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**CLIMATE IN RELATION TO CROP
ADAPTATION IN NEW MEXICO**



**BY
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CLIMATE IN RELATION TO CROP ADAPTATION IN NEW MEXICO

INTRODUCTION

New Mexico is almost square in outline, being 350 miles from north to south, and about the same from east to west. On account of its varied topography the elevations range from about 3,000 feet in the southeastern corner to more than 14,000 feet at the top of the highest mountains. On the whole, New Mexico consists of high plateaus or mesas, with numerous mountain ranges, canyons and valleys; some of the valleys are large enough to make possible the carrying on of extensive agricultural operations under irrigation.

Because of the great range in altitude, climatic conditions are extremely varied, which must be taken into consideration in all agricultural operations. When it is considered that practically all of the farming not carried on under irrigation is being done by dry farming methods, which is now being carried on in altitudes varying from 3,000 feet to about 8,000 feet, under a normal precipitation varying from about 10 to 20 inches, and with a long growing season in the lower altitudes to a very short one in the high altitudes,—it can readily be seen that the limiting factors in crop production vary widely. Therefore it is evident how important it is for farmers to have some knowledge in regard to plant adaptation in New Mexico, and to study thoroughly the conditions in order that serious mistakes may be avoided.

Crops adapted to the unirrigated districts in either the lower or higher altitudes are comparatively small in number. The amount of moisture and length of the growing season are two important limiting factors for many crops in New Mexico. The 5,000-foot elevation is probably about the limit in altitude for many of the sorghums, which are among the best crops for the dry farmers below this altitude; however, up to this altitude Sudan grass, beans, Indian corn, broom corn

and wheat are also dependable crops. In the higher dry land districts short season corn, wheat, barley, oats, field peas, beans, and, in some districts, Irish potatoes, are among the leading crops to grow.

In the irrigated valleys, where the moisture factor is largely under the control of the farmer, a much larger variety of crops can be successfully raised, under *good farm management*. In addition to a large variety of vegetables and fruits, practically all of the crops that can be raised by dry farming can be grown in these irrigated districts of lower altitude. In the high altitude, mountainous, irrigated districts, aside from the dry farming crops that are grown under these conditions, alfalfa, many of the cool season vegetables, and a number of fruits, principally apples, cherries and plums, are usually grown successfully, except that the late spring frosts occasionally partly or wholly destroy the fruit crop.

In this bulletin only a brief discussion is given in regard to the agricultural possibilities in each county. On account of its size it would not be wise to go into detail as regards the many varieties of the different agricultural crops that are grown in each county, or to give descriptions of the different types of soils that are to be found in each locality, and the crops suited to them.

The precipitation and temperature data given will aid materially in deciding whether or not there is enough rainfall and whether the growing season is long enough to raise the different crops in those particular localities, if something is known about the climatic requirements of the crops. Because of the varied topographical and climatic conditions in New Mexico a large portion cannot be used for the growing of crops, but it can be used for the raising of livestock, which is a most prosperous industry in all localities where there is enough range for grazing purposes.

The need of definite information on the precipitation and temperature in connection with plant growth in New Mexico has long been felt. These data, which are of immense value, not only to the New Mexico stockmen and farmers, but to people from other states who contemplate coming to New Mexico to engage in agricultural pursuits, are now available.



BERNALILLO COUNTY

STATION—ALBUQUERQUE. APPROX. LATITUDE—35° 5'. LONG.—106° 38'. ELEVATION—5,200 FEET.

