# BULLETIN No. 2 MAY, 1919

# Colorado Cooperative Crop Reporting Service

(State and Federal)

# U. S. Department of Agriculture

Bureau of Crop Estimates

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#### WINTER WHEAT

If weather conditions remain as favorable until the wheat harvest as they have been up to the present time Colorado will make a record production of winter wheat this year. Advance estimates place the acreage of this crop left for harvest at 834,000 acres, the largest in the history of the state, and compared with 732,000 acres last year. Reports on May 1 indicated that but 1 per cent of the acreage planted would be abandoned, compared with 7 per cent last year and an average of 8.8 per cent for the preceding six years. The condition of the crop on May 1 was 102 per cent of normal, compared with 92 per cent last year and an average of 91 per cent for the preceding seven years. These figures indicate a possible production of 15,312,000 bushels, compared with a prospect and forecast a year ago of 12,122,000 bushels and an actual production of 7,095,000 bushels. With a continuation of the present soil and moisture conditions the production may even exceed the high estimate given, which is greater than the combined production of winter and spring wheat in 1917, the record wheat crop for the state. The acreage abandoned has been confined to a few restricted areas of sandy land where damage resulted from high winds. The condition of this crop has, perhaps, never been more uniformly favorable all over the state at this time of the year.

The condition of winter wheat for the United States on May 1 was placed at 100.5 per cent of normal, compared with \$6.4 per cent a year ago and an average of \$5.4 per cent for the preceding ten years. The abandonment apparently will be only 1.1 per cent of the acreage planted. compared with 13.7 per cent last year, 31 per cent for 1917 and an average of 10.9 per cent for the preceding five years. Upon 48.933.000 acres devoted to this crop the high condition prevailing May 1 indicated a production of \$99,915,000 bushels, compared with 558.449.000 bushels last vear, 418,070,000 in 1917 and 685.000,000 in 1914, the record winter wheat crop for this country. The average for the past five years has been

552,594,000 bushels. The highest condition and largest acreage for the United States in the history of the crop reporting service are indicated for the present crop.

#### RYE

Colorado shows an increase of about 3 per cent in the acreage of rye over that for 1918. The area sown to fall rye in 1918 was estimated at 78,000 acres, compared with 75,000 acres for 1917. All rye, both fall and spring, threshed for grain in 1918, as shown by reports of the threshers, was 117,000 acres. With the 3 per cent increase indicated the area devoted to the crop this year would be 120,000 acres, to be threshed for grain. Upon this estimate of acreage the production of rye for grain, if favorable conditions prevail until the harvest, should be 1,576,000 bushels, compared with a forecast of 1,460,000 bushels on May 1 last year and an actual production of 735,000 bushels. The condition of rye on May 1 compared favorably, with that of winter wheat, being 101 per cent, compared with 96 per cent at this time last year and an average of 91 per cent for the past ten years.

The acreage of rye for the United States is placed at 6.667,000 acres, compared with 6.185,000 acres in 1918. The condition of the crop on May 1 was 95.3 per cent, compared with 85.8 per cent on May 1 last year and an average of 89.8 per cent for the past ten years. These figures indicate a production of 122,946,000 bushels, compared with 89,103.000 bushels in 1918 and a general average of 44,547,000 bushels.

#### SPRING WHEAT

Although no formal forecast of acreage, condition and production of spring wheat is made at this time advance reports indicate that the acreage is larger than that planted last year and that the crop is advancing in excellent shape. Weather conditions have been uniformly favorable in practically all sections of the state and apparently the spring wheat crop will be one of the largest if not the largest in the history of Colorado if conditions remain favorable until harvest.

## OATS

No formal estimate of acreage or condition of oats is made at this time, but the crop is in excellent condition, having profited by the same favorable weather conditions that have advanced winter and spring wheat to such high condition. No heavy increase in the acreage of oats comparable to that of winter wheat is indicated.

