Alberta Crop Report

Alberta 2018 Greenfeed and Silage Production Survey Results

Purpose of Survey

Official greenfeed and silage production statistics for Alberta are not available from Statistics Canada or any other source, despite the fact that producers in the province harvest significant acreages of annual crops for greenfeed and silage every year. To fill this data gap and meet client needs, the Statistics and Data Development Section of Alberta Agriculture and Forestry (AF) initiated a greenfeed and silage production survey in 2002. Since then, the survey has been conducted annually to develop selected statistics for the forage industry.

As in previous years, the 2018 survey was done in partnership with Agriculture Financial Services Corporation (AFSC). The survey collected data on greenfeed and silage acreage, yields and production at the municipal level. The information was then used, along with input from AF specialists to develop provincial estimates. It should also be noted that the yield and production estimates shown in this report are on a wet weight basis.

Alberta 2018 Greenfeed and Silage Production

Hay and pasture growth was slow in May, due to delays in thawing of the frost layer. As of May 1, only 46 per cent of hay and pasture were rated in good or excellent condition. The delays also forced some cattle producers to feed their livestock, drawing down further on tight supplies that were negatively impacted by the colder than normal winter temperatures. For the most part, with some warmer than normal temperatures in May, hay and pasture started to green up. As of May 29, pasture conditions were rated as nine per cent poor, 30 per cent fair, 57 per cent good and four per cent excellent, with similar ratings reported for tame hay. Showers in the first half of June improved pasture and hay growing conditions in all regions, with the exception of the Southern, which received very little rain. By the end of June, pasture and tame hay growth was variable across the regions. This was due to highly varying soil moisture reserves across the province, from dry conditions in a large part of the Southern and Central Regions, to areas with sufficient soil moisture in the North West and Peace Regions.

By the first week of July, pasture and tame hay growing conditions started to deteriorate. Provincially, as of July 17, pasture conditions were rated as 15 per cent poor, 31 per cent fair, 47 per cent good and seven per cent excellent, with similar ratings for tame hay conditions. Towards the end of July, hay supplies and pasture were a concern for livestock producers. This led to the pasturing of some of the poorer crops, as well as several crops cut for feed. By August 7, first cut dryland hay across the province was 94 per cent complete. Average yield (5-year averages shown in brackets) was 1.0 (1.5) ton per acre and quality was rated at 59 (68)

per cent good or excellent. Unlike dryland, haying operations for irrigated hay were complete, with the average yield at 2.2 (2.4) tons per acre and quality rated at 79 (78) per cent good or excellent.

Over the month of August, pasture and tame hay growing conditions across the province continued to deteriorate, with 36 per cent rated poor, 35 per cent fair, 27 per cent good and only two per cent excellent, as of August 28. In fact, the hot, dry weather limited the second cut of hay. As of September 4, the average yield for second cut hay was 0.9 (1.1) ton per acre for dryland, with quality rated at 67 (72) per cent good to excellent. For irrigated hay, average yield was reported at 1.6 (1.7) tons per acre, and quality rated at 74 (77) per cent good to excellent. A third cut was not taken off.

Based on the Statistics Canada report “Production of Principal Field Crops, December, 2018”, Alberta’s forage production was down 12 per cent from 2017 to 7.7 million tonnes, also 8.1 per cent below the 10-year average. This was attributed to the lower production of tame hay, despite fodder corn production increasing. Tame hay production fell to six million tonnes, down 15.9 per cent from 2017 and 15.3 per cent below the 10-year average. Driving the decline was a 13.7 per cent drop in yield to 1.6 tons per acre and harvested area falling 2.3 per cent to four million acres. For fodder corn, production increased 6.1 per cent to 1.7 million tonnes and was 33.4 per cent above the 10-year average. Despite yield falling by 5.5 per cent to 18.1 tons per acre, the gain was attributed to a 12.1 per cent increase in harvested area to 100,900 acres.

In 2018, Alberta producers seeded an estimated 13.2 million acres of spring wheat, durum wheat, barley, oats, mixed grains, triticale and dry peas (see Table 1). About 94.9 per cent of this area was harvested as grains and oilseeds (down 1.2 per cent from 2017 and up 0.5 per cent from the 5-year average), 4.5 per cent as greenfeed and silage (up 25.8 per cent from 2017 and down 3.5 per cent from the 5-year average), 0.3 per cent was grazed (compared to 0.2 per cent in 2017 and the 5-year average of 0.4 per cent) and 0.3 per cent was abandoned (compared to 0.1 per cent in 2017 and the 5-year average of 0.5 per cent).