Precipitation	Year	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual	Seasonal	Record, Yrs.
*0.32	1850	0.05	0.01	0.02	0.21	0.18	1.26	0.45	0.51	0.28	1.02	0.61	0.61	4.92	2.63	..
0.07	1851	0.56	0.42	0.04	0.03	0	0.30	..	..	..	..	..	..	..	..	..
0.07	1852	..	..	0.70	0.07	8.15	0.07	4.06	0.19	0.35	0.16	0.03	0.03	..	13.24	..
0.07	1853	..	..	0.01	0	0.04	0	2.57	3.80	0.07	0.31	0.30	0.30	..	6.48	..
0.13	1854	0	0.43	0.39	1.19	0.28	2.59	1.19	2.67	1.37	1.35	0.92	12.51	8.31	..	..
0.20	1855	0.40	1.02	0.74	0.89	0.25	0.17	1.23	1.12	0.10	0.33	0.03	4.15	3.10	..	..
0.20	1856	0.20	0.19	0.10	0.23	0.25	0.10	0.35	0.77	0.78	0	0	5.20	2.15	..	..
1.45	1857	0.28	0	0.15	0	0.10	0.35	0.77	0.78	1.25	0.10	0	1.40	16.30	13.60	..
0	1858	0.60	0.80	1.60	0	3.50	3.60	4.90	0	0	0	0	0	5.95	5.80	..
0	1859	0	0.15	0.15	0	0	0.25	2.30	3.10	0	0	0.52	0.01	3.78	2.25	..
0.70	1860	0.30	0	0	0	0.70	0.20	1.00	0.35	0	0	0	0.01	..	..	..
..	1861	..	0	..	..	..	0.38	0.34	0.67	..	..	..	..	..	..	..
..	1862	..	..	..	..	..	..	..	..	1.20	0.05	0.19	0.19	..	..	..
0.37	1863	0	0	..	..	..	1.84	0.90	0.25	0.30	0.67	0.52	0.59	5.54	3.39	..
0.20	1864	0.39	0.10	0.20	*0.19	1.45	1.00	1.30	0	0.40	0	0.12	0.12	*10.35	4.14	..
0.20	1865	0.10	..	..	..	..	..	..	0.90	0.32	0.17	..	..	..	..	..
0.45	1866	0.16	0.02	0.02	..	..	..	0.41	..	..	..	..	..	..	..	..
..	1867	..	..	..	..	..	..	..	..	0	1.83	0.07	..	..	..	..
0.49	1878	0.26	0.02	0.02	0.03	T.	..	..	..	..	..	..	..	..	..	..
..	1879	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
..	1881	..	0.04	..	..	..	..	..	..	..	..	..	..	..	..	..
..	1888	..	..	..	0.39	T.	..	..	..	..	..	..	..	..	..	..
..	1889	..	..	0.70	T.	0.53	0.77	0.21	0.18	0.76	0	..	..	..	2.39	..
..	1890	..	..	..	0.04	0	2.07	0.61	0.97	0.15	..	..	..	..	..	..
..	1891	..	0.84	0.81	0.20	0.12	0.08	1.45	0.21	..	..	..	0.02	..	..	..
0.81	1892	0.07	0.22	T.	0.45	T.	1.27	1.88	2.95	0.09	0.17	0.01	0.11	6.84	2.06	..
0.31	1893	0.01	0.31	0.18	0.60	0.80	0.02	0.42	2.25	0.32	0.49	0.17	0.31	7.42	6.55	..
0.01	1894	0.01	0.31	0.18	0.60	0.80	0.02	0.42	2.25	0.32	0.49	0.17	0.31	5.72	4.43	..
1.29	1895	0.60	0.07	0.08	1.73	0.34	2.78	0.80	0.18	0.74	0.85	0.32	0.32	9.78	5.91	..
0.06	1896	0.07	0.01	T.	0.07	0.32	1.98	0.81	0.72	2.55	0.05	0.38	0.38	7.02	2.90	..
0.57	1897	0.13	0.72	0.63	2.07	0.99	0.31	1.31	1.22	1.44	T.	0.35	0.35	9.74	6.52	..
0.58	1898	0.54	0.34	0.33	0.12	1.00	1.25	0.60	0.28	1.15	0.50	0.70	0.70	6.39	3.58	..
0.35	1899	0.35	0.40	0.34	0	0.44	3.23	0.63	1.20	T.	0.20	*0.02	*0.02	7.16	5.84	..
0.70	1900	0.40	0.13	0.33	0.85	0.05	0.13	0.13	2.09	0.25	0.83	T.	T.	5.90	3.69	..
0.65	1901	0.65	0.69	0.15	0.55	0.30	1.46	1.85	1.21	2.90	1.10	T.	T.	10.19	5.67	..
0.32	1902	T.	T.	0	0.32	T.	1.20	0.70	0.55	T.	0	0.84	0.84	4.94	2.68	..
0.08	1903	0.41	0.38	0.05	0.18	2.48	0.32	0	1.93	0	0	0	0	5.83	4.95	..

