
Alberta Crop Report



Alberta 2017 Greenfeed and Silage Production Survey Results

Purpose of Survey

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 2017 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. Just to note, the yield and production estimates in this report are on a wet weight basis.

Alberta 2017 Greenfeed and Silage Production

The 2017 season started with 72 per cent of hay and pasture rated as good or excellent, with very good moisture. However, growth was slow, due to cool temperatures. The good to excellent situation remained dominant until mid-July, when dry conditions blanketed southern parts of the province. After this, pasture conditions deteriorated for the rest of the season. As of August 22, pasture conditions were reported as 29 per cent poor, 23 per cent fair, 31 per cent good and 17 per cent excellent. Dry conditions in the southern parts of the province coupled with wet conditions in the northern parts affected pasture growing conditions in a way such that by the end of October, provincially, only 28 per cent of pasture was rated as good to excellent, 28 per cent poor and 44 per cent fair. Some precipitation in early fall improved pasture growing conditions in the Southern Region to 32 per cent good or excellent. For the other regions, the comparable rating was 10 per cent in the Central Region, 20 per cent in the North East Region, 15 per cent in the North West Region and 78 per cent in the Peace Region.

After several years, dry conditions in the southern parts of the province were favourable for haying operation. First cut dryland hay (5-year averages shown in brackets) was 97 (89) per cent complete by August 8, with an average yield of 1.6 (1.5) tons per acre and quality rated at 82 (67) per cent good or excellent. Irrigated haying operations were 99 (99) per cent complete, with average yield at 2.8 (2.3) tons per acre and quality rated at 92 (71) per cent good or excellent. As of September 19, the average yield for second cut hay was 1.1 tons per acre for dryland, and 1.8 tons per acre for irrigated. Some producers

even had a third cut of irrigated hay, with the average yield at 1.3 ton per acre. The quality for second cut hay was reported as 64 and 93 per cent good to excellent for dryland and irrigated hay, respectively. The quality of third cut hay was rated as 100 per cent good to excellent.

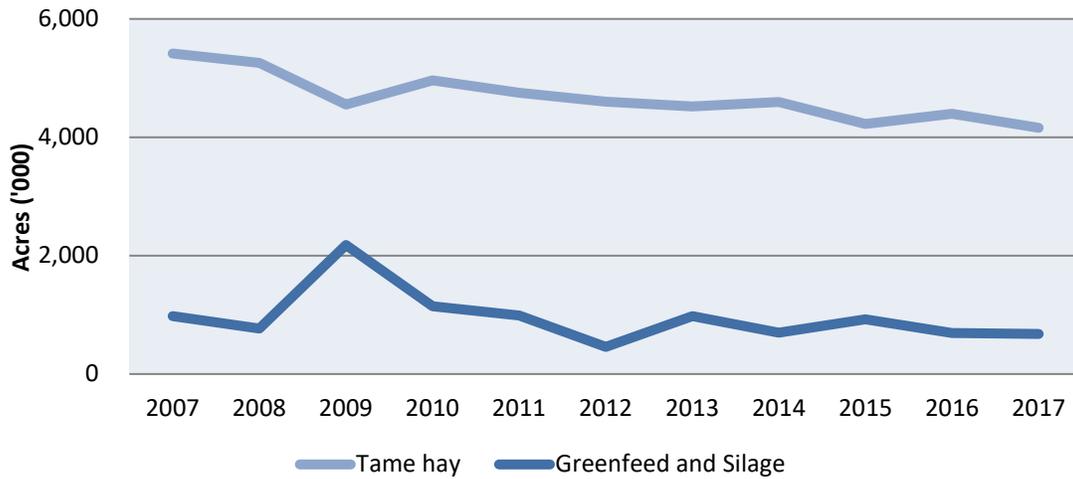
Based on the Statistics Canada report “Production of Principal Field Crops, December, 2017”, forage production (fodder corn and tame hay) for Alberta in 2017 decreased 6.6 per cent from a year earlier, to 8.7 million tonnes. This was attributed to a lower production of tame hay, despite fodder corn production increasing. Fodder corn production increased 1.5 per cent to 1.6 million tonnes, driven by a 5.9 per cent increase in harvested area, which more than offset a four per cent decline in yield. For tame hay, production was down 8.2 per cent to 7.2 million tonnes, due to a lower harvested area and yield. The average yield for tame hay slipped 5.0 per cent to 1.9 tonnes per acre, while harvested area fell 5.2 per cent, to 4.2 million acres.