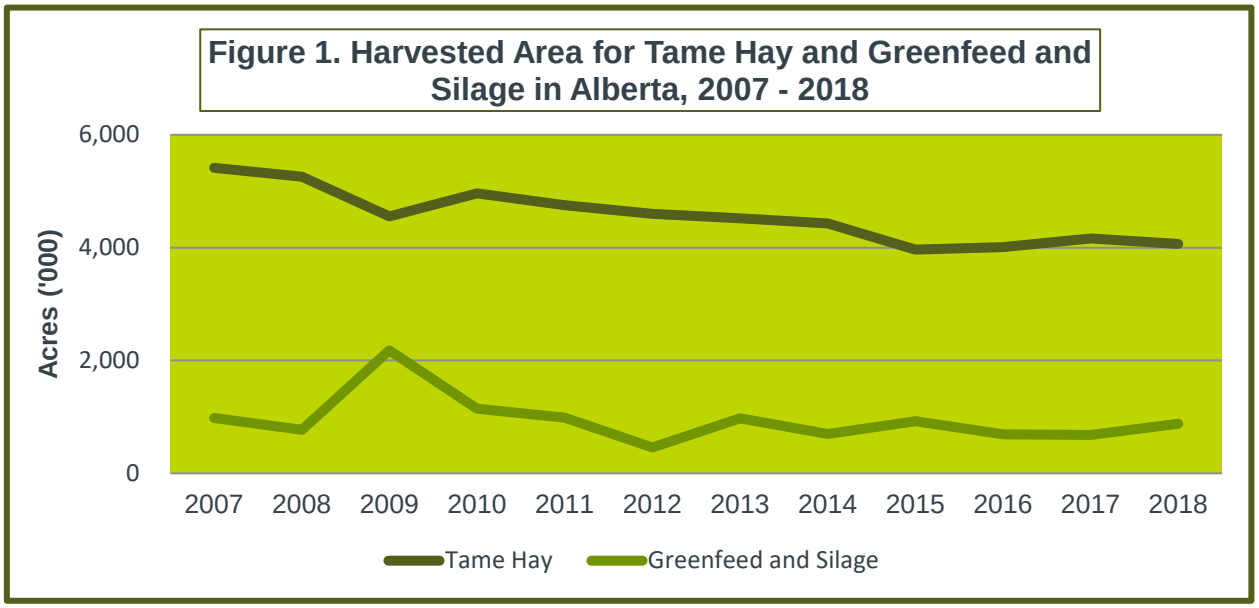
Total harvested area for greenfeed and silage increased 29 per cent to 876,658 acres from 2017. Greenfeed harvested area jumped by 71 per cent to 469,522 acres, while silage acreage rose marginally by one per cent to 407,136 acres (See Figure 1). Compared to 2017, producers harvested much more greenfeed mainly because of a shortage of hay across the province and a cold and, wet harvest season in 2018.

The provincial average yield for greenfeed was down 10.8 per cent at an estimated 2.5 tonnes per acre. For greenfeed barley, the yield was estimated at 2.62 tonnes per acre, up 5.3 per cent from 2017. At the same time, spring wheat averaged 1.94 tonnes per acre, down 28.4 per cent. For greenfeed oats, yield declined 13.3 per cent to 2.76 tonnes per acre. The estimated provincial average yield for silage dropped 6.3 per cent to 5.79 tonnes per acre. For spring wheat silage, yield declined 36.9 per cent to 3.63 tonnes per acre, while barley silage yield was up 11.8 per cent to 6.93 tonnes per acre. Oats silage decreased 15.8 per cent to 5.43 tonnes per acre and mixed grain was down 32.3 per cent to 5.17 tonnes per acre. More than doubling was triticale silage at 7.6 tonnes per acre.

In 2018, total production for greenfeed rose 52.5 per cent. This was attributed to a 71 per cent increase in total harvested area, despite yield declining 10.8 per cent. Production for greenfeed barley was 448,232 tonnes, more than doubled tonnes in 2017. For spring wheat, production was estimated at 201,903 tonnes (up 225.7 per cent), while for oats it was at 307,428 tonnes (down three per cent).

Total silage production was estimated at 2.4 million tonnes, or 5.5 per cent lower than in 2017. The lower production stemmed from a 6.3 per cent decline in the average provincial yield for silage, which more than

offset the 0.8 per cent gain in harvested area. Barley silage production was estimated at 1.5 million tonnes (down 5.4 per cent) and oats at 236,376 tonnes (down 45.5 per cent).