Year	Jan.	Feb.	Mar.	Apr.	May.	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual	Seasonal	Record, Yrs.
1904	0.26	0.16	T.	T.	1.19	0.32	0.94	1.88	1.42	0.17	0	0.60	6.82	7.75	..
1905	1.00	T.	0.30	4.20	0	1.37	0.22	0.72	0.59	0	4.70	2.93	15.73	7.10	..
1906	0.29	T.	0	1.05	0.05	0.06	1.93	0.85	1.80	0.52	0.40	1.20	8.36	5.74	..
1907	0.37	0	0	2.50	1.42	0.18	0.93	1.66	0.20	1.50	0.42	0.01	9.19	6.89	..
1908	0.42	0.34	0	2.09	0.34	0.28	1.52	1.75	0.37	0.22	0.94	0.24	7.61	6.35	..
1909	0.47	0.17	0.11	0.12	0.16	0.12	0.85	1.56	0.52	0	0.95	0.19	4.42	3.33	..
1910	0.14	0.31	0.30	0.55	0.63	0.79	1.88	1.51	0.66	0.29	0.73	0.22	7.41	5.42	..
1911	0.33	1.73	0.42	0.28	0.28	1.26	2.14	0.62	1.04	0.30	0.34	0.20	11.94	5.63	..
1912	0.02	0.19	0.74	0.13	0.30	0.64	2.39	0.63	0.29	0.29	0	0.47	6.09	4.38	..
1913	0.78	0.41	0.15	0.44	0.24	0.99	0.46	0.59	0.55	0.31	0.69	1.06	6.67	3.27	..
1914	0.02	0.40	0.40	0.84	1.02	0.14	2.01	2.00	0.20	1.93	0	2.43	11.39	6.21	..
1915	0.68	0.56	0.51	2.05	.....	.....	2.92	0.83	1.18	.....	.....	.....	.....	.....	..
1916	2.52	.....	.....	.....	.....	.....	.....	1.95	0.34	2.77	0	T.	.....	.....	..
1917	0.35	0.73	T.	0.12	0.50	0.18	0.25	0.56	0.60	T.	T.	0	3.29	2.21	..
	0.44	0.31	0.23	0.54	0.40	0.74	1.25	1.22	0.80	0.76	0.46	0.44	7.59	4.95	..
Mean	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	..
Av. No. days with	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	..
Precipitation ..	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	..
Av. Snowfall, in.	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	..
Temperature	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	..
Mean	33.8	39.3	47.3	55.7	64.7	73.4	77.1	75.3	67.8	56.6	43.3	34.4	55.7	42.1	22
Mean Max.	48.1	53.1	63.3	71.2	78.9	89.1	90.4	88.3	81.8	71.0	57.9	47.7	70.1	58.7	22
Mean Min.	22.3	27.0	32.8	40.8	48.6	57.8	62.1	60.6	53.4	41.5	30.1	22.3	41.6	31.8	18
Highest	70	78	89	89	95	104	104	99	97	86	78	69	104	104	18
Lowest	-4	-10	12	12	30	37	44	45	30	24	7	3	-10	-10	18
Prevailing wind..	N	NW	W	ssw	S	S	S	S	S	S	S	N	S	S	23
Days clear.....	20	17	18	18	20	20	14	14	19	21	22	19	223	105	33
Days partly cldy	7	7	9	8	9	8	15	14	9	6	6	8	107	64	33
Days cloudy.....	4	4	4	3	3	1	3	3	2	4	2	4	36	14	23

Frost:— Average date of first killing frost in autumn, Oct. 23.
Average date of last killing frost in spring, April 16.
Earliest date of killing frost in autumn, September 17.
Latest date of killing frost in spring, May 15.
Average length of growing season, 191 days.
Years Recorded, 23.

*Estimated from nearby stations.

This is a north-central county, and the smallest in the state. The altitude is approximately from 4,500 to 6,000 feet, with a considerable mountain area east of the Rio Grande.

The valley of the Rio Grande has an average annual precipitation of less than 8 inches; mean annual temperature, 55.7 degrees; maximum at times above 100 degrees and minimum as low as 10 degrees below zero, at long intervals; rather fresh southerly winds and much clear sky. Precipitation increases rapidly with altitude and probably exceeds 15 inches at 8,000 feet. Seasonal precipitation is from April to September, inclusive.

Average annual precipitation 8 inches to 16 in mountains.

Average seasonal precipitation 5 inches to 13 in mountains.

Average seasonal snowfall 7 inches to 30 or more in mountains.

