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Department of
Agriculture

National
Agricultural
Statistics
Service

Small Grains
2024 Summary

September 2024

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All wheat production totaled 1.97 billion bushels in 2024, up 9 percent from the 2023 total of 1.80 billion bushels. Area harvested for grain totaled 38.5 million acres, up 4 percent from the previous year. The average yield in the United States was estimated at 51.2 bushels per acre, up 2.5 bushels from the previous year. The levels of production and changes from 2023 by type were: winter wheat, 1.35 billion bushels, up 9 percent; other spring wheat, 542 million bushels, up 8 percent; and Durum wheat, 80.1 million bushels, up 35 percent.

Oat production was estimated at 67.8 million bushels, up 19 percent from 2023. Yield was estimated at a record high 76.5 bushels per acre, up 7.9 bushels from the previous year. Harvested area, at 886 thousand acres, was 7 percent above last year.

Barley production was estimated at 144 million bushels, down 23 percent from the 2023 total of 186 million bushels. The United States average yield, at 76.7 bushels per acre, was up 4.4 bushels from the previous year. Producers seeded 2.37 million acres in 2024, down 24 percent from 2023. Harvested area, at 1.88 million acres, was down 27 percent from 2023.

This report was approved on September 30, 2024.

Secretary of Agriculture
Designate
Robert Bonnie

Agricultural Statistics Board
Chairperson
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Oat Area Planted and Harvested, Yield, and Production – States and United States: 2022-2024

State	Area planted [1]			Area harvested		
	2022	2023	2024	2022	2023	2024
	(1,000 acres)	(1,000 acres)	(1,000 acres)	(1,000 acres)	(1,000 acres)	(1,000 acres)
Arkansas [2]	10	8	(NA)	6	5	(NA)
California [2]	105	90	(NA)	6	5	(NA)
Georgia	75	55	65	15	15	21
Idaho	50	45	40	16	12	10
Illinois	60	55	50	10	17	17
Iowa	130	190	145	40	95	73
Kansas	110	185	160	25	30	26
Maine	27	22	20	25	21	16
Michigan	50	50	50	26	25	33
Minnesota	200	165	205	140	87	140
Missouri [2]	45	32	(NA)	6	9	(NA)
Montana	85	65	60	24	22	25
Nebraska	125	155	120	18	24	36
New York	68	61	60	49	44	40
North Carolina	40	37	34	11	14	12
North Dakota	345	280	280	190	105	135
Ohio	50	40	40	15	15	20
Oklahoma [2]	50	140	(NA)	17	13	(NA)
Oregon	20	20	20	8	12	11
Pennsylvania	87	70	74	61	47	51
South Dakota	260	265	270	75	69	88
Texas	450	390	380	32	70	68
Wisconsin	140	135	140	65	75	64
United States	2,582	2,555	2,213	880	831	886

See footnote(s) at end of table.

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Oat Area Planted and Harvested, Yield, and Production – States and United States: 2022-2024 (continued)

State	Yield			Production		
	2022	2023	2024	2022	2023	2024
	(bushels)	(bushels)	(bushels)	(1,000 bushels)	(1,000 bushels)	(1,000 bushels)
Arkansas [2]	61.0	62.0	(NA)	366	310	(NA)
California [2]	65.0	75.0	(NA)	390	375	(NA)
Georgia	51.0	61.0	62.0	765	915	1,302
Idaho	64.0	91.0	92.0	1,024	1,092	920
Illinois	83.0	90.0	93.0	830	1,530	1,581
Iowa	82.0	80.0	82.0	3,280	7,600	5,986
Kansas	41.0	66.0	66.0	1,025	1,980	1,716
Maine	84.0	62.0	73.0	2,100	1,302	1,168
Michigan	61.0	66.0	66.0	1,586	1,650	2,178
Minnesota	61.0	77.0	88.0	8,540	6,699	12,320
Missouri [2]	52.0	68.0	(NA)	312	612	(NA)
Montana	38.0	37.0	33.0	912	814	825
Nebraska	51.0	53.0	69.0	918	1,272	2,484
New York	55.0	60.0	65.0	2,695	2,640	2,600
North Carolina	77.0	77.0	73.0	847	1,078	876
North Dakota	72.0	76.0	98.0	13,680	7,980	13,230
Ohio	70.0	76.0	68.0	1,050	1,140	1,360
Oklahoma [2]	20.0	60.0	(NA)	340	780	(NA)
Oregon	105.0	79.0	98.0	840	948	1,078
Pennsylvania	59.0	61.0	59.0	3,599	2,867	3,009
South Dakota	80.0	74.0	88.0	6,000	5,106	7,744
Texas	55.0	54.0	46.0	1,760	3,780	3,128
Wisconsin	74.0	61.0	67.0	4,810	4,575	4,288
United States	65.5	68.6	76.5	57,669	57,045	67,793

(NA) Not available.
[1] Includes area planted in preceding fall.
[2] Estimates discontinued in 2024.

Barley Area Planted and Harvested, Yield, and Production – States and United States: 2022-2024

State	Area planted [1]			Area harvested		
	2022	2023	2024	2022	2023	2024
	(1,000 acres)	(1,000 acres)	(1,000 acres)	(1,000 acres)	(1,000 acres)	(1,000 acres)
Alaska	6	7	8	5	6	6
Arizona	17	17	13	16	15	12
California	40	45	40	19	22	20
Colorado	61	55	56	40	52	39
Delaware	21	21	21	16	12	14
Idaho	560	570	530	540	540	510
Kansas	14	16	10	5	5	3
Maine	11	11	10	10	9	9
Maryland	28	31	31	16	13	19
Michigan	5	7	8	4	6	6
Minnesota	65	60	40	55	54	25
Montana	1,030	1,190	900	840	1,030	710
New York	7	9	8	4	5	5
North Carolina	16	16	16	11	10	10
North Dakota	730	690	370	650	570	285
Oregon	36	43	31	19	24	20
Pennsylvania	43	47	40	26	28	30
South Dakota	28	38	34	7	9	5
Utah	20	16	14	15	14	11
Virginia	29	30	24	7	6	9
Washington	69	95	80	58	84	70
Wisconsin	13	12	15	3	2	6
Wyoming	78	83	74	59	58	51
United States	2,927	3,109	2,373	2,425	2,574	1,875

See footnote(s) at end of table.