Source: Statistics Canada and Alberta Agriculture and Forestry

Similar to previous years, the predominant crops harvested for greenfeed and silage in 2018 were barley and oats. However, the area harvested for spring wheat greenfeed and silage jumped dramatically by 355.1 and 145.4 per cent, respectively. Other crops harvested for greenfeed and silage included durum wheat, mixed grains and triticale. Barley accounted for just over one-third of the provincial harvested area for greenfeed at 36.4 per cent, while oats represented 23.7 per cent and spring wheat at 22.1 per cent. Mixed grains and triticale accounted for 12.8 and 3.4 per cent, respectively. Comprising the remaining 1.6 per cent were durum wheat and dry peas. In terms of harvested silage area, 53.6 per cent of the provincial total was barley, 21.5 per cent spring wheat, 12.6 per cent mixed grain, 10.7 per cent oats and 1.5 per cent triticale.

Estimates of greenfeed and silage production for previous years in Alberta, (back to 2009), are also shown in Table 1.

Contact

For additional information relating to this report, please do not hesitate to contact the author.

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Table 1: Alberta Greenfeed and Silage Production, 2009-2018

		Total Seeded Area	Harvested Greenfeed Area	Harvested Silage Area	Average Greenfeed Yield	Average Silage Yield	Total Greenfeed Production	Total Silage Production
		('000 acres)			(tonnes/acre)		('000 tonnes)	
2018	Spring Wheat	6,265	104.0	87.7	1.94	3.63	201.9	318.3
	Durum Wheat	1,185	7.0	0.0	1.36	0.00	9.5	0.0
	Barley	3,114	171.0	218.3	2.62	6.93	448.2	1,513.0
	Oats	795	111.5	43.6	2.76	5.43	307.4	236.4
	Mixed Grains	179	60.0	51.4	2.75	5.17	164.8	265.8
	Triticale	37	15.8	6.1	2.73	4.19	43.2	25.8
	Dry Peas	1,511	0.3	0.0	1.81	0.00	0.5	0.0
	Total	**13,086**	**469.5**	**407.1**	**2.50**	**5.79**	**1,175.7**	**2,359.3**
2017	Spring Wheat	5,860	22.9	35.7	2.71	5.75	62.0	205.6
	Durum Wheat	1,090	10.9	5.8	1.04	0.00	11.4	0.0
	Barley	2,850	86.4	258.2	2.49	6.20	214.7	1,599.9
	Oats	690	99.6	67.3	3.18	6.44	317.0	433.8
	Mixed Grains	135	45.6	31.0	3.30	7.64	150.5	236.6
	Triticale	35	9.3	5.7	1.61	3.50	15.0	20.0
	Dry Peas	1,800	0.0	0.0	0.00	0.00	0.0	0.0
	Total	**12,460**	**274.6**	**403.8**	**2.81**	**6.18**	**770.6**	**2,495.8**
2016	Spring Wheat	5,335	36.8	26.7	2.53	6.11	93.2	162.9
	Durum Wheat	1,170	2.8	0.0	2.25	0.00	5.7	0.0
	Barley	3,200	110.7	271.4	3.08	6.34	340.5	1,720.8
	Oats	720	102.4	57.0	4.34	7.02	444.0	399.9
	Mixed Grains	105	30.4	42.5	4.84	7.68	147.1	326.8
	Triticale	30	4.9	8.4	3.92	6.50	19.3	54.9
	Dry Peas	1,845	0.0	0.0	0.00	0.00	0.0	0.0
	Total	**12,405**	**288.0**	**406.0**	**3.64**	**6.57**	**1,049.8**	**2,665.2**
2015	Spring Wheat	5,860	136.0	52.7	1.82	3.83	247.9	201.9
	Durum Wheat	820	5.0	2.0	0.80	2.60	3.6	0.0
	Barley	3,350	164.5	325.0	2.16	4.28	355.1	1,391.4
	Oats	670	113.6	56.7	2.63	5.20	298.8	294.6
	Mixed Grains	80	16.2	35.9	2.40	5.32	39.0	190.9
	Triticale	35	5.2	10.0	1.20	3.10	6.3	31.1
	Dry Peas	1,445	2.7	1.4	0.77	1.85	2.1	2.7
	Total	**12,260**	**443.2**	**483.7**	**2.15**	**4.37**	**952.9**	**2,112.7**
2014	Spring Wheat	6,045	58.6	17.5	1.95	6.14	114.4	107.7
	Durum Wheat	550	0.0	0.0	0.00	0.00	0.0	0.0
	Barley	3,200	117.8	292.8	2.85	6.69	335.4	1,957.7
	Oats	670	95.1	51.1	2.57	6.70	244.1	342.3
	Mixed Grains	100	20.2	32.3	2.40	6.79	48.5	219.6
	Triticale	30	10.3	2.0	2.20	7.32	22.5	14.4
	Dry Peas	1,300	0.3	0.0	1.63	0.00	0.4	0.0
	Total	**11,895**	**302.2**	**395.7**	**2.53**	**6.68**	**765.4**	**2,641.6**

* Other crops include canola and dry peas - Not available Totals may not add up due to rounding

Note: Yields and production are reported on a wet weight basis.

