were reduced to half of normal. The south had dryland yields of 2 tons/acre with little or no re-growth. Irrigation yields were excellent (4 – 5 tons/acre). In central Alberta the initial yields were average to above average (2 – 2 ½ tons/acre) with little re-growth of the grasses and a low re-growth of the alfalfa. The northern region had average yields around Edmonton (1 ½ - 2 ½ tons/acre), the eastern Peace River area had average to above average yields with the western Peace region being half of normal.

Alberta is expected to have sufficient hay for this winter, although the retention of cull cows due to BSE may utilize more hay than

normal. The uncertainty in the cattle industry has also affected sales.

Forage quality in most of the province is good to excellent. Very little has been rain damaged due to the dry harvest months.

Export Hay

Yields of timothy were up considerably from last year. The wet cool spring and the carryover nitrogen in the soil from last year created normal to above normal yields of first cut timothy. In most areas of the province there was no or very little timothy re-growth. The quality is excellent due to the dry harvest conditions. The processors in Alberta all have large inventories of high quality timothy and the market which began at \$180 – 200/tonne soon dropped to \$150 – 160/tonne. This is due to an increase in product as well as the narrowing of the companies' margins as the Canadian dollar increases in value.

Pastures

Spring pastures started strong with the spring moisture and growing conditions, but as the soil moisture throughout much of the province became depleted, pasture growth and re-growth stopped or was very low.

Saskatchewan Hay Markets (October 24, 2003)

Phil Curry, Saskatchewan Forage Council

Domestic market outlook – In spite of average hay yields and absence of surplus hay in 2003, hay prices are at average levels, and well below last year's record high levels. Less hay has traded this year compared to 2002, and prices have remained steady at 3.0¢/lb. in most regions. Some hay buyers are offering 3.5¢/lb. for hard-core grass/alfalfa bales (1600-1700 lbs.) and up

to 4.0¢/lb. for good/premium timothy in large round or small square bale formats. These prices are at average levels, and well below last year's record high levels. This is also somewhat unusual as the hot, dry summer has led to cattle coming off pasture earlier and more cattle than normal are being put on feed. More producers are also retaining calves, yearlings and cows due to the depressed cattle market. In spite of this, there are a number of factors that are limiting hay prices from rising much higher.

1) The open fall and timely grain harvest has allowed more producers to graze stubble or set up swath grazing fields and there are more grain, straw and other feedstuffs available on farm this year. A warm, dry winter will further lessen the demand for hay for producers who are back-grounding calves or roughing cows through the winter. Producers will try to ration their hay as much as possible and may not have to feed more hay or a higher quality hay ration until calving time.

2) There is competition from other feedstuffs including feed grains, and screenings. For example, feed barley prices are only \$2.00/bushel (\$3.50/bu in 2002) and high quality grain screenings are usually priced at 80% of the price of barley. This will limit the ceiling price for hay.

3) Demand for hay from prairie feedlots is low because they are only operating at one quarter to one-third capacity due to the closed U.S. border. Demand from Alberta is also reduced due to better pasture and hay production in central areas.

4) Some producers still have a surplus of green-feed or crop residue that was from 2002. While the quality of some of this feed is suspect, many producers will try to blend this feed off in mixed rations with other feedstuffs.

5) Many cow/calf producers and feedlots have tight cash-flows this year.

6) Downsizing in the PMU horse market will take 15,000-18,000 horses (estimated) out of the market. This will significantly reduce demand for hay and pasture forages in southeastern Saskatchewan and southwest Manitoba.

U.S. and Asian market outlook – The U.S. market for hay and processed alfalfa is starting to heat up a bit as producers bring cattle and horses home. Southern Manitoba has been exporting increased quantities of alfalfa and timothy products into these

regions, but Canadian supplies are starting to face increased competition from western U.S. processors who are looking to tap into these eastern U.S. markets. This is further aggravated by our rising Canadian dollar and an abundance of high-quality hay in North America in general. Demand for good-premium quality timothy and/or alfalfa in small compressed and double-compressed bales and cubes remains moderate/high but buyers are holding back, looking for the best quality.

The Asian markets are showing some signs of life as many producers are getting through old crop carry-over. The dairy industry in Korea is not in good shape due to over-production. Many producers are out of quota for hay. This protects their local production of hay and leads to tighter controls on milk production. As with exports to the U.S., the high Canadian dollar makes our hay products more expensive in Asia and U.S. hay less expensive. In addition, there has been an increase in rates and shipping costs for bulk and container shipments overseas.

