

## USA Grass and Legume Seed Data: Oregon Production - 2010 to 2019

### Background

The USA grass and legume seed industry continues to flourish in the Pacific North-West region of the United States, with Oregon, not only leading the USA in grass and legume seed production, but is a leader in this field in global production. The grass and legume seed sector, worldwide, is considered small compared to the grain and oilseed sector. However, it is still a valuable asset to agriculture. Oregon continues to be the leader worldwide in this sector, and is looked upon by other seed producing countries for direction and leadership. What happens in the grass and legume seed sector in Oregon reverberates throughout the world. Although grass seed production in Oregon is

centered on the turf grass species, it still has a big influence on forage grass and legume seed production.



Total 2019 grass and legume seed fell slightly from the previous year as legume seed acres fell by 20%, but the main acres devoted to grass seed production remained steady at 415,000 acres, keeping total acres close to 455,000. Although acres remained steady, a good crop year resulted in overall production increasing by 7.5%, resulting in over 730 million lbs. of production across all species. Production was led by the big 3 turf grass species, Tall fescue (266 million lbs.), annual ryegrass (258 million lbs.) and perennial ryegrass (63 million lbs.)

### 2019 Harvested Acres

- Grass seed acres were up by 5000, (11,000 acres above the 10 year average)
- Legume seed acres fell by 20% to 41,800 (from 2018's acres of 52,600). However, 2019 legume acres were only 2000 below the 10 year average.
- Tall fescue continues to be the most widely grown turf grass at 156,000 acres (up by 13,000 acres from 2018)
- Annual ryegrass acres remained steady at 123,000 acres (2018 = 124,000 acres)
- Perennial ryegrass seed acres fell by 11,000, resulting in 63,300 acres in 2019. This acreage is well below the 10 year average of 92,000 acres.
- Creeping red fescue acres remained above 10,000 for the 3<sup>rd</sup> year in a row (10,960 acres in 2019 compared to the 10 year average of 9,200 acres). The other 2 fine fescue categories (hard and chewings) also saw slight acre increases.
- Oregon's 2019 alfalfa seed acres fell by over 60% in 2019 (down to 3680), compared to almost 10,000 in 2018. 10 year average is at 4,500 acres.
- Red clover acres were steady at 17,770 (10 year average at 17,200).
- Crimson clover acres fell 29% to 5,700 acres (10 year average at 8,300)

Oregon Grass and Legume Seed Crops Preliminary Estimates (2010 - 2019) - Harvested Area (acres)												
	Area Harvested (acres)	Area Harvested (acres)	Area Harvested (acres)	Area Harvested (acres)	Area Harvested (acres)	Area Harvested (acres)	Area Harvested (acres)	Area Harvested (acres)	Area Harvested (acres)	Area Harvested (acres)	Area Change from 2018 (%)	Area Harvested: 10 Year Average 2010-2019
	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019		
Annual ryegrass	112,000	122,710	127,040	126,040	120,830	121,290	115,490	120,250	123,780	122,920	99.3%	121,235
Perennial ryegrass	91,570	93,760	105,160	104,790	112,230	95,380	95,130	83,450	74,030	63,305	85.5%	91,881
Tall fescue	117,080	106,520	127,250	134,680	136,385	138,640	135,020	134,370	142,570	155,940	109.4%	132,846
Kentucky bluegrass	13,350	10,630	10,570	11,970	13,205	15,940	18,280	20,650	22,200	24,880	112.1%	16,168
Rough bluegrass	2,050	2,200	2,060	2,100	812	890	1,030	1,080	1,030	1,010	98.1%	1,426
Orchardgrass	15,710	15,100	13,770	13,330	12,771	12,970	13,330	15,190	16,170	15,380	95.1%	14,372
Chewings fescue	7,660	7,080	7,570	8,270	8,086	8,340	8,450	8,790	9,080	9,140	100.7%	8,247
Red fescue	8,490	8,460	7,430	7,420	9,045	8,540	9,160	11,370	10,810	10,960	101.4%	9,169
Hard fescue	3,205	2,535	2,440	2,396	1,626	1,810	2,470	2,280	2,710	3,100	114.4%	2,457
Colonial bentgrass	2,200	2,250	2,350	2,350	2,650	3,000	3,080	3,030	3,490	1,770	50.7%	2,617
Creeping bentgrass	2,350	2,050	2,360	2,370	2,910	3,330	3,860	3,590	3,540	3,440	97.2%	2,980
<b>Total Grasses</b>	<b>375,665</b>	<b>373,295</b>	<b>408,000</b>	<b>415,716</b>	<b>420,550</b>	<b>410,130</b>	<b>405,300</b>	<b>404,050</b>	<b>409,410</b>	<b>414,845</b>	<b>101.3%</b>	<b>403,696</b>
Alfalfa	2,420	1,450	2,370	3,130	5,184	4,980	7,990	4,490	9,960	3,680	36.9%	4,565
Red clover	19,930	19,810	17,350	14,180	13,137	14,820	16,490	18,960	20,030	17,770	88.7%	17,248
Crimson clover	5,960	7,650	8,690	11,340	12,777	7,780	6,630	8,780	8,060	5,720	71.0%	8,339
Common vetch	650	1070	660	230	531	510	380	400	370	430	116.2%	523
Hairy vetch	790	1340	1170	990	1125	680	1350	640	534	760	142.3%	938
White clover/Ladino	12,410	11,470	10,450	10,150	10,443	11,500	12,660	13,960	12,960	12,750	98.4%	11,875
Arrowleaf clover	590	253	235	235	200	630	660	840	720	690	95.8%	505
<b>Total Legumes</b>	<b>42,750</b>	<b>43,043</b>	<b>40,925</b>	<b>40,255</b>	<b>43,397</b>	<b>40,900</b>	<b>46,160</b>	<b>48,070</b>	<b>52,634</b>	<b>41,800</b>	<b>79.4%</b>	<b>43,993</b>
<b>Total Grass &amp; Legume</b>	<b>418,415</b>	<b>416,338</b>	<b>448,925</b>	<b>455,971</b>	<b>463,947</b>	<b>451,030</b>	<b>451,460</b>	<b>452,120</b>	<b>462,044</b>	<b>456,645</b>	<b>98.8%</b>	<b>447,690</b>