Source: Statistics Canada and Alberta Agriculture and Forestry

Table 1 (Cont'd): Alberta Greenfeed and Silage Production, 2009-2018

		Total Seeded Area	Harvested Greenfeed Area	Harvested Silage Area	Average Greenfeed Yield	Average Silage Yield	Total Greenfeed Production	Total Silage Production
2013	**Spring Wheat**	6,415	7.1	7.1	2.16	6.28	15.2	44.3
	Durum Wheat	600	0.0	0.0	0.00	0.00	0.0	0.0
	Barley	3,650	104.8	249.7	4.33	7.38	453.3	1,841.4
	Oats	580	95.3	28.6	4.53	7.23	431.4	206.7
	Mixed Grains	900	194.7	280.2	4.88	7.27	950.1	2,035.9
	Triticale	25	5.3	4.6	3.18	10.67	16.9	48.6
	Dry Peas	1,000	0.0	0.0	0.00	0.00	0.0	0.0
	Total	**13,170**	**407.1**	**570.0**	**4.59**	**7.33**	**1,866.9**	**4,176.9**
2012	**Spring Wheat**	5,800	5.8	2.9	0.91	1.36	5.3	3.9
	Durum Wheat	580	0.0	0.0	0.00	0.00	0.0	0.0
	Barley	3,770	65.2	182.5	2.47	5.91	160.9	1,079.3
	Oats	640	100.7	44.5	2.74	5.99	275.8	266.3
	Mixed Grains	80	28.4	20.7	2.30	6.51	65.4	134.7
	Triticale	25	4.4	1.8	2.39	7.88	10.5	14.6
	Dry Peas	1,075	1.4	0.0	1.58	0.00	2.2	0.0
	Total	**11,970**	**205.9**	**252.4**	**2.53**	**5.94**	**520.1**	**1,498.8**
2011	**Spring Wheat**	5,972	2.0	0.0	2.09	0.00	4.2	0.0
	Durum	536	0.0	0.0	-	-	0.0	0.0
	Barley	3,610	150.0	390.0	3.13	6.40	469.5	2,497.9
	Oats	892	210.0	115.0	3.15	7.28	661.1	837.7
	Mixed Grains	202	45.0	55.0	3.38	7.91	152.3	435.1
	Triticale	41	5.0	15.0	2.91	5.78	14.5	86.8
	Other Crops*	6,778	0.0	0.0	-	-	0.0	0.0
	Total	**18,031**	**412.0**	**575.0**	**3.16**	**6.71**	**1,301.5**	**3,857.5**
2010	**Spring Wheat**	6,020	50.0	5.0	2.51	6.27	125.6	31.4
	Durum	360	0.0	0.0	-	-	0.0	0.0
	Barley	3,730	195.0	380.0	3.04	6.74	592.6	2,561.4
	Oats	940	245.0	120.0	2.99	6.94	733.5	832.8
	Mixed Grains	180	80.0	55.0	3.38	7.91	270.7	435.1
	Triticale	40	5.0	10.0	2.96	7.56	14.8	75.6
	Other Crops*	6,485	0.0	0.0	-	-	0.0	0.0
	Total	**17,755**	**575.0**	**570.0**	**3.02**	**6.91**	**1,737.3**	**3,936.3**
2009	**Spring Wheat**	5,875	205.0	75.0	1.05	3.06	216.0	229.0
	Durum	930	20.0	-	0.91	-	18.0	-
	Barley	3,960	370.0	455.0	2.28	4.38	843.0	1,994.0
	Oats	845	350.0	130.0	1.96	3.76	686.0	488.0
	Mixed Grains	200	100.0	50.0	1.93	4.55	193.0	227.0
	Triticale	45	15.0	10.0	1.69	4.54	25.0	45.0
	Other Crops*	5,800	175.0	225.0	0.97	2.12	169.0	476.0
	Total	**17,655**	**1,235.0**	**945.0**	**1.74**	**3.66**	**2,150.0**	**3,459.0**

* Other crops include canola and dry peas - Not available Totals may not add up due to rounding

Note: Yields and production are reported on a wet weight basis.

Source: Statistics Canada and Alberta Agriculture and Forestry