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Barley Area Planted and Harvested, Yield, and Production – States and United States: 2022-2024 (continued)

State	Yield			Production		
	2022	2023	2024	2022	2023	2024
	(bushels)	(bushels)	(bushels)	(1,000 bushels)	(1,000 bushels)	(1,000 bushels)
Alaska	42.0	38.0	46.0	210	228	276
Arizona	133.0	132.0	102.0	2,128	1,980	1,224
California	56.0	75.0	58.0	1,064	1,650	1,160
Colorado	111.0	131.0	145.0	4,440	6,812	5,655
Delaware	87.0	95.0	85.0	1,392	1,140	1,190
Idaho	111.0	112.0	109.0	59,940	60,480	55,590
Kansas	34.0	29.0	75.0	170	145	225
Maine	69.0	45.0	65.0	690	405	585
Maryland	82.0	96.0	82.0	1,312	1,248	1,558
Michigan	50.0	60.0	45.0	200	360	270
Minnesota	72.0	74.0	70.0	3,960	3,996	1,750
Montana	41.0	49.0	51.0	34,440	50,470	36,210
New York	61.0	65.0	60.0	244	325	300
North Carolina	69.0	76.0	75.0	759	760	750
North Dakota	73.0	71.0	74.0	47,450	40,470	21,090
Oregon	55.0	33.0	47.0	1,045	792	940
Pennsylvania	67.0	81.0	81.0	1,742	2,268	2,430
South Dakota	54.0	52.0	57.0	378	468	285
Utah	82.0	73.0	90.0	1,230	1,022	990
Virginia	86.0	83.0	84.0	602	498	756
Washington	84.0	53.0	66.0	4,872	4,452	4,620
Wisconsin	55.0	63.0	45.0	165	126	270
Wyoming	93.0	104.0	112.0	5,487	6,032	5,712
United States	71.7	72.3	76.7	173,920	186,127	143,836

[1] Includes area planted in preceding fall.

All Wheat Area Planted and Harvested, Yield, and Production – States and United States: 2022-2024

State	Area planted [1]			Area harvested		
	2022	2023	2024	2022	2023	2024
	(1,000 acres)	(1,000 acres)	(1,000 acres)	(1,000 acres)	(1,000 acres)	(1,000 acres)
Alabama	180	205	110	120	145	60
Arizona	85	38	59	84	37	58
Arkansas	220	230	130	150	165	85
California	390	338	315	105	97	98
Colorado	1,950	2,300	2,100	1,430	1,730	1,840
Delaware	80	80	70	54	69	52
Georgia	200	195	145	100	85	60
Idaho	1,158	1,170	1,210	1,077	1,035	1,135
Illinois	650	840	770	560	780	700
Indiana	290	405	310	240	335	240
Kansas	7,300	8,100	7,600	6,600	5,750	7,150
Kentucky	530	610	560	375	460	390
Maryland	355	340	325	170	195	180
Michigan	460	600	400	415	560	375
Minnesota	1,250	1,300	1,220	1,210	1,260	1,180
Mississippi	100	120	60	75	95	35
Missouri	630	780	670	410	600	480
Montana	5,460	5,255	5,280	4,915	4,985	5,030
Nebraska	980	1,130	1,000	820	880	920
New Jersey [2]	26	34	(NA)	22	32	(NA)
New Mexico	360	405	370	90	85	145
New York	140	150	135	100	120	120
North Carolina	480	480	410	375	400	330
North Dakota	6,195	6,610	6,575	6,135	6,500	6,465
Ohio	510	650	520	465	590	465
Oklahoma	4,300	4,550	4,350	2,450	2,450	2,850
Oregon	730	740	740	715	720	725
Pennsylvania	270	280	240	210	230	195
South Carolina	120	110	80	100	95	65
South Dakota	1,580	1,660	1,520	1,440	1,320	1,395
Tennessee	410	470	380	335	390	320
Texas	5,300	6,400	5,500	1,300	2,100	2,600
Utah	110	105	105	88	87	90
Virginia	230	200	150	150	135	85
Washington	2,325	2,300	2,295	2,270	2,240	2,240
Wisconsin	300	280	265	235	230	220
Wyoming	115	115	110	95	90	91
United States	45,769	49,575	46,079	35,485	37,077	38,469

See footnote(s) at end of table.

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All Wheat Area Planted and Harvested, Yield, and Production – States and United States: 2022-2024 (continued)

State	Yield			Production		
	2022	2023	2024	2022	2023	2024
	(bushels)	(bushels)	(bushels)	(1,000 bushels)	(1,000 bushels)	(1,000 bushels)
Alabama	72.0	75.0	71.0	8,640	10,875	4,260
Arizona	114.0	103.0	109.0	9,576	3,811	6,322
Arkansas	53.0	57.0	56.0	7,950	9,405	4,760
California	85.3	86.0	85.0	8,960	8,338	8,334
Colorado	25.0	41.0	35.0	35,750	70,930	64,400
Delaware	76.0	92.0	72.0	4,104	6,348	3,744
Georgia	58.0	55.0	59.0	5,800	4,675	3,540
Idaho	86.8	86.1	89.0	93,515	89,110	101,015
Illinois	79.0	87.0	86.0	44,240	67,860	60,200
Indiana	81.0	92.0	89.0	19,440	30,820	21,360
Kansas	37.0	35.0	43.0	244,200	201,250	307,450
Kentucky	80.0	88.0	75.0	30,000	40,480	29,250
Maryland	78.0	85.0	75.0	13,260	16,575	13,500
Michigan	83.0	83.0	87.0	34,445	46,480	32,625
Minnesota	61.0	62.0	68.5	73,810	78,120	80,830
Mississippi	52.0	52.0	50.0	3,900	4,940	1,750
Missouri	60.0	70.0	75.0	24,600	42,000	36,000
Montana	28.3	37.2	34.2	139,300	185,505	172,120
Nebraska	32.0	42.0	52.0	26,240	36,960	47,840
New Jersey [2]	70.0	82.0	(NA)	1,540	2,624	(NA)
New Mexico	17.0	11.0	12.0	1,530	935	1,740
New York	72.0	81.0	75.0	7,200	9,720	9,000
North Carolina	64.0	70.0	57.0	24,000	28,000	18,810
North Dakota	48.9	47.1	56.9	299,900	306,390	367,695
Ohio	79.0	90.0	85.0	36,735	53,100	39,525
Oklahoma	28.0	28.0	38.0	68,600	68,600	108,300
Oregon	68.0	56.0	70.0	48,620	40,320	50,750
Pennsylvania	73.0	76.0	75.0	15,330	17,480	14,625
South Carolina	57.0	58.0	54.0	5,700	5,510	3,510
South Dakota	50.0	45.0	56.6	72,040	59,440	78,995
Tennessee	73.0	80.0	75.0	24,455	31,200	24,000
Texas	30.0	37.0	31.0	39,000	77,700	80,600
Utah	36.0	53.0	49.0	3,168	4,611	4,410
Virginia	68.0	78.0	66.0	10,200	10,530	5,610
Washington	63.4	50.5	64.1	144,020	113,120	143,570
Wisconsin	78.0	76.0	82.0	18,330	17,480	18,040
Wyoming	17.0	30.0	31.0	1,615	2,700	2,821
United States	46.5	48.7	51.2	1,649,713	1,803,942	1,971,301