#### HAY

An increase of 1 per cent in the acreage of tame hay for the state over that for 1918 is indicated, while wild hay stands at 100 per cent, or the same as for last year. According to these figures the area devoted to hay of all kinds this year is 1,412,000 acres, compared with 1,402,000 acres last year. The condition of all hay on May 1 was normal or 100 per cent, compared with 96 per cent last year and an average of 94 per cent for the past five years. These figures indicate a production of 3,318,000 tons for 1919, compared with 3,163,000 tons indicated by the forecast of May 1 last year and an actual production of 2,469,000 tons. The average production of this crop for the state is 2,512,000 tons. The amount

of last year's Colorado hay crop remaining on the farms is reported as 148,000 tons, or 6 per cent of the total, compared with 312,000 tons, or 11 per cent, at this time last year. The heavy shipments of hay and alfalfa meal early last fall, together with a hard winter in the southeastern and southern parts of the state, have largely consumed the hay crop, causing shortage of hay in several sections of the state.

The preliminary estimates for the United States indicate 71,224,000 acres of hay for this year, compared with 71,415,000 acres last year. The condition of the hay crop on May 1 was 94.3 per cent, compared with 89.6 per cent last year and an average of 88.1 per cent. The indicated production is 114,930,000 tons, compared with 107,550,000 tons indicated at this time last year and an actual production of 89,833,000 tons, and a production of 98,439,000 tons in 1917. The per cent of hay on farms in the United States May 1 was estimated at 9.4 per cent of last year's crop, or 8,493,000 tons, compared with 11,476,000 tons of May 1 last year and an average of 11,803,000 tons on May 1 for the past five years.

#### **PASTURES**

The condition of pastures in Colorado on May 1 was 97 per cent. compared with 92 per cent last year and an average condition of 89 per cent. Throughout the state pastures are reported in excellent condition, though a little late in some sections. The condition of pastures for the United States is placed at 90.3 per cent of normal, compared with 83.1 per cent on May 1, 1918, and a ten-year average on May 1 of 84.5 per cent.

#### DRY BEANS

Special advance reports on intentions to plant indicate that there will be a heavy falling off in the acreage devoted to dry beans this year as compared with last year. Though it is too early yet to give definite figures the special reports above referred to indicate that the acreage will be only from 30 to 40 per cent of that planted last year.

## **POTATOES**

The planting of the potato crop is well advanced. It is too early to make a full forecast of the acreage that will be devoted to the crop, but special reports received indicate that there will be a considerable decrease in acreage in most commercial potato producing sections. The special reports above referred to indicate that the acreage to be planted in Colorado will be but 88 to 90 per cent of last year.

## FRUIT

The outlook for the fruit crop is excellent. Though there have been local frosts in some districts in the past two weeks no damage to fruit has been reported. On the western slope and in the Canon City district the fruit blossom is heavy and a good crop of all varieties of tree fruits is indicated. Especially favorable reports regarding the condition and advancement of tree fruits are received from the northeastern part of the state, where the area devoted to orchards is increasing steadily.

### PLOWING

The advancement of spring work and plowing in Colorado is about the same as a year ago, being about 70 per cent, as compared with an average of 65 per cent for May 1. Planting shows an advancement of 63 per cent, compared with the same per cent a year ago and an average for May 1 of 57 per cent. In the United States plowing is not quite so far advanced as a year ago, being 72.7 per cent completed on May 1, compared with 77.5 per cent on May 1 last year and an average of 70.5 per cent. Planting was about 61 per cent completed on May 1, compared with 60.8 per cent on May 1 last year and a ten-year average on the same date of 58.1 per cent.

