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# Minnesota AgriView

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## CHICKENS & EGGS

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Minnesota **egg production** during April 2018 was 268 million eggs, down 2 percent from last month but up 4 percent from last year. The average number of **all layers on hand** during April 2018 was 11.1 million, down 1 percent from last month but up 6 percent from last year. **Eggs per 100 layers** for April were 2,411, down slightly from last month and down 2 percent from last year.

United States egg production totaled 8.79 billion during April 2018, up 1 percent from last year. Production included 7.65 billion table eggs, and 1.14 billion hatching eggs, of which 1.06 billion were broiler-type and 79.6 million were egg-type. The average number of layers during April 2018 totaled 386 million, up 3 percent from last year. April egg production per 100 layers was 2,277 eggs, down 2 percent from April 2017. All layers in the United States on May 1, 2018 totaled 385 million, up 3 percent from last year. The 385 million layers consisted of 322 million layers producing table or market type eggs, 59.3 million layers producing broiler-type hatching eggs, and 3.46 million layers producing egg-type hatching eggs. Rate of lay per day on May 1, 2018, averaged 75.8 eggs per 100 layers, down 1 percent from May 1, 2017.

### Layers on Hand and Eggs Produced – States and United States: During April 2017 and 2018

[Data may not add to totals due to rounding. Data by type of flock not shown for some states to avoid disclosing individual operations, data included in United States totals.]

State	Table egg layers in flocks 30,000 & above		All layers on hand		Eggs per 100 layers		Total egg production		Table egg production	
	2017	2018	2017	2018	2017	2018	2017	2018	2017	2018
	(1,000 layers)	(1,000 layers)	(1,000 layers)	(1,000 layers)	(eggs)	(eggs)	(million eggs)	(million eggs)	(million eggs)	(million eggs)
Alabama .....	1,287	1,275	9,044	9,796	1,853	1,805	167.6	176.8	32.4	28.6
Arkansas .....	3,755	4,032	13,988	14,333	2,021	1,951	282.7	279.7	97.2	102.0
California .....	12,296	13,394	12,902	14,046	2,332	2,471	300.9	347.1	(D)	(D)
Colorado .....	4,026	4,333	4,456	4,735	2,534	2,507	112.9	118.7	(D)	(D)
Florida .....	7,496	7,040	7,882	7,483	2,285	2,180	180.1	163.1	175.2	157.8
Georgia .....	9,408	9,200	19,259	19,347	2,111	1,993	406.6	385.6	226.8	203.7
Illinois .....	4,543	5,222	5,016	5,690	2,456	2,388	123.2	135.9	118.4	131.8
Indiana .....	31,967	31,646	32,830	32,425	2,375	2,332	779.7	756.3	763.4	742.5
Iowa .....	53,408	55,055	54,694	56,569	2,388	2,322	1,306.2	1,313.3	1,291.0	1,297.0
Maryland .....	2,709	2,398	2,877	2,545	2,426	2,287	69.8	58.2	68.6	57.3
Michigan .....	14,023	14,948	14,286	15,188	2,486	2,513	355.2	381.7	(D)	(D)
<b>Minnesota .....</b>	<b>9,984</b>	<b>10,533</b>	<b>10,504</b>	<b>11,093</b>	<b>2,456</b>	<b>2,411</b>	<b>258.0</b>	<b>267.5</b>	<b>250.4</b>	<b>259.9</b>
Mississippi .....	1,428	1,462	5,628	5,791	1,986	2,029	111.8	117.5	34.2	35.8
Missouri .....	7,305	7,046	10,888	10,796	2,433	2,455	264.9	265.0	(D)	(D)
Nebraska .....	8,146	7,522	8,254	7,764	2,455	2,472	202.6	191.9	202.6	188.2
New York .....	5,255	4,848	5,631	5,231	2,484	2,409	139.9	126.0	(D)	(D)
North Carolina .....	7,192	7,165	15,285	15,606	2,117	2,114	323.6	329.9	177.9	178.0
Ohio .....	29,667	31,518	30,585	32,500	2,350	2,207	718.8	717.2	(D)	(D)
Oregon .....	2,167	2,201	2,306	2,340	2,593	2,585	59.8	60.5	59.8	60.5
Pennsylvania .....	25,840	25,861	27,951	27,934	2,416	2,436	675.2	680.5	643.5	651.9
South Carolina .....	2,578	3,146	3,770	4,369	2,324	2,152	87.6	94.0	65.5	72.7
South Dakota .....	2,607	2,571	2,749	2,713	2,364	2,503	65.0	67.9	65.0	67.9
Texas .....	17,330	17,803	21,639	22,278	2,167	2,209	468.9	492.1	(D)	(D)
Utah .....	5,096	5,141	5,134	5,179	2,429	2,356	124.7	122.0	124.7	122.0
Virginia .....	987	780	2,711	2,507	2,162	2,190	58.6	54.9	27.8	24.8
Washington .....	6,954	6,592	7,119	6,757	2,545	2,439	181.2	164.8	(D)	(D)
Wisconsin .....	5,362	6,189	6,013	6,854	2,435	2,336	146.4	160.1	(D)	(D)
Other States <sup>1</sup> .....	23,535	24,660	32,347	34,109	2,209	2,226	714.7	759.3	589.2	626.9
United States .....	306,351	313,581	375,748	385,978	2,312	2,277	8,686.6	8,787.5	7,572.8	7,646.3