(NA) Not available.
[1] Includes area planted in preceding fall.
[2] Estimates discontinued in 2024.

Winter Wheat Area Planted and Harvested, Yield, and Production – States and United States: 2022-2024

State	Area planted [1]			Area harvested		
	2022	2023	2024	2022	2023	2024
	(1,000 acres)	(1,000 acres)	(1,000 acres)	(1,000 acres)	(1,000 acres)	(1,000 acres)
Alabama	180	205	110	120	145	60
Arkansas	220	230	130	150	165	85
California	350	320	290	70	80	75
Colorado	1,950	2,300	2,100	1,430	1,730	1,840
Delaware	80	80	70	54	69	52
Georgia	200	195	145	100	85	60
Idaho	770	750	760	710	630	700
Illinois	650	840	770	560	780	700
Indiana	290	405	310	240	335	240
Kansas	7,300	8,100	7,600	6,600	5,750	7,150
Kentucky	530	610	560	375	460	390
Maryland	355	340	325	170	195	180
Michigan	460	600	400	415	560	375
Mississippi	100	120	60	75	95	35
Missouri	630	780	670	410	600	480
Montana	2,050	1,850	1,950	1,800	1,680	1,830
Nebraska	980	1,130	1,000	820	880	920
New Jersey [2]	26	34	(NA)	22	32	(NA)
New Mexico	360	405	370	90	85	145
New York	140	150	135	100	120	120
North Carolina	480	480	410	375	400	330
North Dakota	105	155	125	95	145	120
Ohio	510	650	520	465	590	465
Oklahoma	4,300	4,550	4,350	2,450	2,450	2,850
Oregon	730	740	740	715	720	725
Pennsylvania	270	280	240	210	230	195
South Carolina	120	110	80	100	95	65
South Dakota	830	920	860	730	670	760
Tennessee	410	470	380	335	390	320
Texas	5,300	6,400	5,500	1,300	2,100	2,600
Utah	110	105	105	88	87	90
Virginia	230	200	150	150	135	85
Washington	1,850	1,800	1,800	1,800	1,750	1,750
Wisconsin	300	280	265	235	230	220
Wyoming	115	115	110	95	90	91
United States	33,281	36,699	33,390	23,454	24,558	26,103

See footnote(s) at end of table.

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Winter Wheat Planted and Harvested, Yield, and Production – States and United States: 2022-2024 (continued)

State	Yield			Production		
	2022	2023	2024	2022	2023	2024
	(bushels)	(bushels)	(bushels)	(1,000 bushels)	(1,000 bushels)	(1,000 bushels)
Alabama	72.0	75.0	71.0	8,640	10,875	4,260
Arkansas	53.0	57.0	56.0	7,950	9,405	4,760
California	73.0	80.0	78.0	5,110	6,400	5,850
Colorado	25.0	41.0	35.0	35,750	70,930	64,400
Delaware	76.0	92.0	72.0	4,104	6,348	3,744
Georgia	58.0	55.0	59.0	5,800	4,675	3,540
Idaho	90.0	89.0	89.0	63,900	56,070	62,300
Illinois	79.0	87.0	86.0	44,240	67,860	60,200
Indiana	81.0	92.0	89.0	19,440	30,820	21,360
Kansas	37.0	35.0	43.0	244,200	201,250	307,450
Kentucky	80.0	88.0	75.0	30,000	40,480	29,250
Maryland	78.0	85.0	75.0	13,260	16,575	13,500
Michigan	83.0	83.0	87.0	34,445	46,480	32,625
Mississippi	52.0	52.0	50.0	3,900	4,940	1,750
Missouri	60.0	70.0	75.0	24,600	42,000	36,000
Montana	33.0	51.0	50.0	59,400	85,680	91,500
Nebraska	32.0	42.0	52.0	26,240	36,960	47,840
New Jersey [2]	70.0	82.0	(NA)	1,540	2,624	(NA)
New Mexico	17.0	11.0	12.0	1,530	935	1,740
New York	72.0	81.0	75.0	7,200	9,720	9,000
North Carolina	64.0	70.0	57.0	24,000	28,000	18,810
North Dakota	60.0	56.0	54.0	5,700	8,120	6,480
Ohio	79.0	90.0	85.0	36,735	53,100	39,525
Oklahoma	28.0	28.0	38.0	68,600	68,600	108,300
Oregon	68.0	56.0	70.0	48,620	40,320	50,750
Pennsylvania	73.0	76.0	75.0	15,330	17,480	14,625
South Carolina	57.0	58.0	54.0	5,700	5,510	3,510
South Dakota	52.0	47.0	63.0	37,960	31,490	47,880
Tennessee	73.0	80.0	75.0	24,455	31,200	24,000
Texas	30.0	37.0	31.0	39,000	77,700	80,600
Utah	36.0	53.0	49.0	3,168	4,611	4,410
Virginia	68.0	78.0	66.0	10,200	10,530	5,610
Washington	68.0	54.0	70.0	122,400	94,500	122,500
Wisconsin	78.0	76.0	82.0	18,330	17,480	18,040
Wyoming	17.0	30.0	31.0	1,615	2,700	2,821
United States	47.0	50.6	51.7	1,103,062	1,242,368	1,348,930

(NA) Not available.
[1] Includes area planted in preceding fall.
[2] Estimates discontinued in 2024.