# MORTALITY AND CONDITION OF LIVESTOCK

In Colorado the losses of livestock due to disease and exposure. exclusive of old age, accident and slaughter, have been slightly greater during the past year than during the year preceding. There have been especially heavy losses from exposure of range stock in certain sections of the state where exceptionally severe storms have occurred and a shortage of feed has prevailed. The reports show the deaths of horses to have been 19 head per 1,000, compared with the same number for 1918 and an average of 18 for the past ten years. Cattle losses from disease were 22 head for 1,000 compared with 28 last year and an average of 18 for the past ten years, while losses from exposure were 40 head per 1,000, compared with 10 head last year and an average of 27 for the past ten years. Losses of sheep from disease were about normal, averaging 24 head per 1,000, compared with 25 head last year and an average of 22 for the past ten years. Losses of lambs from exposure were 57 head per 1,000, compared with 36 last year and an average of 70 for the past ten years. Losses of swine from disease were much lower than the average, being 20 head per 1,000, compared with 35 last year and an average of 30 for the past ten years. The condition of horses on May 1 was 95 per cent, compared with 98 per cent last year and an average of 98 per cent for the past ten years. The condition of cattle on May 1 was 92 per cent of normal, compared with 98 per cent last year and an average of 96 per cent for the past ten years. The condition of sheep on May 1 was placed at 93 per cent of normal, compared with 99 per cent last year and a ten-year average of 97 per cent. The condition of swine on May 1 was 97 per cent, compared with 99 per cent last year and an average of 98 per cent for the past ten years. The somewhat lowered condition of all livestock is due, as above stated, to the hard winter and spring in some sections of the state and, particularly, to the shortage and high prices of all kinds of feed.

In Colorado stock are being put upon the ranges a little later than usual, and in several sections they are in poor condition when turned upon pasture, due to the stortage of feed and severe weather above referred to.

The losses of horses from disease and exposure for the United States for the past year are placed at 15.7 head per 1,000, compared with 16.5 last year and a ten-year average of 19.4. Losses of cattle from disease were 15.8 head per 1,000, compared with 18.2 last year and a ten-year average of 20. From exposure losses were 17.3 head per 1,000, compared with 7.5 last year and an average of 14.3 for the past ten years. Losses of sheep from disease were 19.7 head per 1,000 and from exposure 25.1 head, compared with 19.8 and 19.2 head last year and ten-year averages

of 14.4 and 30.2. Losses of lambs were 48.3 head per 1,000, compared with 49.3 last year and an average of 67.5 for the past ten years. The condition of horses in the United States on May 1 was 95.3 per cent, compared with 96.2 per cent last year and a ten-year average of 96.2; cattle, 94.7 per cent, compared with 95.6 last year and a ten-year average of 96.2; sheep 95.9, compared with 96.9 last year and an average of 95.4 for the past ten years; swine 94.5 per cent, compared with 96.3 per cent last year and a ten-year average of 95.7.

Summaries of the May 1 crop and livestock report for Colorado and the United States will be found on page 8 of this bulletin.

# YIELDS PER ACRE 1918 AND NORMAL YIELDS

Believing the subject to be of much general interest to the public we are publishing in this bulletin the yields per acre by counties of certain crops as reported to the Co-operative Crop Reporting Service, the figures used as the basis for calculating normals having been obtained through a special inquiry regarding normals.

The first column contains the average of yields for all lands, both irrigated and non-irrigated, in the season of 1918 as determined from the reports of the licensed threshermen of the State to the United States Food Administration. These figures show many very low yields for some crops in certain counties. This is to be explained by the fact that over considerable areas of the State the season of 1918 was exceptionally hot and dry from May 20 until June 20, which is a most critical period for small grains. As a result the yields in many sections were far below the average, grading from a fair crop all the way down to a total failure. Owing to the urgency for grain prevailing at the time because of the war, many farmers from patriotic motives cut and threshed crops that in ordinary times would have been fed out by stock or considered as not worth harvesting. As a result of these extraordinary conditions many figures of yield were brought abnormally low.