(D) Withheld to avoid disclosing data for individual operations. <sup>1</sup> Includes data for states not published in this table.

## FARM LABOR

There were 35,000 workers hired directly by farms in the Lake Region (Michigan, Minnesota, and Wisconsin) during the reference week of January 7-13, 2018. Farm operators paid their hired workers an average wage rate of \$13.06 per hour, down \$0.54 from January 2017. The number of hours worked averaged 37.7 for hired workers during the reference week, compared with 39.0 hours in January 2017.

During the reference week of April 8-14 2018, there were 43,000 workers hired directly by farms in the Lake Region (Michigan, Minnesota, and Wisconsin). Farm operators paid their hired workers an average wage rate of \$13.02 per hour during the April 2018 reference week, down \$0.33 from April 2017. The number of hours worked averaged 39.0 for hired workers during the reference week, up from 38.7 hours in April 2017.

### Hired Workers, Hours Worked and Wage Rates – Lake Region and United States: 2017-2018

[Lake Region includes Michigan, Minnesota, and Wisconsin]

	Lake Region			United States		
	April 2017	January 2018	April 2018	April 2017	January 2018	April 2018
Hired workers on farms..... 1,000 workers	46	35	43	673	534	648
Hours worked by hired workers .... hours per week	38.7	37.7	39.0	40.4	38.0	40.2
Wage rate <sup>1</sup>						
Field and livestock combined..... dollars per hour	12.70	12.30	12.35	12.32	12.86	12.74
Field ..... dollars per hour	12.58	12.18	12.28	12.22	12.84	12.72
Livestock ..... dollars per hour	12.83	12.35	12.41	12.53	12.89	12.78
All hired workers..... dollars per hour	13.35	13.06	13.02	13.23	14.08	13.72

<sup>1</sup> Benefits, such as housing and meals, are provided to some workers but the values are not included in the wage rates.

There were 648,000 workers hired directly by farm operators on the Nation's farms and ranches during the week of April 8-14, 2018, down 4 percent from the April 2017 reference week. Workers hired directly by farm operators numbered 534,000 during the week of January 7-13, 2018, up slightly from the January 2017 reference week.

Farm operators paid their hired workers an average wage of \$13.72 per hour during the April 2018 reference week, up 4 percent from the April 2017 reference week. Field workers received an average of \$12.72 per hour, an increase of 4 percent. Livestock workers earned \$12.78 per hour, up 2 percent. The field and livestock worker combined wage rate, at \$12.74 per hour, was up 3 percent from the 2017 reference week. Hired laborers worked an average of 40.2 hours during the April 2018 reference week, down slightly from the hours worked during the April 2017 reference week.