## 2019 Grass and Legume Seed Production

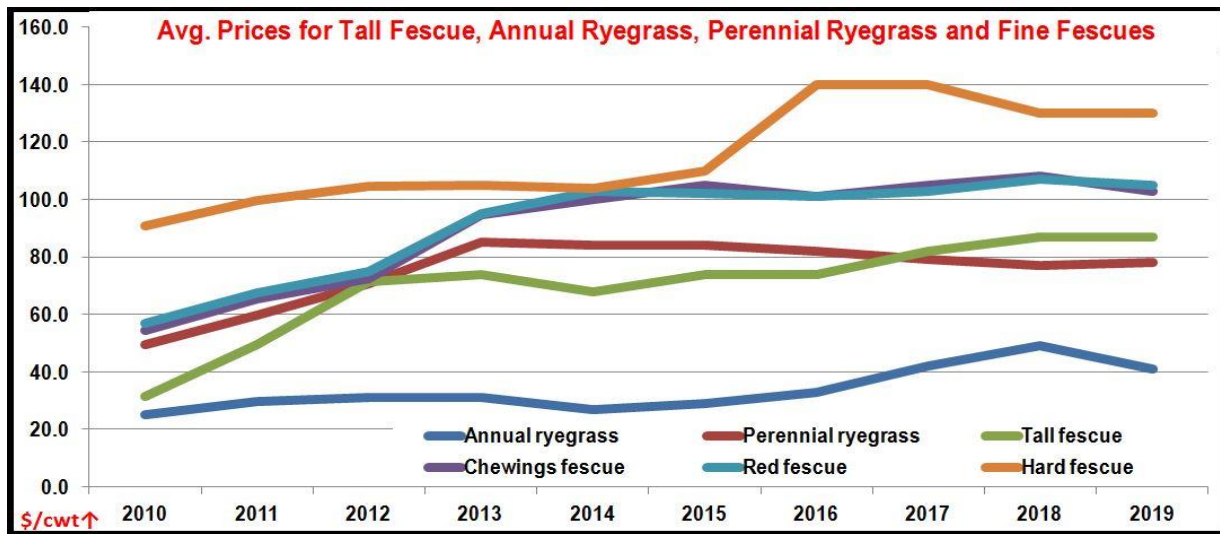
- When compared to 2018, Oregon's 2019 total production of grass and legume seed was up 7.5% (production up over 50 million lbs. to 731).
- Total production of grasses came in at 703 million lbs., up by 56 million from 2018.
- Legume seed production totaled 27.7 million lbs., down 5.3 million lbs. from the previous year.
- As usual, the big 3 grass crops accounted for **266 million lbs.** of production. 2019 saw (tall fescue at 266 million lbs, (up 27 million lbs.), annual ryegrass at 258 million lbs., (up 37 million lbs.), and perennial ryegrass at 103 million lbs. (down by 7 million lbs. due primarily to a decrease in acres).
- Fine fescue production saw 27 million lbs. produced, led by chewings fescue (11.6 million lbs.), creeping red fescue (10.8 million lbs.) and hard fescue (3.9 million lbs.)
- Overall legume seed production was down by 6 million lbs (down 16%), with alfalfa seed down 3.2 million lbs., crimson clover down 2.5 million lbs., and white clover/ladino down 1.2 million lbs. Red clover, however, saw production increase by 1 million lbs. to 12.4 million lbs.