Other Spring Wheat Area Planted and Harvested, Yield, and Production – States and United States: 2022-2024

State	Area planted			Area harvested		
	2022	2023	2024	2022	2023	2024
	(1,000 acres)	(1,000 acres)	(1,000 acres)	(1,000 acres)	(1,000 acres)	(1,000 acres)
Idaho	380	410	450	360	395	435
Minnesota	1,250	1,300	1,220	1,210	1,260	1,180
Montana	2,700	2,700	2,450	2,440	2,630	2,340
North Dakota	5,300	5,550	5,350	5,260	5,490	5,250
South Dakota	750	740	660	710	650	635
Washington	475	500	495	470	490	490
United States	10,855	11,200	10,625	10,450	10,915	10,330

State	Yield			Production		
	2022	2023	2024	2022	2023	2024
	(bushels)	(bushels)	(bushels)	(1,000 bushels)	(1,000 bushels)	(1,000 bushels)
Idaho	81.0	82.0	89.0	29,160	32,390	38,715
Minnesota	61.0	62.0	68.5	73,810	78,120	80,830
Montana	25.0	30.0	26.0	61,000	78,900	60,840
North Dakota	50.0	48.5	59.0	263,000	266,265	309,750
South Dakota	48.0	43.0	49.0	34,080	27,950	31,115
Washington	46.0	38.0	43.0	21,620	18,620	21,070
United States	46.2	46.0	52.5	482,670	502,245	542,320

Durum Wheat Area Planted and Harvested, Yield, and Production – States and United States: 2022-2024

State	Area planted			Area harvested		
	2022	2023	2024	2022	2023	2024
	(1,000 acres)	(1,000 acres)	(1,000 acres)	(1,000 acres)	(1,000 acres)	(1,000 acres)
Arizona	85	38	59	84	37	58
California	40	18	25	35	17	23
Idaho [1]	8	10	(NA)	7	10	(NA)
Montana	710	705	880	675	675	860
North Dakota	790	905	1,100	780	865	1,095
United States	1,633	1,676	2,064	1,581	1,604	2,036

State	Yield			Production		
	2022	2023	2024	2022	2023	2024
	(bushels)	(bushels)	(bushels)	(1,000 bushels)	(1,000 bushels)	(1,000 bushels)
Arizona	114.0	103.0	109.0	9,576	3,811	6,322
California	110.0	114.0	108.0	3,850	1,938	2,484
Idaho [1]	65.0	65.0	(NA)	455	650	(NA)
Montana	28.0	31.0	23.0	18,900	20,925	19,780
North Dakota	40.0	37.0	47.0	31,200	32,005	51,465
United States	40.5	37.0	39.3	63,981	59,329	80,051

(NA) Not available.
[1] Estimates discontinued in 2024.

Wheat Production by Class – United States: 2022-2024

[Wheat class estimates are based on the latest available data including both surveys and administrative data]

Crop	2022	2023	2024
	(1,000 bushels)	(1,000 bushels)	(1,000 bushels)
Winter			
Hard red	530,966	596,047	770,439
Soft red	336,146	449,017	342,439
Hard white	10,647	13,995	19,559
Soft white	225,303	183,309	216,493
Spring			
Hard red	446,495	465,413	502,867
Hard white	6,707	8,745	9,502
Soft white	29,468	28,087	29,951
Durum	63,981	59,329	80,051
Total	1,649,713	1,803,942	1,971,301

Wheat Class Percentage Estimates

The following percentages are the basis for the United States wheat production by class estimates each year. These estimates are based on the latest varietal or class survey data available. These end-of-season percentages will be used during the 2025 forecast season. However, if an unusual situation significantly distorts a State's normal distribution, then updated percentages will be used to forecast the production by class.

Winter Wheat Production Distribution by Class – States: 2023 and 2024

State	Hard red		Soft red		Hard white		Soft white	
	2023	2024	2023	2024	2023	2024	2023	2024
	(percent)	(percent)	(percent)	(percent)	(percent)	(percent)	(percent)	(percent)
Alabama	-	-	100	100	-	-	-	-
Arkansas	-	-	100	100	-	-	-	-
California	93	93	-	-	4	3	3	4
Colorado	96	96	-	-	4	4	-	-
Delaware	-	1	100	99	-	-	-	-
Georgia	-	1	99	99	-	-	1	-
Idaho	20	23	-	-	1	1	79	76
Illinois	-	1	100	99	-	-	-	-
Indiana	-	-	100	100	-	-	-	-
Kansas	93	94	3	2	4	4	-	-
Kentucky	-	-	100	100	-	-	-	-
Maryland	-	1	100	99	-	-	-	-
Michigan	1	1	68	65	-	-	31	34
Mississippi	-	1	100	99	-	-	-	-
Missouri	1	1	99	99	-	-	-	-
Montana	100	99	-	-	-	1	-	-
Nebraska	94	94	-	-	6	6	-	-
New Jersey [1]	-	(NA)	100	(NA)	-	(NA)	-	(NA)
New Mexico	100	99	-	-	-	-	-	1
New York	6	6	93	93	-	-	1	1
North Carolina	-	-	100	100	-	-	-	-
North Dakota	100	100	-	-	-	-	-	-
Ohio	-	-	100	100	-	-	-	-
Oklahoma	98	98	2	2	-	-	-	-
Oregon	6	9	-	-	-	-	94	91
Pennsylvania	1	1	99	99	-	-	-	-
South Carolina	-	1	100	99	-	-	-	-
South Dakota	100	100	-	-	-	-	-	-
Tennessee	-	-	100	100	-	-	-	-
Texas	97	95	3	5	-	-	-	-
Utah	71	70	-	-	1	1	28	29
Virginia	1	1	99	99	-	-	-	-
Washington	10	10	-	-	-	-	90	90
Wisconsin	3	3	97	97	-	-	-	-
Wyoming	98	98	-	-	1	2	1	-

- Represents zero.
(NA) Not available.
[1] Estimates discontinued in 2024.