Farm operators paid their hired workers an average wage of \$14.08 per hour during the January 2018 reference week, up 5 percent from the January 2017 reference week. Field workers received an average of \$12.84 per hour, up 6 percent, while livestock workers earned \$12.89 per hour, up 2 percent from a year earlier. The field and livestock worker combined wage rate, at \$12.86 per hour, was up 4 percent from the January 2017 reference week. Hired laborers worked an average of 38.0 hours during the January 2018 reference week, equaling the hours worked during the January 2017 reference week.

#### April Reference Week

For the April 2018 reference week, the largest percentage increases in the number of hired workers from the 2017 reference week occurred in the Cornbelt I (Illinois, Indiana, and Ohio), Cornbelt II (Iowa and Missouri), and Northeast I (Connecticut, Maine, Massachusetts, New Hampshire, New York, Rhode Island and Vermont), regions. The Cornbelt I and Cornbelt II regions saw the largest increases, each with 17 percent more workers on regional farms.

The largest percentage decreases in the number of hired workers from the 2017 reference week occurred in the Appalachian II (Kentucky, Tennessee, and West Virginia), Northeast II (Delaware, Maryland, New Jersey, and Pennsylvania), and Southeast (Alabama, Georgia, and South Carolina) regions. Appalachian II saw the biggest decline, with workers down 25 percent from the 2017 reference week. The largest percentage increases in average wage rates for all hired workers occurred in the Mountain I (Idaho, Montana, and Wyoming), Mountain II (Colorado, Nevada, and Utah), and Mountain III (Arizona and New Mexico) regions.

#### January Reference Week

For the January 2018 reference week, the largest percentage increases in the number of hired workers from the 2017 reference week occurred in the Hawaii, Mountain II (Colorado, Nevada, and Utah), and Northeast I (Connecticut, Maine, Massachusetts, New Hampshire, New York, Rhode Island, and Vermont) regions. The Northeast I region saw the largest increase, with 40 percent more workers on the region's farms.

The largest percentage decreases in the number of hired workers from the 2017 reference week occurred in the Florida, Northeast II (Delaware, Maryland, New Jersey, and Pennsylvania), and Southeast (Alabama, Georgia, and South Carolina) regions. The Southeast region saw the biggest decline, with workers down 35 percent from the 2017 reference week. The largest percentage increases in average wage rates for all hired workers occurred in the California, Mountain II, and Mountain III (Arizona and New Mexico) regions.

# AGRICULTURAL CHEMICAL USE

The National Agricultural Statistics Service (NASS) Agricultural Chemical Use Program is the U.S. Department of Agriculture's official source of statistics about on-farm and post-harvest fertilizer and pesticide use and pest management practices.

The 2017 Agricultural Chemical Use Survey collected data about fertilizer and pesticide use as well as pest management practices in growing wheat and soybeans. NASS conducted the survey in 18 states that together accounted for 90 percent of the 46.0 million acres planted to wheat in the United States in 2017, including 85 percent of winter wheat acres and 99 percent of spring and durum wheat acres. NASS also conducted the survey in 16 states that accounted for 92 percent of the 90.1 million acres planted to soybeans in the United States in 2017.

For complete results of this survey, visit <https://www.nass.usda.gov>

## Spring Wheat

**Fertilizer Use:** Fertilizer refers to a soil-enriching input that contains one or more plant nutrients, primarily nitrogen (N), phosphate (P<sub>2</sub>O<sub>5</sub>), and potash (K<sub>2</sub>O). Of the three primary macronutrients, nitrogen was the most widely used on spring wheat planted in Minnesota. Farmers applied nitrogen to 98 percent of planted acres at an average rate of 118 pounds per acre per year. Macronutrients phosphate and potash were applied to 96 and 59 percent of acres, respectively. The secondary macronutrient, sulfur, was applied to 31 percent of acres planted to spring wheat.