Oregon Grass and Legume Seed Crops Preliminary Estimates (2010 - 2019) - Production (000's of lbs.)												
	Production (000' lbs.)	Production (000' lbs.)	Production (000' lbs.)	Production (000' lbs.)	Production (000' lbs.)	Production (000' lbs.)	Production (000' lbs.)	Production (000' lbs.)	Production (000' lbs.)	Production (000' lbs.)	Production Change from 2018 (%)	Total Production: 10 Year
	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019		
Annual ryegrass	201,998	248,661	240,721	250,946	269,077	220,398	217,237	206,909	221,712	258,765	116.7%	233,642
Perennial ryegrass	146,590	152,045	156,861	156,437	188,451	126,609	146,215	123,208	110,916	103,502	93.3%	141,083
Tall fescue	186,363	171,195	190,247	199,720	216,149	192,428	207,121	207,148	239,902	266,616	111.1%	207,689
Kentucky bluegrass	16,445	14,141	13,609	14,818	18,181	18,183	21,637	18,887	25,336	27,583	108.9%	18,882
Rough bluegrass	2,071	2,200	2,575	2,310	849	1,318	1,071	1,080	1,288	1,153	89.5%	1,592
Orchardgrass	13,143	12,281	10,382	10,504	10,677	8,585	12,300	15,889	16,250	16,396	100.9%	12,641
Chewings fescue	9,713	9,649	10,290	11,250	10,811	9,474	9,737	10,029	11,936	11,642	97.5%	10,453
Red fescue	10,885	10,665	9,399	9,105	11,484	9,251	9,588	11,469	12,055	10,810	89.7%	10,471
Hard fescue	2,802	2,190	1,861	1,818	1,916	1,655	2,699	2,300	3,831	3,932	102.6%	2,500
Colonial bentgrass	841	936	940	940	1,304	1,200	1,222	1,147	1,261	684	54.2%	1,048
Creeping bentgrass	1,534	1,652	1,237	1,679	1,912	1,697	2,274	2,581	2,698	2,314	85.8%	1,958
<b>Total Grasses</b>	<b>592,385</b>	<b>625,615</b>	<b>638,122</b>	<b>659,527</b>	<b>734,261</b>	<b>590,799</b>	<b>631,101</b>	<b>600,647</b>	<b>647,185</b>	<b>703,294</b>	<b>108.7%</b>	<b>642,294</b>
Alfalfa	2,083	1,186	2,028	2,573	4,395	3,954	5,303	4,959	5,695	2,588	45.4%	3,476
Red clover	10,505	17,883	12,857	10,726	9,564	7,545	14,093	11,195	11,486	12,470	108.6%	11,832
Crimson clover	5,896	8,160	7,635	8,786	12,509	8,763	6,564	9,556	8,224	5,757	70.0%	8,185
Common vetch	633	2091	1265	460	704	433	432	547	159	723	454.7%	745
Hairy vetch	700	1320	988	828	670	306	874	383	534	524	98.1%	713
White clover/Ladino	5,771	5,174	4,733	4,618	4,768	6652	6780	6,904	6,477	5,260	81.2%	5,714
Arrowleaf clover	480	199	118	118	100	599	564	507	442	455	102.9%	358
<b>Total Legumes</b>	<b>20,068</b>	<b>36,013</b>	<b>29,624</b>	<b>28,109</b>	<b>32,710</b>	<b>28,252</b>	<b>34,610</b>	<b>34,051</b>	<b>33,017</b>	<b>27,777</b>	<b>84.1%</b>	<b>30,423</b>
<b>Total Grass &amp; Legume</b>	<b>618,453</b>	<b>661,628</b>	<b>667,746</b>	<b>687,636</b>	<b>763,521</b>	<b>619,051</b>	<b>665,711</b>	<b>634,698</b>	<b>680,202</b>	<b>731,071</b>	<b>107.5%</b>	<b>672,972</b>