Mean annual temperature 50 degrees to 56 degrees.

Mean summer temperature 70 degrees to 75 degrees.

Mean winter temperature 30 degrees to 36 degrees.

Almost all of the farming in this county is being done in the Rio Grande valley under irrigation; and considerable fruit, such as apples, pears, peaches, European and native plums, sour cherries and grapes, is being raised. Alfalfa, wheat, barley, oats, sorghums, corn, carrots, turnips, watermelons, tomatoes, celery, cauliflower, spinach, onions, cabbage, chile and beans are among the most successful crops raised. Potatoes have not proven a success. In the eastern and mountainous section some dry farming is being done, and beans, watermelons, pumpkins, short season corn, and some Irish potatoes are the principal crops grown. There is not sufficient rainfall, as a rule, in the western part of the county, nor in the valley, to insure the growing of crops, at least on a large scale, under dry farming conditions.

Stock raising flourishes on the mesas and in the mountains of the eastern, northern and northwestern portions of the county.

CHAVES COUNTY

STATION—BOAZ. APPROX. LATITUDE—33° 45'. LONGITUDE—103° 55'. ELEVATION—4154 FEET.

	Year	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual	Seasonal	Record, Yrs.
Precipitation	1909	0.11	0.02	0.06	0	0.02	4.55	1.57	1.60	0.27	0.21	1.28	0.22	.....	8.01	8.01
	1910	0.17	0.06	0.21	0.04	0.28	0.74	0.63	3.81	0.97	0.36	0.06	0.07	7.17	6.49	7.17
	1911	0.07	0.06	0.21	0.04	0.12	0.67	1.51	1.63	0.97	1.12	0.18	0.07	12.05	9.94	12.05
	1912	0.01	0.25	0.21	0.07	0.72	1.81	0.64	3.53	2.61	1.31	0.10	0.43	11.69	9.38	11.69
	1913	0.29	0.56	0.23	1.68	0.01	4.03	0.12	0.04	5.22	0.15	1.37	0.37	12.24	11.10	12.24
	1914	0	0.06	0.05	1.33	3.08	2.71	3.21	1.38	0.20	2.29	1.35	1.04	16.60	11.91	16.60
	1915	0.29	0.57	1.12	1.89	0.24	0.84	2.23	2.61	6.75	0.26	0.91	1.04	23.85	20.56	23.85
	1916	0.26	0	0.37	1.07	0.20	0.22	2.32	10.06	1.12	3.05	0.10	0.47	19.24	14.99	19.24
	1917	0.19	0.08	0.62	0	2.21	0	0.50	4.82	0.43	0	T.	0.00	8.25	7.96	8.25
Average	1917	0.15	0.31	0.28	1.77	1.10	1.73	1.41	3.28	2.06	1.04	0.48	0.55	14.38	11.35	14.38
Days with precip.		2	2	3	4	4	5	7	7	4	3	3	4	47	30	47
Snowfall, in.		1.2	2.1	1.4	0	0	0	0	0	0	0.4	0.9	3.9	9.9	9.9	9.9
Temperature—																
Mean	40.8	41.2	43.0	57.4	65.8	74.3	78.0	76.1	69.7	69.7	57.8	48.2	36.6	57.9	57.9	57.9
Mean Max.	57.9	58.6	66.9	75.1	82.2	90.4	93.8	91.3	85.3	85.3	74.8	65.2	51.0	74.5	74.5	74.5
Mean Min.	23.8	23.7	31.0	39.7	48.4	58.2	62.3	60.9	54.1	40.8	31.1	22.3	11.0	41.4	41.4	41.4
Highest	78	76	85	93	102	105	105	104	99	91	83	73	59	105	105	105
Lowest	-20	-7	12	20	25	44	50	45	36	20	2	3	-9	-20	-20	-20
Prevailing wind..	W	SW	SW	WSW	SW	SW	SW	S	S	SW	SW	SW	SW	SW	SW	SW
Days clear	21	35	20	17	17	15	12	13	13	20	23	22	19	215	94	215
Days partly cldy.	7	10	8	1	12	13	17	17	17	8	6	4	6	118	78	118
Days cloudy	3	3	3	2	2	2	2	2	1	2	3	3	6	32	11	32

Frost—Average date of first killing frost in autumn, Oct. 18.
 Average date of last killing frost in spring, April 24.
 Earliest date of killing frost in autumn, Oct. 10.
 Latest date of killing frost in spring, May 23.
 Average length of growing season, 177 days.