Other Spring Wheat (excluding Durum) Production Distribution by Class – States: 2023 and 2024

State	Hard red		Hard white		Soft white	
	2023	2024	2023	2024	2023	2024
	(percent)	(percent)	(percent)	(percent)	(percent)	(percent)
Idaho	34	40	27	24	39	36
Minnesota	100	100	-	-	-	-
Montana	100	100	-	-	-	-
North Dakota	100	100	-	-	-	-
South Dakota	100	100	-	-	-	-
Washington	17	23	-	1	83	76

- Represents zero.

Winter Wheat Head Population

The National Agricultural Statistics Service conducted objective yield surveys in 10 winter wheat estimating States during 2024. Randomly selected plots in winter wheat fields were visited monthly from May through harvest to obtain specific counts and measurements. Data in this table are actual field counts from this survey.

Winter Wheat Heads per Square Foot – Selected States: 2020-2024

State	2020	2021	2022	2023	2024
	(number)	(number)	(number)	(number)	(number)
Colorado					
July	43.0	49.9	40.8	41.5	39.8
August	42.7	46.8	39.7	48.4	40.9
Final	42.7	46.8	39.7	48.4	40.9
Illinois					
July	52.5	63.3	63.1	58.3	63.1
August	52.4	63.4	62.9	58.3	61.0
Final	52.4	63.4	62.9	58.3	61.0
Kansas					
July	45.3	51.4	40.7	37.3	42.1
August	45.4	51.4	40.7	38.5	41.1
Final	45.4	51.4	40.7	38.5	41.1
Missouri					
July	52.5	55.4	55.5	48.1	57.0
August	52.5	55.4	55.5	48.1	56.9
Final	52.5	55.4	55.5	48.1	56.6
Montana					
July	37.4	40.2	36.0	44.3	47.2
August	38.8	38.9	38.2	44.8	47.2
Final	38.6	38.9	38.3	44.8	47.2
Nebraska					
July	45.8	47.7	45.1	45.7	61.3
August	45.7	47.0	45.4	43.2	60.6
Final	45.7	47.0	45.4	43.2	60.6
Ohio					
July	64.1	66.7	55.1	57.9	61.5
August	63.9	66.5	55.0	57.7	60.6
Final	63.9	66.5	55.0	57.7	60.6
Oklahoma					
July	38.2	38.2	35.2	40.2	36.3
August	38.3	38.2	35.3	40.2	35.1
Final	38.3	38.2	35.3	40.2	35.1
Texas					
July	32.7	32.1	29.0	31.2	30.8
August	32.7	31.3	28.8	31.3	31.2
Final	32.7	31.3	28.9	31.7	31.2
Washington					
July	37.7	33.3	40.3	31.7	39.0
August	38.3	33.4	41.0	31.9	38.0
Final	38.2	33.4	41.1	31.9	37.9
10 State					
July	42.1	45.5	40.6	39.7	42.3
August	42.3	45.0	40.8	40.7	41.8
Final	42.3	45.0	40.8	40.8	41.8

Rye Area Planted and Harvested, Yield, and Production – States and United States: 2022-2024

State	Area planted [1]			Area harvested		
	2022	2023	2024	2022	2023	2024
	(1,000 acres)	(1,000 acres)	(1,000 acres)	(1,000 acres)	(1,000 acres)	(1,000 acres)
Minnesota	70	75	80	28	22	20
North Dakota	110	96	84	60	63	58
Oklahoma	265	260	250	50	45	70
Pennsylvania	190	185	175	21	18	28
South Dakota	(D)	(D)	57	(D)	(D)	26
Wisconsin	230	240	260	20	15	30
Other States [2]	1,310	1,437	1,300	166	159	170
United States	2,175	2,293	2,206	345	322	402

State	Yield			Production		
	2022	2023	2024	2022	2023	2024
	(bushels)	(bushels)	(bushels)	(1,000 bushels)	(1,000 bushels)	(1,000 bushels)
Minnesota	52.0	44.0	47.0	1,456	968	940
North Dakota	46.0	41.0	48.0	2,760	2,583	2,784
Oklahoma	20.0	17.0	27.0	1,000	765	1,890
Pennsylvania	38.0	34.0	39.0	798	612	1,092
South Dakota	(D)	(D)	56.0	(D)	(D)	1,456
Wisconsin	58.0	41.0	39.0	1,160	615	1,170
Other States [2]	31.8	30.4	31.7	5,279	4,832	5,397
United States	36.1	32.2	36.6	12,453	10,375	14,729

(D) Withheld to avoid disclosing data for individual operations.
[1] Includes area planted in preceding fall.
[2] For 2022 and 2023, other States include Georgia, Illinois, Kansas, Michigan, Nebraska, New York, North Carolina, South Dakota, and Texas. For 2024, other States include Georgia, Illinois, Kansas, Michigan, Nebraska, New York, North Carolina, and Texas.

Small Grain Annual Summary Area Planted and Harvested, Yield, and Production in Domestic Units – United States: 2023-2024

Crop	Area planted		Area harvested	
	2023	2024	2023	2024
	(1,000 acres)	(1,000 acres)	(1,000 acres)	(1,000 acres)
Barley	3,109	2,373	2,574	1,875
Oats	2,555	2,213	831	886
Rye	2,293	2,206	322	402
Wheat, all	49,575	46,079	37,077	38,469
Winter	36,699	33,390	24,558	26,103
Durum	1,676	2,064	1,604	2,036
Other spring	11,200	10,625	10,915	10,330

Crop	Yield per acre		Production	
	2023	2024	2023	2024
	(bushels)	(bushels)	(1,000 bushels)	(1,000 bushels)
Barley	72.3	76.7	186,127	143,836
Oats	68.6	76.5	57,045	67,793
Rye	32.2	36.6	10,375	14,729
Wheat, all	48.7	51.2	1,803,942	1,971,301
Winter	50.6	51.7	1,242,368	1,348,930
Durum	37.0	39.3	59,329	80,051
Other spring	46.0	52.5	502,245	542,320