### 2019 Average Prices

- Average prices for annual ryegrass fell by 16% to 41 ¢/lb. as supply increased by 16%.
- Perennial ryegrass seed prices rose by 1 ¢/lb. to average 78 ¢/lb.
- Tall fescue prices remained at 87 ¢/lb., the same as 2018.
- Average prices for the fine fescues all remained above \$1/lb.
- With a 30% drop in production, crimson clover seed prices shot up by 33 ¢/lb., to average 80 ¢/lb. for the year.
- Red clover seed average prices remained steady at \$1.00/lb.



Oregon Grass and Legume Seed Crops Preliminary Estimates (2010 - 2019) - Average \$ (\$/cwt)												
	Price (\$/cwt)	Price (\$ / cwt)	Price (\$ / cwt)	Price (\$ / cwt)	Price (\$ / cwt)	Price (\$ / cwt)	Price (\$ / cwt)	Price (\$ / cwt)	Price (\$ / cwt)	Price (\$ / cwt)	Price (\$ / cwt)	Price (\$ / cwt)
	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	Change from 2018 (%)	Average Price: 10 Year
Annual ryegrass	25.0	29.6	31.0	31.0	27.0	29.0	33.0	42.0	49.0	41.0	83.7%	34
Perennial ryegrass	49.5	59.7	70.8	85.2	84.0	84.0	82.0	79.0	77.0	78.0	101.3%	75
Tall fescue	31.5	49.6	71.2	73.9	68.0	74.0	74.0	82.0	87.0	87.0	100.0%	70
Kentucky bluegrass	96.4	107.6	110.3	116.0	126.0	136.0	137.0	140.0	143.0	146.0	102.1%	126
Rough bluegrass	149.0	149.0	149.0	130.0	198.0	134.0	135.0	135.0	165.0	225.0	136.4%	157
Orchardgrass	58.1	68.8	82.6	100.0	112.0	174.0	212.0	225.0	203.0	155.0	76.4%	139
Chewings fescue	54.6	65.4	72.4	94.7	100.0	105.0	101.0	105.0	108.0	103.0	95.4%	91
Red fescue	56.8	67.7	75.0	94.9	103.0	102.0	101.0	103.0	107.0	105.0	98.1%	92
Hard fescue	90.8	99.5	104.4	104.9	104.0	110.0	140.0	140.0	130.0	130.0	100.0%	115
Colonial bentgrass	173.2	180.0	200.0	202.1	270.0	260.0	250.0	250.0	213.0	205.0	96.2%	220
Creeping bentgrass	300.0	300.0	298.1	310.7	334.0	327.0	340.0	350.0	365.0	331.0	90.7%	326
Alfalfa	198.3	192.1	231.4	235.3	272.0	176.0	225.0	235.0	242.0	250.0	103.3%	226
Red clover	81.0	109.9	101.4	135.3	187.0	160.0	112.0	113.0	100.0	100.0	100.0%	120
Crimson clover	43.0	62.0	98.3	130.8	160.0	53.0	75.0	70.0	47.0	80.0	170.2%	82
Common vetch	40.0	40.0	40.0	40.0	53.0	50.0	45.0	45.0	45.0	58.0	128.9%	46
Hairy vetch	105.0	105.0	110.0	110.0	125.0	135.0	110.0	105.0	100.0	110.0	110.0%	112
White clover/Ladino	122.8	169.6	184.8	234.4	225.0	221.0	219.0	162.0	165.0	186.0	112.7%	189
Arrowleaf clover	94.4	92.1	70.0	75.8	70.0	115.0	120.0	105.0	102.0	93.0	91.2%	94