CHAVES COUNTY																
STATION—ROSWELL. APPROX. LATITUDE—33° 24'. LONGITUDE—104° 27'. ELEVATION—3578 FEET.																
Precipitation	Year	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual	Seasonal	Record, Yrs.
1889	0.33	0.15	0.00	0.76	0.03	0.48	2.17	4.89	0.76	2.55	3.15	0.05	.....	.....	.....	9.09
1890	0.33	0.15	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	.....
1891	0.33	0.15	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	.....
1892	0.33	0.15	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	.....
1893	0.33	0.15	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	.....
1894	0.33	0.15	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	.....
1895	0.33	0.15	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	.....
1896	0.33	0.15	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	.....
1897	0.33	0.15	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	.....
1898	0.33	0.15	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	.....
1899	0.33	0.15	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	.....
1900	0.33	0.15	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	.....
1901	0.33	0.15	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	.....
1902	0.33	0.15	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	.....
1903	0.33	0.15	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	.....
1904	0.33	0.15	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	.....
1905	0.33	0.15	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	.....
1906	0.33	0.15	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	.....
1907	0.33	0.15	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	.....
1908	0.33	0.15	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	.....
1909	0.33	0.15	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	.....
1910	0.33	0.15	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	.....
1911	0.33	0.15	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	.....
1912	0.33	0.15	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	.....
1913	0.33	0.15	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	.....
1914	0.33	0.15	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	.....
1915	0.33	0.15	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	.....
1916	0.33	0.15	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	.....
1917	0.33	0.15	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	.....
Mean	0.39	0.54	0.43	0.98	1.07	1.53	2.34	2.14	1.71	1.36	1.06	0.55	0.44	1.43	2.77	12
Days with precip.	2	2	2	2	4	6	8	5	5	4	3	2	2	45	30	21
Snowfall, in.	2.0	3.7	0.8	0.4	0	0	0	0	0	0	0	0	0	11.3	.....	.....
Temperature	39.2	42.5	51.3	60.6	69.4	76.3	78.9	76.5	70.3	59.5	48.1	41.2	59.5	.....	.....	.....
Mean	56.5	58.9	70.7	77.5	84.2	90.7	90.8	90.8	85.3	74.9	64.6	55.6	75.1	.....	.....	.....
Mean Max.	24.4	25.4	34.7	41.4	51.3	59.1	63.3	62.3	54.9	42.0	31.4	24.3	42.9	.....	.....	.....
Mean Min.	83	88	91	94	99	110	106	103	101	93	87	77	110	.....	.....	.....
Highest	-19	-14	-2	20	29	45	53	48	33	19	10	-10	-19	.....	.....	.....
Lowest .....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....

	Year	Jan.		Feb.		March		April		May		June		July		Aug.		Sept.		Oct.		Nov.		Dec.		Annual		Seasonal		Record. Yrs.
		SW	SE	SW	SE	SW	SE	SW	SE	SW	SE	SW	SE	SW	SE	SW	SE	SW	SE	SW	SE	SW	SE	SW	SE	SW	SE			
Prevailing wind...		6	7	8	7	8	7	8	7	8	7	8	7	8	7	8	7	8	7	8	7	8	7	8	7	8	7	8	10	
Av. hourly veloc...		17	15	16	17	16	17	16	17	16	17	14	13	15	13	15	17	21	20	16	19	16	19	17	16	19	17	92		
Days clear		8	8	9	8	9	8	9	8	9	8	11	12	13	12	13	9	6	6	9	6	6	9	11	11	65	65	65		
Days partly cldy...		6	5	6	5	6	5	6	5	4	4	4	4	5	4	4	4	4	4	4	4	4	4	6	5	7	26	26		
Days cloudy																														
Mean Rel. humid- ity, 6 a. m.....		79	76	69	70	67	74	80	84	85	81	81	81	81	81	81	81	81	81	81	81	81	81	81	81	81	81	81	81	
Mean Rel. humid- ity, 6 p. m.....		44	39	31	29	26	35	41	45	46	48	53	53	41	41	41	41	41	41	41	41	41	41	41	41	41	41	41	41	
Percentage of sunshine		67	66	67	69	74	73	68	70	74	74	69	61	69	61	69	61	69	61	69	61	69	61	69	61	69	61	69	69	

Frost—Average date of first killing frost in autumn, Oct. 21.