Small Grain Annual Summary Area Planted and Harvested, Yield, and Production in Metric Units – United States: 2023-2024

Crop	Area planted		Area harvested	
	2023	2024	2023	2024
	(hectares)	(hectares)	(hectares)	(hectares)
Barley	1,258,180	960,330	1,041,670	758,790
Oats	1,033,980	895,580	336,300	358,560
Rye	927,950	892,750	130,310	162,690
Wheat, all	20,062,510	18,647,710	15,004,690	15,568,020
Winter	14,851,720	13,512,600	9,938,380	10,563,620
Durum	678,260	835,280	649,120	823,950
Other spring	4,532,530	4,299,830	4,417,190	4,180,450

Crop	Yield per hectare		Production	
	2023	2024	2023	2024
	(metric tons)	(metric tons)	(metric tons)	(metric tons)
Barley	3.89	4.13	4,052,440	3,131,660
Oats	2.46	2.74	828,010	984,010
Rye	2.02	2.30	263,540	374,130
Wheat, all	3.27	3.45	49,095,260	53,650,020
Winter	3.40	3.48	33,811,720	36,711,860
Durum	2.49	2.64	1,614,670	2,178,630
Other spring	3.09	3.53	13,668,870	14,759,530

Crop Comments

Oats: Production in 2024 was estimated at 67.8 million bushels, up 23 percent from 2023 in comparable States. Yield was estimated at a record high 76.5 bushels per acre, up 7.7 bushels from the previous year in comparable States. Harvested area, at 886 thousand acres, was 11 percent above 2023 in comparable States. Record low acres were planted in Idaho, Maine, Ohio, and Texas. Record low acres were harvested in Idaho and Maine. Record high yields were estimated in Illinois, Kansas, Minnesota, and North Dakota.

Nationally, oat producers seeded 63 percent of the 2024 acreage by April 28, sixteen percentage points ahead of the previous year and 12 percentage points ahead of the 5-year average. Fifty-nine percent of the oat acreage had emerged by May 12, nine percentage points ahead of the previous year and 7 percentage points ahead of the 5-year average. Heading of the oat acreage advanced to 95 percent complete by July 21, equal to the previous year and the 5-year average. Oat producers harvested 47 percent of the acreage by August 4, two percentage points ahead of the previous year and the 5-year average. At that time, harvest progress was at or ahead of the 5-year average in 6 of the 9 weekly *Crop Progress* estimating States. Seventy-eight percent of the Nation's oat acreage was harvested by August 25, one percentage point behind the previous year and 3 percentage points behind the 5-year average. As of September 15, ninety-seven percent of the oat acreage was harvested, equal to 2023 and the 5-year average.

Beginning in 2024, estimates for oats were discontinued in Arkansas, California, Missouri, and Oklahoma.

Barley: Production was estimated at 144 million bushels, down 23 percent from the 2023 total of 186 million bushels. The average yield, at 76.7 bushels per acre, was up 4.4 bushels from the previous year. Producers seeded 2.37 million acres in 2024, down 24 percent from 2023. Harvested area, at 1.88 million acres, was down 27 percent from 2023.

Record high planted acres were estimated in Alaska. Record low planted acres were estimated in California, Minnesota, North Dakota, Oregon, and Utah. Record low harvested acres were estimated in South Dakota. Record high yields were estimated in Colorado, Kansas, North Dakota, Pennsylvania and Wyoming.

Nationwide, barley producers seeded 24 percent of the Nation's acreage by April 21, fifteen percentage points ahead of the previous year and 5 percentage points ahead of the 5-year average. By April 21, emergence was evident in 2 percent of the Nation's barley acreage, 1 percentage point ahead of the previous year but 1 percentage point behind the 5-year average. Nationally, 88 percent of the barley acreage was sown by May 26, seven percentage points ahead of the previous year and 2 percentage points ahead of the 5-year average. Sixty-two percent of the barley acreage emerged by May 26, thirteen percentage points ahead of the previous year and 3 percentage points ahead of the 5-year average. Heading of the Nation's barley acreage advanced to 38 percent complete by June 30, six percentage points ahead of the previous year but equal to the 5-year average. As of July 28, barley producers had harvested 2 percent of the Nation's acreage, two percentage points behind last year and the 5-year average. By August 25, forty-seven percent of the barley acreage was harvested, 11 percentage points behind the previous year and 14 percentage points behind the 5-year average. Overall, 65 percent of the barley acreage was reported in good to excellent condition on August 25, sixteen percentage points above the same time in 2023. By September 15, ninety-four percent of the barley acreage was harvested, 2 percentage points ahead of the previous year and 1 percentage point ahead of the 5-year average.

Winter wheat: Winter wheat production for 2024 totaled 1.35 billion bushels, up 9 percent from the 2023 total of 1.24 billion bushels in comparable States. The United States yield, at 51.7 bushels per acre, was up 1.1 bushels from 2023 in comparable States. Area harvested for grain was estimated at 26.1 million acres, up 6 percent from 2023 in comparable States. Record high yields were estimated in Missouri, South Dakota, and Wisconsin for 2024.

Compared with 2023, harvested acreage was up 17 percent in the major Hard Red Winter (HRW) growing States, the primary winter wheat-producing area. HRW production totaled 770 million bushels, up 29 percent from 2023.

In the Soft Red Winter (SRW) growing area, harvested acreage decreased 20 percent from 2023 in comparable States. SRW production totaled 342 million bushels, down 23 percent from 2023 in comparable States.

White winter wheat production totaled 236 million bushels, up 20 percent from 2023. Harvested acreage was up 2 percent from 2023.

Seeding of the 2024 winter wheat acreage began in mid-September 2023 with 7 percent sown by September 10. By October 8, producers had sown 57 percent of the intended 2024 winter wheat acreage, 4 percentage points ahead of the previous year but equal to the 5-year average. Nationwide, 29 percent of the winter wheat acreage had emerged by October 8, five percentage points ahead of the previous year but 1 percentage point behind the 5-year average. Emergence was at or behind the 5-year average in 12 of the 18 estimating States. Producers had sown 84 percent of the intended 2024 winter wheat acreage by October 29, two percentage points behind the previous year and 1 percentage point behind the 5-year average. Winter wheat planting had double-digit advances in 9 of the 18 estimating States during the week. Nationwide, 64 percent of the winter wheat acreage had emerged by October 29, four percentage points ahead of the previous year but equal to the 5-year average. Winter wheat emergence advanced by 10 percentage points or more from the previous week in 14 of the 18 estimating States. Overall, 47 percent of the 2024 winter wheat acreage was reported in good to excellent condition based on conditions as of October 29, compared with 28 percent at the same time the previous year.