### 2019 Average Yields by Crop

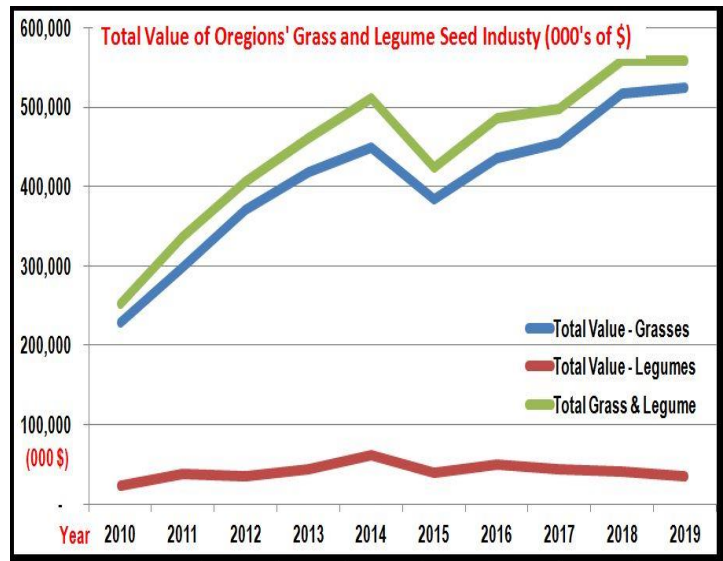
- 2019 production saw the big 3, tall fescue (up 1.6%), annual ryegrass (up 14%) and perennial ryegrass (up 9%) all above 2018 yields.
- Of the major turf grasses, only creeping red fescue fell below its average 10 year yield.

- Legume seed yields were quite variable, with different species falling below and above their 10 year average yields.

Oregon Grass and Legume Seed Crops Preliminary Estimates (2010 - 2019) - Average Yield (lbs./ac)													
	Yield per Acre (lbs)	Yield per Acre (lbs)	Yield per Acre (lbs)	Yield per Acre (lbs)	Yield per Acre (lbs)	Yield per Acre (lbs)	Yield per Acre (lbs)	Yield per Acre (lbs)	Yield per Acre (lbs)	Yield per Acre (lbs)	Yield per Acre (lbs)	Yield Change from 2018 (%)	Yield per Acre: 10 Year Average
	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019			
Annual ryegrass	1,804	2,026	1,895	1,991	2,227	1,817	1,881	1,721	1,791	2,055	114.7%	1,921	
Perennial ryegrass	1,601	1,622	1,492	1,493	1,680	1,327	1,537	1,476	1,498	1,635	109.1%	1,536	
Tall fescue	1,592	1,607	1,495	1,483	1,610	1,387	1,534	1,542	1,683	1,710	101.6%	1,564	
Kentucky bluegrass	1,232	1,330	1,288	1,238	1,377	1,141	1,184	915	1,141	1,109	97.2%	1,196	
Rough bluegrass	1,010	1,000	1,250	1,100	1,046	1,481	1,039	1,000	1,250	1,142	91.4%	1,132	
Orchardgrass	837	813	754	788	836	662	923	1,046	1,005	1066	106.1%	873	
Chewings fescue	1,268	1,363	1,359	1,360	1,337	1,136	1,148	1,141	1,315	1,274	96.9%	1,270	
Red fescue	1,282	1,261	1,265	1,227	1,270	1,083	1,047	1,009	1,115	986	88.4%	1,155	
Hard fescue	874	864	763	759	1,178	914	1,093	1,009	1,414	1268	89.7%	1,014	
Colonial bentgrass	382	416	400	400	492	400	397	379	361	386	106.9%	401	
Creeping bentgrass	653	806	524	653	657	510	589	719	762	644	84.5%	652	
Alfalfa	861	818	856	822	848	794	664	1,105	572	654	114.3%	799	
Red clover	527	903	741	756	728	509	855	590	573	702	122.5%	688	
Crimson clover	989	1067	879	775	979	1126	990	1,088	1,020	984	96.5%	990	
Common vetch	974	1,954	1,917	2,000	1,326	849	1,137	1,368	430	1,651	384.0%	1,361	
Hairy vetch	886	985	844	836	596	450	647	598	1,000	689	68.9%	753	
White clover/Ladino	465	451	453	455	457	578	536	495	500	413	82.6%	480	
Arrowleaf clover	814	787	502	502	500	950	855	604	614	659	107.3%	679	

**Summary:**

Oregon’s grass and legume seed industry contributes immensely to her economy. 2019 saw total grass and legume seed production worth \$559 million. Grass seed production accounted for \$524 million of this total, with legume seed production accounting for \$34.7 million. The importance of Oregon’s contribution to the world grass and legume seed sector cannot be stressed enough. Not only is it the world’s leader in production, it also leads in research, technology and in setting the direction the marketplace takes, especially turf seed markets.



The data presented in this article is taken from collaboration data compiled between Oregon's government personnel, industry reps and grower groups, under the direction of Nicole Anderson, Extension Field Crops Agronomist, Oregon State University. This data is available at:

<https://cropandsoil.oregonstate.edu/seed-crops/oregon-grass-and-legume-seed-production>

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