Prices for hay at the Oct. 22, 2003 hay auction at *Vold, Jones & Vold Auction Co. Ltd.* (Ponoka, AB) are as follows:

- Grass/alfalfa or alfalfa hay (good quality)
- rounds (1200 lbs) – \$22-\$57
- small squares (50 - 60 lbs) - \$2.35 – \$5.50/bale (grass/alfalfa or alfalfa)
- small squares (green-feed) \$2.00
- small squares (straw) \$2.00-\$3.00
- rounds (straw) \$8 - \$24/bale
- med/large square (straw) \$16/bale

Prices for the Oct. 16, 2003 hay auction at *Saskatoon Auction Mart Ltd.* are as follows:

- rounds - None offered
- small squares - \$3.00- \$4.00/bale (Alf. or Alf/grass)

October prices for hay F.O.B. plant from *Elcan Forage Inc.* (Broderick, SK):

- Alfalfa (premium quality)
- rounds or small squares - \$70/Tonne
- Timothy (Premium) - \$175-\$180/tonne
- Timothy (Good #1) - \$145-\$150/tonne.

Aug.-Oct. 2003 prices for hay F.O.B. plant from *Tisdale Alfalfa Dehydrators* (Tisdale, SK)

- Alfalfa (premium) - \$70-\$75/Tonne

Processed (pellets) feed prices for Oct. 17, 2003 from *FCL Feeds* (Melfort, SK):

- Pea/lentil/screenings blend - \$102 /Tonne
- Higher barley blend - \$144/Tonne

American Hay Prices

Montana (Oct. 17, 2003)

Demand for hay is moderate as most cow/calf producers bring more horses and cattle home (Prices are in US \$/ton).

Alfalfa – Large Round – Premium - \$75

Alfalfa – Large Round – Good \$60-\$65

Alfalfa/Grass – Large Round – Good - \$62.50-\$65

Alfalfa/Grass – Sm. Square – Good - \$70

Timothy – Sm. Square – Premium - \$120

Grass – Small Square – Premium - \$120

Grass – Large Round – Premium - \$75

Grass – Large Round – Good - \$55-\$65

Ducks Unlimited Canada 2003 Hay Tender Prices

Ducks Unlimited Canada

DUC offers local hay and livestock producers the opportunity to bid on the standing hay on a number of their conservation land parcels each year. Table 1 shows the hay tender prices received by DUC in 2003 by region. Prices received on the DUC July hay tenders were average to below-average in most areas with prices ranging from \$2.60 - \$8.00/ac for poor quality native grass or “go-back” hay yielding < 0.5 ton/ac. Prices for good quality alfalfa or grass/alfalfa hay ranged from \$30 - \$62/ac for standing hay yielding 1.0 – 1.5 tons/ac. with the exception of the Yorkton area where medium-good hay went for an average of \$15/ac.

Table 1 – DUC 2003 Hay Tender Prices by Region

Region	Quality	Average/Acre	Range
Yorkton	Poor	\$6	\$4.00 - \$8.00
	Med-Good	\$15	\$11.00 - \$21.40
Wadena	Poor	\$12	\$2.60 - \$17.00
	Good	\$27	\$20.00 - \$37.10
Melfort	Poor-Med	\$13	\$6.00 - \$22.50
	Good	\$34	\$27.00 - \$40.00
North Battleford	Med-Good	\$35	\$20.00 - \$62.00
Saskatoon	Poor	\$7	\$5.00 - \$8.25
	Med	\$17	\$15.00 - \$21.00
Regina	Med	\$20	These were set prices that were offered to producers
	Good	\$30	

Fertilizing Forages in October

Wally Vanin, SAFRR, North Battleford

Late October is one of the best times to apply fertilizer on forages. In late October, soil and air temperatures are low and surface applied fertilizer, especially nitrogen fertilizer, remains stable with little or no volatile or leaching losses. The fertilizer remains on the soil surface and is moved into the soil with the snow melt and early spring rains.

In order to maximize the yield response from fertilizer, the nutrients must be available to the forage crop when it begins growth in the spring. Most forages produce seventy five percent of their yield by the end of June. Soil moisture is most favourable in June and therefore, a late fall application of fertilizer will insure that the fertilizer is in place for the forage crop.

Soil testing is certainly a recommended practice to determine the fertilizer nutrients required by your forage crop. Generally, alfalfa responds best to phosphate fertilizer, while grasses respond best to nitrogen fertilizer. The largest portion of any yield increase and thus the greatest return per dollar invested comes from these major nutrients. Potash and sulphur are also often required by forages and should be considered on grey-wooded soils, which are more likely to be deficient.