The second and third columns give the figures that are to be regarded as normal yields for each crop on non-irrigated and irrigated lands respectively. Normal yields are understood as the average yields secured by all farmers from their usual methods of farm practice in a season wholly but not extraordinarily favorable to production. Only in the most favorable seasons will these yields be exceeded for a county as a whole. although the best practice on individual farms will often exceed them. According to our study and observation the average of the best class of farming in a favorable season may exceed these figures of normal by as much as 30 per cent, but this is to be regarded as the limit of reasonable expectancy under the best practice and most favorable conditions. Probably in the average of all seasons, good, fair, and poor, few farms will exceed the figures given as normal. Therefore, while referring to what would be obtained on the average for a county in a wholly favorable season, they may be regarded as indicating about what may be counted upon only as the result of the best farm practice on the better class of These figures are believed to be substantially accurate and reliable, but are subject to revision from time to time as better information dictates:

# THRESHING REPORTS AND NORMALS.

	Winter Wheat			Spring Wheat			Rye		
Districts and	Average Threshing Reports, 1916	Normal Non-Irrigated	Normal Irrigated	Average Threshing Reports, 1918	Normal Non-Irrigated	Normal Irrigated	Average Threshing Reports, 1	Normal Non-Irrigated	Normal Irrigated
Counties									
District. 1. Northwest.	Bu.	Bu.	Bu.	Bu.	Bu.	Bu.	Bu.	Bu.	Bu.
Grand		20	40			$\frac{30}{30}$		$\frac{20}{15}$	30 20
Jackson Moffat	12	23	35	15	20	30	9	20	30
Rio Blanco Routt	$\frac{27}{23}$	$\begin{smallmatrix}23\\31\end{smallmatrix}$	40	$\frac{24}{17}$	$\frac{26}{25}$	40	$\frac{14}{12}$	$\frac{20}{25}$	35 30
<ol><li>North Central.</li></ol>									
Adams Boulder	$\frac{8}{23}$	$\begin{array}{c} 16 \\ 19 \end{array}$	$\frac{35}{34}$	$\frac{22}{23}$	$\frac{11}{16}$	33 35	$\begin{smallmatrix} 5\\24\end{smallmatrix}$	$\frac{14}{16}$	$\frac{25}{30}$
Boulder Denver	20	15	35	12	11	33	23	10	22
Larimer Weld	$\frac{21}{15}$	$\frac{20}{17}$	$\frac{40}{35}$	$\frac{28}{19}$	$\frac{14}{12}$	$\frac{40}{32}$	$\frac{11}{6}$	18 13	$\frac{32}{25}$
<ol><li>Northeast.</li></ol>	10						-		
Logan	8 8	$\frac{16}{15}$	$\frac{30}{34}$	9 11	$\frac{12}{12}$	28 30	10 6	$\frac{10}{12}$	$\frac{22}{23}$
Morgan Phillips Sedgwick	7	18		7	12		4	16	
Sedgwick	6 6	18 15	38	8 4	$^{15}_{12}$	29	3 5	$\frac{12}{11}$	24
Washington Yuma	6	16		4	12		ž	$\hat{1}\hat{2}$	
4. West Central.	32	23	34	24	13	32	31	15	30
DeltaEagle	14	15	30	31		38	9	15	30
Garfield Gunnison	19	18	40	$\begin{array}{c} 23 \\ 25 \end{array}$	20 20	38 38	15 19	15 15	36 30
mesa	21	10	32	21		29			30
Montrose	$\frac{32}{13}$	19	$\frac{37}{40}$	$\frac{29}{33}$	13	36 35	$\begin{smallmatrix}23\\18\end{smallmatrix}$	16	$\frac{25}{25}$
Ouray Pitkin	25		35	34		35	18		30
<ol><li>Central.</li></ol>				10	10	. 0.0	10	15	30
Chaffee			30	$\frac{19}{12}$	10	36	12	15	
Clear Creek Fremont Gilpin Jefferson Lake	14	12	28	14	15	28	9	14	23
Jefferson	26	19	40	$\frac{22}{24}$	16	35	$\begin{smallmatrix}21\\16\end{smallmatrix}$	15	23
Lake									
Park Summit		****							
Teller	•					•		10	
6. East Central. Arapahoe	9	14	42	17	11	37	9	10	22
Cheyenne Douglas	6	14		4	15	20	9	$\frac{15}{12}$	
Einert	$\frac{12}{11}$	$\frac{18}{16}$	30	$^{10}_{7}$	$\frac{15}{13}$	20	9 8	14	
El Paso	8 7	18	28	14	15	$\frac{20}{20}$	8 7 5	15 15	30
El Paso Kit Carson Lincoln	5	$\frac{14}{14}$	30	4 4	11 11	20	6	15	
7. Southwest.	18	18	38	22	18	33	5	15	25
Archuleta Dolores	12	15	25	- 5	15	25	6	15	$\frac{1}{25}$
HinsdaleLa Plata	22		28	19	16	30	9	15	25
Mineral									
Mineral	10	15	28	17	13	26	10	15	27
San Miguel		18	25		15	25		15	25
Alamosa				22		25			
Conejos	18		$\frac{22}{25}$	15 15		$\frac{25}{25}$	7		22
Custer	19		$^{25}$	20	20	25	17	12	22 22
HuerfanoRio Grande	$\frac{10}{17}$	16	31 25	$\begin{smallmatrix}15\\22\end{smallmatrix}$	$\frac{15}{15}$	28 30		10	20
Saguache				21		23			20
9. Southeast. Baca	9	13	31	7	11	28	8	14	26
Rent	23	12	37	18	$\frac{10}{12}$	32	19 9	15	$\frac{25}{25}$
Crowley	$\frac{24}{4}$	$^{12}_{11}$	30	$^{17}_{8}$	10	30	9	12	
Las Animas Otero	6	13	$\begin{smallmatrix} 3  2 \\ 3  7 \end{smallmatrix}$	$\begin{smallmatrix}12\\32\end{smallmatrix}$	$^{12}_{13}$	$\frac{28}{32}$	$\begin{smallmatrix} 5\\12\end{smallmatrix}$	13 13	$\frac{21}{30}$
Prowers	$\frac{26}{20}$	$^{13}_{10}$	36	19	10	30	20	12	28
Pueblo	8	15	35	14	15	32	8	14	30