**Pesticide Use:** The pesticide active ingredients used on spring wheat are classified in this report as herbicides (targeting weeds), insecticides (targeting insects), fungicides (targeting fungal disease) and other chemicals (targeting all other pests and other materials, including extraneous crop foliage). Herbicide active ingredients were applied to 96 percent of the spring wheat acres planted. Tebuconazole was the most widely used pesticide overall, with 67 percent of spring wheat acres treated with the fungicide. Fungicide and insecticide active ingredients were applied to 86 percent and 37 percent of spring wheat acres planted, respectively.

	Minnesota			Program States <sup>1</sup>		
	Planted acres treated (%)	Rate applied per year (pounds per acre)	Total pounds applied (1,000 pounds)	Planted acres treated (%)	Rate applied per year (pounds per acre)	Total pounds applied (1,000 pounds)
<b>Fertilizer Use on Spring Wheat</b>						
Nitrogen	98	118	134,300	96	98	984,500
Phosphate	96	47	52,300	89	40	367,700
Potash	59	37	25,200	34	21	73,900
Sulfur	31	11	4,000	38	11	45,400
<b>Pesticide Use on Spring Wheat by Active Ingredient</b>						
<b>FUNGICIDE:</b>						
Fluxapyroxad	10	0.025	3	3	0.025	9
Propiconazole	57	0.092	61	30	0.086	268
Prothioconazole	47	0.085	46	13	0.082	113
Pyraclostrobin	14	0.056	9	6	0.056	32
Tebuconazole	67	0.096	74	22	0.094	214
TOTAL FUNGICIDE <sup>2</sup>	86		199	45		692
<b>HERBICIDE:</b>						
Bromoxynil Heptan.	21	0.117	28	10	0.113	114
Bromoxynil Octanoate	46	0.197	105	34	0.173	611
Clopyralid Mono Salt	29	0.087	30	32	0.077	253
Flucarbazone-Sodium	15	0.025	4	12	0.021	27
Fluroxypyr 1-MHE	34	0.091	36	46	0.083	401
Glyphosate Iso. Salt	5	0.625	36	37	0.845	3,245
Glyphosate Pot. Salt	6	0.923	69	18	1.192	2,202
MCPA, 2-Ethylhexyl	46	0.311	164	23	0.277	674
Methanone	18	0.033	7	21	0.028	60
Pinoxaden	17	0.079	15	10	0.059	59
Thifensulfuron	36	0.013	5	18	0.013	24
Tribenuron-Methyl	38	0.005	2	20	0.015	33
TOTAL HERBICIDE <sup>2</sup>	96		538	96		9,433
<b>INSECTICIDE:</b>						
Lambda-Cyhalothrin	33	0.016	6	9	0.017	16
TOTAL INSECTICIDE <sup>2</sup>	37		16	12		69

<sup>1</sup> The 8 program states surveyed about spring wheat in the 2017 ARMS were California, Idaho, Minnesota, Montana, North Dakota, Oregon, South Dakota, and Washington. <sup>2</sup> Total Fungicide, Herbicide and Insecticide includes pesticides that are not listed in this table. Pesticides were not listed if data were withheld to avoid disclosing data for individual operations, or the total was less than half the rounding unit.

## Soybeans

**Fertilizer Use:** Fertilizer refers to a soil-enriching input that contains one or more plant nutrients, primarily nitrogen (N), phosphate (P<sub>2</sub>O<sub>5</sub>), and potash (K<sub>2</sub>O). Of the three primary macronutrients, potash was the most widely used on soybean acres planted in Minnesota. Minnesota farmers applied potash to 34 percent of planted acres at an average rate of 59 pounds per acre per year. Macronutrients nitrogen and phosphate were applied to 26 and 28 percent of soybean acres, at an average rate of 16 and 59 pounds per acre per year, respectively. The secondary macronutrient, sulfur, was applied to 6 percent of acres planted to soybeans.