Greencover Canada – Technical Assistance Component Meeting – Saskatoon, September 30, 2003

Phil Curry, Sask. Forage Council, Melfort

The Greencover Canada program, announced earlier this year by Agriculture and Agri-Food Canada, offers both technical and financial assistance for the promotion of

When applying fertilizer in late October, urea can be utilized safely as the nitrogen source. It is a relatively cheap source of nitrogen that can be applied as a broadcast application after October 20. A small amount of snow should not deter the application of fertilizer. For alfalfa, phosphate fertilizer can be applied any time after the middle of September, as phosphate is a stable nutrient. Phosphate fertilizer will move into the soil with rains and snow melt.

Fertilizing forage crops has additional benefits as well. The life of the forage stand will be prolonged as fertilized forage can compete against weeds better and is more winter hardy. Older grass stands can be rejuvenated with fertilizer. In order to maximize yield, the grass must be allowed to develop a leaf area before it is grazed. A pasture that is kept grazed short will not use the applied nitrogen. Grass should be allowed to grow to a height of six to eight inches before grazing commences.

A forage crop should be evaluated before fertilizer is applied to determine its potential for yield increase. If a forage crop is weedy and thin, fertilizer could favour the weeds more than forage. If there is a good population of desirable forage plants, then fertilizer should be considered. The economics are favourable when moderate rates of the right nutrients are applied.

beneficial management practices targeted toward environmentally sensitive lands. The program consists of four components – Land Conversion, Critical Areas, Technical Assistance, and Shelterbelts – designed to promote sustainable land use and to expand the land base covered by perennial forage and trees.

The Technical Assistance Component will provide funding to extension agencies to promote improvements in forage, native rangeland, and riparian management. An 8-member committee, co-chaired by AAFC-PFRA and SAFRR will oversee funding of technical assistance projects over the next 5 years.

As part of the consultation process for the Technical Assistance Program in Saskatchewan, livestock producers and a

diverse group of extensionists from provincial, federal and NGO agencies met in Saskatoon on Sept 30th. The purpose of the meeting was to determine gaps and priorities in extension related to forage, range, and riparian management.

For further information about the Greencover program in Saskatchewan, call Terry Kowalchuk, AAFC-PFRA at (306) 691-3376

Steer Performance Grazing Hybrid Bromegrass

Dr. Bart Lardner, Western Beef Development Centre, Saskatoon

Pasture forages are an important part of beef production systems in western Canada and producers require species adapted to their region, which are high yielding and provide good nutritional quality. Beef producers need information on how new species perform under grazed conditions in order to decide whether to include the forage in their management plan. In western Canada, smooth bromegrass and crested wheatgrass have been widely utilized as pasture forages for grazing animals. Due to their wide adaptation to climate and soils, these two species have been recommended both for use in pasture and hay crops in Saskatchewan. However, a hybrid bromegrass called "AC Knowles" may be one of the new forage types that can meet both these demands. This grass is a cross between meadow bromegrass (recommended for grazing) and smooth bromegrass (hay type species).

Recent research trials carried out in 2001-02 at the Termuende Research Farm near Lanigan, SK, indicated that steers grazing hybrid bromegrass gained 2.3 lb per day

over 75 grazing days compared to 2.1 lbs/day grazing meadow bromegrass and 1.8 pounds per day grazing smooth bromegrass. During the summer of 2003, pasture production was affected due to limited rainfall after June 15th which resulted in shortened grazing periods. However, over 35 days steers gained 1.93 lbs day grazing both the hybrid or meadow bromegrass paddocks and 1.79 lbs on the smooth bromegrass. In addition the hybrid bromegrass provided 161 grazing days, compared with 136 for meadow and 127 for smooth bromegrass.

To date, after three years of data collection on steer weight gains the results show the hybrid pastures are outperforming or equivalent to meadow bromegrass pastures. The hybrid is suggested to meet the needs of both hay and pasture, producing hay yields about equal to smooth bromegrass but better than meadow bromegrass, and a pasture yield better than smooth bromegrass and comparable to meadow bromegrass. In relation to maturity, drought tolerance and quality, it falls between both the parent species. Field observations have shown the hybrid to tolerate dry conditions more favorably than meadow bromegrass and

with good moisture be ready for grazing sooner than smooth brome grass.

This grazing study indicates the potential of hybrid brome grass as a pasture species for use by commercial beef producers. The animal performance data showed comparable average daily gains and animal

grazing days to existing pasture species already in use in Saskatchewan. This would indicate that hybrid brome grass could fit well into a livestock grazing system.

Barley After Hay: Grass Matters!