Av. Average date of last killing frost in spring, April 11.

Earliest date of killing frost in autumn, Oct. 10.

Latest date of killing frost in spring, May 6.

Average length of growing season, 133 days.

Years recorded, 16.

*Estimated from nearby stations.

This is one of the most notable southeastern counties, with altitude increasing westward from the Pecos Valley, from 3,500 to 5,000 or 6,000 feet, and eastward rarely going much above 4,500 feet. It has a warm, rather dry, climate, affording bountiful crops in the irrigated valley of the Pecos, and good grazing lands over the mesas east and west. The seasonal rainfall exceeds 9 inches (from April to September, inclusive) in the valley and increases to about 11 inches over the eastern mesas, amounting to more than 14 inches annually in both districts. The mean temperature is about 60 degrees in the valley and 58 degrees over the mesas, with maximum slightly above 100 degrees practically every summer and minimum occasionally below zero each winter. Much sunshine occurs and rather fresh southwesterly winds.

Average annual precipitation, 14 to 16 inches.

Average seasonal precipitation, 10 to 12 inches.

Average seasonal snowfall, 10 to 15 inches.

Mean annual temperature, 58 to 60 degrees.

Mean summer temperature, 75 to 77 degrees.

Mean winter temperature, 39 to 41 degrees.

Mean annual sunshine, 69 per cent.

Mean relative humidity, 59 per cent.

Prevailing wind direction, southwesterly.

Average hourly wind movement, 6.8 miles.

Practically all of the farming is done in the Pecos Valley; both under artesian well and gravity irrigation. Alfalfa is the principal forage crop, although the feed sorghums do very well. Kafir, feterita, milo, and Indian corn, are successfully grown. Among the vegetables, sweet potatoes, cantaloupes, cabbage, onions, tomatoes, and celery, as well as a number of the root crops, are well adapted. This is the largest apple growing county in the state. Large apple orchards are in bearing and a number are coming into bearing. While apples are the principal fruit crop, American and European plums, sour cherries, as well as peaches and grapes, are also grown. The Irish potato is not a complete success, and should not be planted on a large scale. On account of the limited amount of rainfall crops are not successfully grown under dry farming

conditions in most years in the greater part of the county, although in the northeastern part the non-saccharine sorghums, broom corn, beans, and such vegetables as pumpkins, squash and melons grow very well.

Stock raising is carried on extensively on the mesas and in the mountains; while in the irrigated valleys the feeding of sheep, both lambs and old ewes, by the farmers, and the growing of pork by means of pasturing on alfalfa, are coming industries.

COLFAX COUNTY

STATION—CIMARRON. APPROX. LATITUDE—36° 55'. LONGITUDE—104° 53'. ELEVATION—6,885 FEET.