Seeding of the 2024 acreage was at 93 percent by November 12, two percentage points behind the previous year but equal to the 5-year average. Winter wheat planting was complete or nearing completion (95 percent or more) in 10 of the 18 estimating States. Nationwide, 81 percent of the winter wheat acreage had emerged by November 12, one percentage point ahead of the previous year and one percentage point ahead of the 5-year average. Emergence was at or ahead of the 5-year average in 13 of the 18 estimating States. Overall, 47 percent of the 2024 winter wheat acreage was reported in good to excellent condition for the week ending November 12, compared with 32 percent at the same time the previous year as the acreage was entering dormancy.

As the acreage was emerging from dormancy, 56 percent of the 2024 winter wheat acreage was reported in good to excellent condition, compared with 27 percent at the same time the previous year as of April 7. By April 28, thirty percent of the Nation's winter wheat acreage was headed, 7 percentage points ahead of the previous year and 9 percentage points ahead of the 5-year average. On April 28, forty-nine percent of the 2024 winter wheat acreage was reported in good to excellent condition, 21 percentage points above the previous year.

By May 12, fifty-seven percent of the Nation's winter wheat acreage was headed, 11 percentage points ahead of the previous year and 13 percentage points ahead of the 5-year average. By May 26, seventy-seven percent of the Nation's winter wheat acreage was headed, 8 percentage points ahead of the previous year and 8 percentage points ahead of the 5-year average. As of May 26, forty-eight percent of the 2024 winter wheat acreage was reported in good to excellent condition, 14 percentage points above the same time the previous year.

Forty percent of the 2024 winter wheat acreage was harvested by June 23, nineteen percentage points ahead of the previous year and 15 percentage points ahead of the 5-year average. As of June 23, fifty-two percent of the 2024 winter wheat United States acreage was reported in good to excellent condition, 12 percentage points above the same time the previous year.

Seventy-one percent of the 2024 winter wheat acreage had been harvested by July 14, eighteen percentage points ahead of the previous year and 9 percentage points ahead of the 5-year average. Winter wheat harvest progress was complete or nearing completion in 8 of 18 estimating States. In Kansas, 97 percent of the State's winter wheat acreage was harvested by July 14, twenty-nine percentage points ahead of the previous year and 11 percentage points ahead of the 5-year average.

Ninety-six percent of the 2023 winter wheat acreage had been harvested by August 18, one percentage point ahead of the previous year and one percentage point ahead of the 5-year average. Winter wheat harvest progress was complete or nearing completion in all estimating States except Idaho, Montana, Oregon, and Washington.

Beginning in 2024, estimates for winter wheat were discontinued in New Jersey.

Other spring wheat: Production for 2024 was estimated at 542 million bushels, up 8 percent from the 2023 total of 502 million bushels. Harvested area totaled 10.3 million acres, down 5 percent from 2023. The United States yield was a record high, estimated at 52.5 bushels per acre, up 6.5 bushels from 46.0 bushels per acre in 2023. Minnesota and North Dakota yields were both record highs. Of the total production, 503 million bushels were Hard Red Spring wheat, up 8 percent from the 2023 total.

Seeding of the 2024 spring wheat acreage began in April. Thirty-four percent of the spring wheat acreage was seeded by April 28, twenty-four percentage points ahead of the previous year and 15 percentage points ahead of the 5-year average. As of April 28, Washington led the Nation in planting progress with 76 percent. By April 28, five percent of the Nation's spring wheat acreage had emerged, 3 percentage points ahead of last year but equal to the 5-year average.

As of May 12, sixty-one percent of the spring wheat acreage was seeded, 26 percentage points ahead of the previous year and 13 percentage points ahead of the 5-year average. As of May 12, twenty-five percent of the Nation's spring wheat acreage had emerged, 14 percentage points ahead of the previous year and 7 percentage points ahead of the 5-year average. As of May 26, eighty-eight percent of the spring wheat acreage was seeded, 9 percentage points ahead of the previous year and 7 percentage points ahead of the 5-year average. As of May 26, sixty-one percent of the Nation's spring wheat acreage had emerged, 11 percentage points ahead of the previous year and 9 percentage points ahead of the 5-year average.

By June 23, eighteen percent of the Nation's spring wheat acreage had reached the headed stage, 7 percentage points behind the previous year but equal to the 5-year average. Seventy-one percent of the Nation's spring wheat was rated in good to excellent condition, 21 percentage points above the same time the previous year.

By July 14, seventy-six percent of the Nation's spring wheat acreage had reached the headed stage, 6 percentage points behind the previous year and 2 percentage points behind the 5-year average. Seventy-seven percent of the spring wheat was rated in good to excellent condition, 2 percentage points above the previous week and 26 percentage points above the same time the previous year.

By August 18, thirty-one percent of the spring wheat had been harvested, 4 percentage points behind the previous year and 5 percentage points behind the 5-year average. Seventy-three percent of the Nation's spring wheat was rated in good to excellent condition, 35 percentage points above the same time the previous year.

By September 1, seventy percent of the spring wheat was harvested, 2 percentage points ahead of the previous year but equal to the 5-year average.

Durum wheat: Production for 2024 was estimated at 80.1 million bushels, up 36 percent from the 2023 total of 58.7 million bushels in comparable States. Area harvested for grain totaled 2.04 million acres, up 28 percent from 2023 in comparable States. The United States yield was estimated at 39.3 bushels per acre, up 2.5 bushels from the 2023 yield in comparable States. North Dakota yield was a record high in 2024. Compared with last year, production in Montana and North Dakota, the largest Durum wheat-producing States, was down 5 percent in Montana but up 61 percent in North Dakota. Harvest was 98 percent complete in Montana and 77 percent complete in North Dakota by September 8.