P.G. Jefferson, R. Lemke, R.P. Zentner and F. Selles, AAFC Semiarid Prairie Agricultural Research Centre, Swift Current, SK

Choice of grass for short-rotation hay crop matters when following the hay crop with barley. In 2002, we terminated a short-rotation (3 year) forage crop experiment and seeded Harrington barley. When the previous grass was intermediate wheatgrass, the barley yielded only 17 bu/ac compared to 26 bu/ac following Dahurian wildrye or 28 bu/ac following slender wheatgrass. There was a similar effect on barley straw yield. The latter two grasses were lower yielding in last year of haying and their stands were obviously thinning while the intermediate wheatgrass was the highest hay producer and the stand was still persisting. So less persistent grasses would be better as a short-lived hay crop in rotation with annual crops than a persistent grass species. The barley grain protein was not affected by the previous grass species but intermediate wheatgrass slightly reduced the barley test weight compared to Dahurian wildrye or slender wheatgrass.

A second component of the forage experiment compared alfalfa in mixture with the grasses to grasses alone. When alfalfa was grown in the previous hay crop, the barley yield was 30 bu/ac compared to 19 bu/ac after grass alone. There was similar alfalfa effect on straw yield. There was no alfalfa effect on the barley protein but total N uptake after grass-alfalfa was equivalent to 33 lb N/ac compared to 21 lb N/ac after grass alone. The previous grass-alfalfa contributed 12 lb N/ac more to the barley crop than grass alone. Barley after grass-alfalfa also had slightly higher test weight (about 3 lb/bu more) compared to barley after grass alone.

The research was repeated in 2003 and the results are not yet completed. Preliminary information suggests that the results will be similar to 2002. We plan to repeat the research again in 2004. These preliminary results suggest that short-lived Dahurian wildrye and slender wheatgrass mixed with alfalfa may fit as a short-rotation hay in annual crop rotations better than longer-lived species such as intermediate wheatgrass.

Saskatchewan Forage Exports to August 2003

Art Laforge, AAFC-Market Information Services Branch, Regina

The value and quantity of alfalfa products (sun-cured and cubes) exported to August 2003 has increased from the poor production levels of 2002. Export of alfalfa bales has been dramatically reduced from 2002 levels and even more from 2001, when 13,712 tonnes of alfalfa valued at

\$2,382,474. Most of this latter production has traditionally goes into U.S. markets. It should also be noted that a significant quantity of Saskatchewan timothy hay gets marketed through Manitoba and Alberta processors and thus shows up in export figures from those provinces.

Product	2002 Value (Cdn\$)	2003 Value (Aug)	2002 Quantity(TNE)	2003 Quantity (Aug)
Alfalfa meal&pellets suncured	958,629	1,265,128	4,387	6,250
Alfalfa meal&pellets	1,009,108	710,409	3,566	2,970
Alfalfa cubes (dehy)	4,608,314	4,775,753	17,205	17,916
Alfalfa (loose/bales)	956,301	459,489	1,252	628
Hay (Timothy)	2,999,505	1,377,279	8,210	3,973

The editors would like to thank the following people who contributed to this issue: Michel Tremblay, Wally Vanin – SAFRR; Arvid Aasen – AAFRD; Chris Nykoluk – P.F.R.A.; Paul Jefferson – AAFC/SPARC; Bart Lardner – Western Beef Development Centre; Greg Sommerfeld – Elcan Forage Inc.; Duane Mooney - Ag Com Transport Ltd.; Saskatoon Auction Mart Ltd.; Leah Filson, Dave O'Bertos, Richard McBride, Michael Champion, Dwayne Donald, Jason Neufeld, Kevin Hardy – Ducks Unlimited Canada; Peter Fofonoff – Tisdale Alfalfa Dehydrators; Ralph Bowditch, AgWest Commodities Inc.; U.S.D.A. Market News Service

The Saskatchewan Hay Report is published by the Saskatchewan Forage Council and is available online at www.saskforage.ca. 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 editors:

*Philip Curry
Saskatchewan Forage Council
P.O. Box 1115
Melfort, Saskatchewan
S0E 1A0
Phone: (306) 752-2533
Fax: (306) 752-9799
E-mail: pcurry@health.gov.sk.ca*

*Janice Bruynooghe
Saskatchewan Forage Council
129 - 72 Campus Drive
Saskatoon, Saskatchewan
S7N 5B5
Phone: (306) 966-2148
Fax: (306) 966-2614
E-mail: jbruynooghe@saskforage.ca*

Funding for the 2003 Saskatchewan Hay Reports has been generously provided by Ducks Unlimited Canada.