In 2017, Alberta producers seeded an estimated 12.5 million acres of spring wheat, durum wheat, barley, oats, mixed grains, triticale and dry peas (see Table 1). About 96.1 per cent of this area was harvested as grains and oilseeds (up 2.8 per cent from 2016 and 1.5 per cent from the 5-year average), 3.5 per cent as greenfeed and silage (down 6.8 per cent from 2016 and 19.7 per cent from the 5-year average), 0.2 per cent was grazed (compared to 0.2 per cent in 2016 and the 5-year average of 0.4 per cent) and 0.1 per cent was abandoned (compared to 2.5 per cent in 2016 and the 5-year average of 0.5 per cent).

Total harvested area for greenfeed and silage slightly declined in 2017 to 678,313 acres, down 2.3 per cent from 2016 (See Figure 1). Greenfeed harvested area dropped 4.7 per cent to 274,562 acres, while silage acreage decreased by 0.5 per cent to 403,751 acres. Compared to 2016, producers harvested less greenfeed and silage mainly because of the long, cold and wet harvest season in 2016 which forced producers to graze their swaths. Just to caution, data for 2017 survey was collected in Mid-October, when farmers still did not have a very good idea about the harvest season, and as such, these could be a revision in the acreages.

The provincial average yield for greenfeed (selected crops) was 23.0 per cent lower than in 2016 and estimated at 2.81 tonnes per acre. Greenfeed barley was estimated to average 2.49 tonnes per acre, down 19.0 per cent from 2016, while spring wheat averaged 2.71 tonnes per acre, up 7.1 per cent. Average yield for greenfeed oats declined 26.7 per cent to 3.18 tonnes per acre. The estimated provincial average yield for silage (selected crops) decreased 5.8 per cent to 6.18 tonnes per acre. Silage yield for all crops decreased; the yield for spring wheat silage dropped 5.8 per cent to 5.75 tonnes per acre, barley silage yield was down 2.2 per cent to 6.20 tonnes per acre, oats decreased 8.3 per cent to 6.44 tonnes per acre, mixed grain down 0.6 per cent to 7.64 tonnes per acre and triticale decreased 46.2 per cent to 3.50 tonnes per acre.

Figure 1. Total Harvested Tame Hay and Sum of Greenfeed and Silage Area (2007 - 2017)



Source: Alberta Agriculture and Forestry

Total production for greenfeed decreased 26.6 per cent in 2017, due to a 23.0 per cent decrease in greenfeed yields as well as a 4.7 per cent decrease in the total harvested area for greenfeed. The production for greenfeed barley was 214,654 tonnes (down 37.0 per cent from 2016), while for oats, it was estimated at 317,046 tonnes (down 28.6 per cent). Total silage production was estimated at 2.5 million tonnes, down 6.4 per cent from 2016. This drop was the result of a 5.8 per cent decrease in the average provincial yield for silage and a 0.5 per cent decline in harvested area. Barley silage production was estimated at 1.6 million tonnes (down 7.0 per cent from 2016) and oats at 433,768 tonnes (up 8.5 per cent).

The major crops harvested for greenfeed and silage in 2017 were barley and oats, although many acres of spring wheat, durum wheat, mixed grains and triticale were also included. Barley accounted for 31.5 per cent of the provincial total harvested greenfeed area, while oats represented 36.3 per cent. Spring wheat accounted for 8.3 per cent, mixed grains accounted for 16.6 per cent, and durum wheat accounted for 4.0 per cent. The remaining 3.4 per cent of total harvested greenfeed area was from triticale. In terms of harvested silage area, 64.0 per cent of the provincial total was barley, 16.7 per cent oats, 8.9 per cent spring wheat, 1.4 per cent durum wheat, 7.7 per cent mixed grains and 1.4 per cent triticale.

Estimates of greenfeed and silage production in Alberta for previous years, dating back to 2008, are also shown in Table 1.

For further information on the survey results, please contact:

Ashan Shooshtarian, Crop Statistician
 Alberta Agriculture and Forestry

Economics and Competitiveness Branch
Statistics and Data Development Section
Telephone: 780-422-2887
Fax: 780-427-5220
Email: ashan.shooshtarian@gov.ab.ca