Pueblo 8 15 35 14 15 32 8 14 30 Omission of figures indicates that the crop is not grown extensively and not reported.

THRESHING RETURNS, NORMALS, ACREAGES AND CONDITION.

	Bar pe	Barley, Yield per acre.			Winter Wheat		Rye		Hay Pastur <b>e</b>	
Districts and Counties	Average Threshing Reports, 1918	Normal Non-Irrigated	Normal Irrigated	Acreage Compared With 1918	Condition Compared With Normal	Acreage Compared With 1918	Condition Compared With Normal	Condition Compared With Normal	Condition Compared With Normal	
District. 1. Northwest.	Bu.	Bu.	Bu.	%	%	%	%	%	%	
Grand Jackson Moffat Rio Blanco Routt	. 18	25 40 30 25 38	50 40 50 40	103 95 116	100 95 110 98	95 100	100 98 100	97 100 88 100	97 100 95 95	
2. North Central. Adams Boulder Denver Larimer Weld	16 27 33 29	20 23 18 19	35 42 30 51 43	103 101 101 107 110	96 95 95 100	105 100 100 98 104	95 97 95 100	99 100 96 102 95 96	102 90 80 94 85 91	
3. Northeast. Logan Morgan Phillips Sedgwick Washington Yuma	17 24 15 18	19 17 20 23 22	39 43 39	112 115 120 135 120 115	104 101 100 110 100 104	95 101 104 105 99 107	100 102 96 101 102 104	98 100 98 96 100 101	96 96 94 92 100	
4. West Central. Delta Eagle Garfield Gunnison Mesa Montrose Ouray Pitkin	21 29 31 28	20 20 25 23 	40 36 45 35 36 40 40	101 90 120 102 107	99 100 100 100 97	100	100	100 100 100 101 100 98 100 100	94 94 100 97 95 97 100	
5. Central. Chaffee Clear Creek Premont Gilpin Jefferson Lake Park Summit Teller	20 21  24	12 18 18  23  20	42 32 34  50	110	107	100	100	103 99 100 98 100 100 102 100 90	103 100 97 100 102 100 103 101	
6. East Central. Arapahoe Cheyenne Douglas Elbert El Paso Kit Carson Lincoln 7. Southwest.	21 9 9 11 18 8 9	23 23 23 20 23 20 23 20	35 35 35 35	110 115 100 100 111 118 110	95 98 95 99 110 109	103 103 105 100 104 105 108	99 100 95 100 104 104 104	100 100 100 100 105 105 95	98 101 90 100 105 101 95	
Archuleta Dolores Hinsdale La Plata Mineral Montezuma San Juan San Miguel	18	25  18  15  20	37 37 41 35	100  107  95 	100			100 100 100 102 100 100 100	100 100 100 100 100 98 100 100	
Alamosa Conejos Costilla Custer Huerfano Rio Grande Saguache 9. Southeast	12 26 26 23 26 10 24	20 25 28 20	32 40 40 40  43 39 31	110	102	100 100 100	100 93 100	102 110 115 100 103 105 100	103 110 110 100 103 100 100	
Baca Bent Crowley Kiowa Las Animas Otero Prowers Pueblo Omission of figure	9 29 20 10 22 	13 16 20 16 18  16 10	38 39 39 36 46 32 41	125 115 100 110 115 120 125 100	97 100 106 110	105  100 90 105 100	110 110 100 99 102 110	$\begin{array}{c} 100 \\ 103 \end{array}$	110 110 100 100 105 100 101 105	