**Pesticide Use:** The pesticide active ingredients used on soybeans are classified in this report as herbicides (targeting weeds), insecticides (targeting insects), fungicides (targeting fungal disease) and other chemicals (targeting all other pests and other materials, including extraneous crop foliage). Herbicide active ingredients were applied to 94 percent of the soybeans planted. Fomesafen sodium and sulfentrazone were the most widely used pesticides overall, however glyphosate potassium salt was the active ingredient with the greatest total amount applied. Fungicide and insecticide active ingredients were applied to 13 and 38 percent, respectively, of soybean acres planted in Minnesota.

	Minnesota			Program States <sup>1</sup>		
	Planted acres treated (%)	Rate applied per year (pounds per acre)	Total pounds applied (1,000 pounds)	Planted acres treated (%)	Rate applied per year (pounds per acre)	Total pounds applied (1,000 pounds)
<b>Fertilizer Use on Soybeans</b>						
Nitrogen	26	16	35,200	31	18	468,300
Phosphate	28	41	95,000	41	52	1,771,200
Potash	34	59	161,000	42	91	3,207,900
Sulfur	6	10	5,100	9	15	112,200
<b>Pesticide Use on Soybeans by Active Ingredient</b>						
<b>FUNGICIDE:</b>						
Azoxystrobin	5	0.086	32	4	0.102	347
Fluxapyroxad	7	0.067	36	5	0.055	215
Propiconazole	4	0.104	31	3	0.095	212
Pyraclostrobin	7	0.142	81	5	0.121	552
TOTAL FUNGICIDE <sup>2</sup>	13		203	14		1,937
<b>HERBICIDE:</b>						
Acetochlor	3	0.683	157	3	1.114	3,213
Chlorimuron-Ethyl	5	0.026	10	12	0.020	209
Clethodim	14	0.069	76	11	0.100	915
Cloransulam-Methyl	23	0.028	53	9	0.026	188
Dicamba, Digly. Salt	6	0.671	324	7	0.612	3,729
Dimethenamid-P	5	0.759	296	5	0.451	1,905
Fluazifop-P-Butyl	6	0.090	46	3	0.109	255
Flumioxazin	7	0.074	40	13	0.074	806
Fluthiacet-Methyl	2	0.004	1	3	0.005	12
Fomesafen Sodium	34	0.222	612	19	0.240	3,858
Glufosinate-Ammonium	10	0.514	406	13	0.587	6,424
Glyphosate	23	0.926	1,717	8	0.923	6,266
Glyphosate Dim. Salt	4	1.463	467	2	1.502	2,693
Glyphosate Iso. Salt	27	0.873	1,892	46	1.145	44,232
Glyphosate Pot. Salt	26	1.838	3,910	30	1.590	40,318
Imazethapyr	4	0.041	13	8	0.047	328
Metribuzin	7	0.220	125	18	0.256	3,726
Pyroxasulfone	8	1.105	72	10	0.125	1,034
S-Metolachlor	9	1.360	993	16	1.214	15,911
Saflufenacil	3	0.018	4	8	0.028	184
Sulfentrazone	34	0.167	465	22	0.179	3,309
Trifluralin	4	0.854	255	2	0.887	1,201
TOTAL HERBICIDE <sup>2</sup>	94		12,240	95		161,144
<b>INSECTICIDE:</b>						
Bifenthrin	2	0.055	8	5	0.064	247
Chlorpyrifos	17	0.352	484	3	0.350	876
Lambda-Cyhalothrin	24	0.027	52	8	0.031	215
Thiamethoxam	7	0.034	19	1	0.036	44
TOTAL INSECTICIDE <sup>2</sup>	38		577	19		2,735

(Z) Less than half the rounding unit. <sup>1</sup> The 16 program states surveyed about soybeans in the 2017 ARMS were Arkansas, Illinois, Indiana, Iowa, Kansas, Kentucky, Michigan, Minnesota, Mississippi, Missouri, Nebraska, North Carolina, North Dakota, Ohio, South Dakota, and Wisconsin. <sup>2</sup>Total Fungicide, Herbicide, and Insecticide includes pesticides that are not listed in this table. Pesticides were not listed if data were withheld to avoid disclosing data for individual operations, or the total was less than half the rounding unit.