Beginning in 2024, estimates for Durum wheat were discontinued in Idaho.

Rye: Production for 2024 was estimated at 14.7 million bushels, up 42 percent from the 2023 total, and was the highest production since 1987. Harvested area totaled 402,000 acres, up 25 percent from last year. The United States yield was a record high at 36.6 bushels per acre and was up 4.4 bushels from 2023. Oklahoma yield was a record high. Planted area totaled 2.21 million acres, down 4 percent from last year. Much of those acres were used as a cover crop.

Statistical Methodology

Survey procedures: Objective yield and farm operator surveys were conducted to gather information on small grain acreage, yield, and production. The objective yield survey was conducted in 10 States that accounted for 71 percent of the 2023 winter wheat production. Early in the growing season, farm operators were interviewed to seek permission to randomly locate two sample plots in selected winter wheat fields. Throughout the growing season, counts such as number of stalks, heads in late boot, and number of emerged heads were collected from these plots. The plots were revisited each month until crop maturity when the heads were clipped, threshed, and weighed. After the farm operator harvested the sample field, enumerators revisited the sample to collect data in order to measure harvesting loss.

Data from operators was collected by mail, internet, or telephone, to obtain information on crop acreage, yield and production for the 2024 crop year. Approximately 56,000 producers were interviewed during the first two weeks of September and asked questions pertaining to planted and harvested area as well as yield and production.

Estimating Procedures: National and State level objective yield and grower reported data were reviewed for reasonableness and consistency with historical estimates. The survey data were also reviewed considering weather patterns and crop progress compared with previous years. Each Regional Field Office submits an estimate and written analysis for their State to the Agricultural Statistics Board (ASB). The ASB uses the survey data, administrative data, and the State analysis to prepare the estimates published in this report.

Revision Policy: Estimates contained in this report may be revised in the *Crop Production Annual Summary* report published in January should new information become available. Previous year acreage, yield, and production estimates can be revised in the *Small Grain Summary* published the following year, if new information is available that would justify a change. Estimates will also be reviewed after data for the 5-year Census of Agriculture are available. No revisions will be made after that date.

Reliability: The surveys used to make the acreage, yield, and production estimates contained in this report are subject to sampling and non-sampling type errors that are common to all surveys. Reliability of the objective yield and farmer survey must be treated separately because the survey designs for the two surveys are different. The objective yield indications are subject to sampling variability because all acres of winter wheat are not included in the sample.

The farm operator survey indications are also subject to sampling variability because all operations with small grains are not included in the sample. This variability, as measured by the relative standard error at the National level, is approximately 1.8 percent for winter wheat, 6.2 percent for Durum wheat, and 3.8 percent for other spring wheat. This means that chances are approximately 95 out of 100 that survey estimates for production will be within plus or minus 3.6 percent for winter wheat, 12.4 percent for Durum wheat, and 7.6 percent for other spring wheat of the value that could be developed by averaging the estimates produced from all possible samples selected from the same population and surveyed using the same procedures. The relative standard errors for barley, oats, and rye are 4.2, 5.9, and 9.1 percent, respectively.

Survey indications are also subject to non-sampling errors such as omission, duplication, imputation for missing data, and mistakes in reporting, recording, and processing the data. These errors cannot be measured directly, but they are minimized through rigid quality controls in the data collection process and a careful review of all reported data for consistency and reasonableness.

Information Contacts

Listed below are the commodity statisticians in the Crops Branch of the National Agricultural Statistics Service to contact for additional information. E-mail inquiries may be sent to nass@usda.gov.

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- Joshua Bates – Hemp, Oats, Soybeans ..... (202) 690-3234
- Natasha Bruton – Barley, Cotton System Consumption and Stocks, Grain Crushings ..... (202) 690-1042
- David Colwell – Fats and Oils, Flour Milling Products ..... (202) 720-8800
- Michelle Harder – Hay, Peanuts ..... (202) 690-8533
- Brittany Brown – Corn, Proso Millet, Rice ..... (202) 720-2127
- James Johanson – Rye, Wheat ..... (202) 720-8068
- Becky Sommer – Cotton, Cotton Ginnings, Sorghum ..... (202) 720-5944
- Travis Thorson – Canola, Rapeseed, Safflower, Sunflower ..... (202) 720-7369

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- All reports are available electronically, at no cost, on the NASS web site: www.nass.usda.gov.

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- Cornell's Mann Library has launched a new website housing NASS's and other agency's archived reports. The new website, https://usda.library.cornell.edu. All email subscriptions containing reports will be sent from the new website, https://usda.library.cornell.edu. To continue receiving the reports via e-mail, you will have to go to the new website, create a new account and re-subscribe to the reports. If you need instructions to set up an account or subscribe, they are located at: https://usda.library.cornell.edu/help. You should whitelist notifications@usda-esmis.library.cornell.edu in your email client to avoid the emails going into spam/junk folders.

For more information on NASS surveys and reports, call the NASS Agricultural Statistics Hotline at (800) 727-9540, 7:30 a.m. to 4:00 p.m. ET, or e-mail: nass@usda.gov.

USDA Fall Data Users' Meeting

Virtual Meeting

October 15 & 16, 2024
Starting at 12:00 pm ET

USDA's National Agricultural Statistics Service (NASS) will hold a virtual meeting for users of U.S. domestic and international agriculture data. NASS is organizing the 2024 Fall Data Users' Meeting in cooperation with five other USDA agencies – Agricultural Marketing Service, Economic Research Service, Farm Service Agency, Foreign Agricultural Service, and World Agricultural Outlook Board – and the Census Bureau's Foreign Trade Division. Representatives will provide agency updates, answer questions, and listen to concerns from data users.

Abbreviated Agenda

Day 1 – October 15
Agency Updates– *All agencies*
2022 Census of Agriculture Results- *National Agricultural Statistics Service*
LMR Live Cattle Data Dashboard - *Agricultural Marketing Service*

Day 2 – October 16
Open Forum – *All agencies*
ERS' Cotton, Wool, and Textile Data: An Overview – *Economic Research Service*

For registration details or additional information about the Data Users' Meeting, see the meeting page on the NASS website (https://www.nass.usda.gov/go/data_users).