Omission of figures indicates that the crop is not grown extensively and reported.

Summary of the May 1, 1919, Crop and Livestock Report for Colorado and the United States.

Subject.		Colora	d٥		United States					
WINTER WHEAT-	1919	1918	Average	1919	1918	Average				
Abandoned, per cent *Acres for harvest		7 732	8.8		13.7 36.704	10.9 34.059				
Condition, per cent. *Production, bus1	102	92	91		86.4	85.4 552,594				
RYE—		-		,		,				
*Acres threshed Acres (winter rye) Condition, per cent. *Production, bus	$\begin{array}{c} 78 \\ 101 \end{array}$	117 75 96 735	91 423	6,667 95.3 122,946	6,185 85.8 89,103	2,711 89.S 44,547				
HAY-ALL KINDS-										
*Acres	.100 3,318	96	1,384 94 2,512	71,224 94.3 114,930 8,493	71,415 89.6 89,833 11,476	67,682 88.1 95,371 11,803				
PASTURES, per cent.	97	92	89	90.3	83.1	84.5				
PLOWING, per cent	70	70	65	72.7	77.5	70.5				
PLANTING, per cent	63	63	57	61	60.8	58.1				
LIVE STOCK-MORTA	LITY	OFP	ER 1,00	00						
Horses and Mules Cattle, disease	$\frac{19}{22}$	$\frac{19}{28}$	18 18	15.7 $15.8$	16.5 18.2	$\frac{19.4}{20.0}$				
Cattle, exposure	40	10	27	17.3	7.51	14.3				
Sheep, disease Sheep, exposure	24 59	$\frac{25}{20}$	$\frac{22}{42}$	$19.7 \\ 25.1$	$19.8 \\ 19.2$	$\frac{24.4}{30.2}$				
Lambs	57	36	70	48.3	49.3	58.8				
Swine, disease	20	33	30	41.4	42.1	67.5				
LIVE STOCK CONDITION-										
Horses	95	98	98	95.3	96.2	96.2				
Cattle	$\frac{92}{93}$	98 99	96	94.7	95 6	$95.2 \\ 95.4$				
Sheep	93 97	99	97 98	95.9 94.5	96.9 96.3	$95.4 \\ 93.7$				
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<sup>\*</sup>The figures on acreage and production merely enumerate thousands and require that three ciphers (000) be added to complete them.

#### COOPERATION INVITED.

The Colorado Cooperative Crop Reporting Service desires to make this monthly bulletin of the greatest possible value to all those interested in the production, movement and marketing of farm products, and urges the cooperation of all who are in position to report agricultural conditions. It solicits helpful suggestions and comments from reporters and others interested in this service. Those desiring to keep permanent files of this bulletin may obtain extra copies or missing copies by writing to the Colorado Cooperative Crop Reporting Service, at Denver, Colo.

<sup>†</sup>Forecast.