Table 1: Alberta Greenfeed and Silage Production

	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)	
2017 Spring Wheat	5,860	23	36	2.71	5.75	62	206
Durum Wheat	1,090	11	6	1.04	0.00	11	0
Barley	2,850	86	258	2.49	6.20	215	1,600
Oats	690	100	67	3.18	6.44	317	434
Mixed Grains	135	46	31	3.30	7.64	151	237
Triticale	35	9	6	1.61	3.50	15	20
Dry Peas	1,800	0	0	0.00	0.00	0	0
Total	12,460	275	404	2.81	6.18	771	2,496
2016 Spring Wheat	5,335	37	27	2.53	6.11	93	163
Durum Wheat	1,170	3	0	2.25	0.00	6	0
Barley	3,200	111	271	3.08	6.34	341	1,721
Oats	720	102	57	4.34	7.02	444	400
Mixed Grains	105	30	43	4.84	7.68	147	327
Triticale	30	5	8	3.92	6.50	19	55
Dry Peas	1,845	0	0	0.00	0.00	0	0
Total	12,405	288	406	3.64	6.57	1,050	2,665
2015 Spring Wheat	5,860	136	53	1.82	3.83	248	202
Durum Wheat	820	5	2	0.80	2.60	4	0
Barley	3,350	164	325	2.16	4.28	355	1,391
Oats	670	114	57	2.63	5.20	299	295
Mixed Grains	80	16	36	2.40	5.32	39	191
Triticale	35	5	10	1.20	3.10	6	31
Dry Peas	1,445	3	1	0.77	1.85	2	3
Total	12,260	443	484	2.15	4.37	953	2,113
2014 Spring Wheat	6,045	59	18	1.95	6.14	114	108
Durum Wheat	550	0	0	0.00	0.00	0	0
Barley	3,200	118	293	2.85	6.69	335	1,958
Oats	670	95	51	2.57	6.70	244	342
Mixed Grains	100	20	32	2.40	6.79	49	220
Triticale	30	10	2	2.20	7.32	23	14
Dry Peas	1,300	0	0	1.63	0.00	0	0
Total	11,895	302	396	2.53	6.68	765	2,642
2013 Spring Wheat	6,415	7	7	2.16	6.28	15	44
Durum Wheat	600	0	0	0.00	0.00	0	0
Barley	3,650	105	250	4.33	7.38	453	1,841
Oats	580	95	29	4.53	7.23	431	207
Mixed Grains	900	195	280	4.88	7.27	950	2,036
Triticale	25	5	5	3.18	10.67	17	49
Dry Peas	1,000	0	0	0.00	0.00	0	0
Total	13,170	407	570	4.59	7.33	1,867	4,177

- Not available r - Revised 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

	Total Seeded Area	Harvested Greenfeed Area	Harvested Silage Area	Average Greenfeed Yield	Average Silage Yield	Total Greenfeed Production	Total Silage Production
2012 Spring Wheat	5,800	6	3	0.91	1.36	5	4
Durum Wheat	580	0	0	0.00	0.00	0	0
Barley	3,770	65	182	2.47	5.91	161	1,079
Oats	640	101	44	2.74	5.99	276	266
Mixed Grains	80	28	21	2.30	6.51	65	135
Triticale	25	4	2	2.39	7.88	11	15
Dry Peas	1,075	1	0	1.58	0.00	2	0
Total	11,970	206	252	2.53	5.94	520	1,499
2011 Spring Wheat	5,972	2	0	2.09	0.00	4	0
Durum	536	0	0	-	-	0	0
Barley	3,610	150	390	3.13	6.40	469	2,498
Oats	892	210	115	3.15	7.28	661	838
Mixed Grains	202	45	55	3.38	7.91	152	435
Triticale	41	5	15	2.91	5.78	15	87
Other Crops*	6,778	0	0	-	-	0	0
Total	18,031	412	575	3.16	6.71	1,302	3,857
2010 Spring Wheat	6,020	50	5	2.51	6.27	126	31
Durum	360	0	0	-	-	0	0
Barley	3,730	195	380	3.04	6.74	593	2,561
Oats	940	245	120	2.99	6.94	733	833
Mixed Grains	180	80	55	3.38	7.91	271	435
Triticale	40	5	10	2.96	7.56	15	76
Other Crops*	6,485	0	0	-	-	0	0
Total	17,755	575	570	3.02	6.91	1,737	3,936
2009 Spring Wheat	5,875	205	75	1.05	3.06	216	229
Durum	930	20	-	0.91	-	18	-
Barley	3,960	370	455	2.28	4.38	843	1,994
Oats	845	350	130	1.96	3.76	686	488
Mixed Grains	200	100	50	1.93	4.55	193	227
Triticale	45	15	10	1.69	4.54	25	45
Other Crops*	5,800	175	225	0.97	2.12	169	476
Total	17,655	1,235	945	1.74	3.66	2,150	3,459
2008 Spring Wheat	5,700	-	8	-	4.31	-	34
Durum	930	-	-	-	-	-	-
Barley	4,150	115	255	2.77	6.11	318	1,557
Oats	850	170	120	2.49	5.53	424	664
Mixed Grains	130	42	40	2.63	6.49	110	259
Triticale	35	8	10	2.80	6.67	22	67
Other Crops*	5,910	-	2	-	-	-	-
Total	17,705	335	435	2.61	5.93	874	2,581

* Other crops include canola and dry peas - Not available r - Revised 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