Precipitation	Year	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual	Seasonal	Record, Yrs.
1904	.....	0.55	0.52	5.12	4.45	3.24	1.88	2.95	1.21	7.65	0.57	0.19	0.29	21.31	12.71	12
1905	0.55	0.52	0.41	4.45	0.83	0.52	0.52	2.88	1.21	2.52	0.98	1.80	0.04	21.31	12.71	12
1906	0.55	0.41	1.73	0.93	1.15	0.93	0.52	2.88	1.21	2.52	0.98	1.80	0.04	21.31	12.71	12
1907	0.55	0.41	1.73	0.93	1.15	0.93	0.52	2.88	1.21	2.52	0.98	1.80	0.04	21.31	12.71	12
1908	0.55	0.41	1.73	0.93	1.15	0.93	0.52	2.88	1.21	2.52	0.98	1.80	0.04	21.31	12.71	12
1909	0.55	0.41	1.73	0.93	1.15	0.93	0.52	2.88	1.21	2.52	0.98	1.80	0.04	21.31	12.71	12
1910	0.55	0.41	1.73	0.93	1.15	0.93	0.52	2.88	1.21	2.52	0.98	1.80	0.04	21.31	12.71	12
1911	0.55	0.41	1.73	0.93	1.15	0.93	0.52	2.88	1.21	2.52	0.98	1.80	0.04	21.31	12.71	12
1912	0.55	0.41	1.73	0.93	1.15	0.93	0.52	2.88	1.21	2.52	0.98	1.80	0.04	21.31	12.71	12
1913	0.55	0.41	1.73	0.93	1.15	0.93	0.52	2.88	1.21	2.52	0.98	1.80	0.04	21.31	12.71	12
1914	0.55	0.41	1.73	0.93	1.15	0.93	0.52	2.88	1.21	2.52	0.98	1.80	0.04	21.31	12.71	12
1915	0.55	0.41	1.73	0.93	1.15	0.93	0.52	2.88	1.21	2.52	0.98	1.80	0.04	21.31	12.71	12
1916	0.55	0.41	1.73	0.93	1.15	0.93	0.52	2.88	1.21	2.52	0.98	1.80	0.04	21.31	12.71	12
1917	0.55	0.41	1.73	0.93	1.15	0.93	0.52	2.88	1.21	2.52	0.98	1.80	0.04	21.31	12.71	12
Average		0.55	0.52	5.12	4.45	3.24	1.88	2.95	1.21	7.65	0.57	0.19	0.29	21.31	12.71	12
Av. No. days with precipitation ..		1	3	5	7	7	8	12	12	7	4	3	2	71	53	12
Av. snowfall, in..		1.8	8.2	7.6	5.2	3.2	0	0	0	0	3.2	4.7	7.0	40.9	11	11
Temperature—																
Mean		33.8	33.7	41.2	48.0	54.9	63.2	67.0	63.2	59.9	49.8	40.4	30.1	48.9	10	10
Mean Max.		49.3	49.0	57.1	63.4	71.9	78.1	81.4	81.0	76.6	66.5	57.5	45.7	64.8	11	11
Mean Min.		17.6	17.3	25.7	32.4	37.9	47.1	52.2	51.4	48.0	38.2	29.2	15.0	33.2	11	11
Highest		70	71	81	82	86	92	92	91	87	85	78	73	92	11	11
Lowest		-20	-35	-11	11	18	31	40	36	23	1	-6	-16	-35	11	11
Prevailing wind..		E	E	W	E	SE	SE	SE	SE	SE	E	E	E	E	E	12
Days clear		16	12	12	12	11	11	7	9	15	18	17	16	156	65	12
Days partly cldy.		9	9	11	10	12	13	17	17	10	7	6	8	129	79	12
Days cloudy		6	7	8	8	8	6	7	5	5	6	7	7	80	39	12

Frost—Average date of first killing frost in autumn, Oct. 6.
 Average date of last killing frost in spring, May 7.
 Earliest date of killing frost in autumn, Sept. 19.
 Latest date of killing frost in spring, May 17.
 Average length of growing season, 152 days.
 Years recorded, 12.

COLFAX COUNTY, (Continued)

	Year	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual	Seasonal	Record, Yrs.
Prevailing wind..		N	NW	S	S	S	S	S	NW	S	SW	S	NW	222	106	15
Days clear.....		20	17	17	17	17	17	18	17	20	19	22	21	222	106	20
Days partly cloudy.		7	7	8	7	8	8	8	8	5	6	4	5	80	43	20
Days cloudy.....		4	4	6	6	7	5	2	6	5	6	4	5	63	34	20

Frost—Average date of first killing frost in autumn, Oct. 3.

Average date of last killing frost in spring, May 4.

Earliest date of killing frost in autumn, Sept. 12.

Latest date of killing frost in spring, May 23.

Average length of growing season, 150 days.

*Estimated from nearby stations.

This is one of the northeast border counties, with many miles of mesa land from 5,500 to 9,000 feet in altitude, but rising along its western border at the crest of the Sangre de Cristo range to 13,000 feet. The mesa districts average from 14 to 16 inches in annual precipitation at 6,000 feet, increasing to 16 or 18 inches at 8,000 feet, and going above 20 inches at 10,000 feet. Over the lower mesas, which are successful dry farming lands, more than 12 inches precipitation occurs during the growing season from April to September. The temperature averages about 50 degrees, with maximum each summer above 90 degrees, and minimum each winter well below zero, with an occasional extreme record of 20 to 30 degrees below, especially over the mountain areas. In these districts the growing season is short, climate rigorous, snows heavy and winter long. The mesa districts have fresh, southerly winds, dry, sunny climate, with rather late spring frosts—conditions which are rather more favorable for grazing, although there are extensive dry farming areas.

Average annual precipitation, 13.5 to 16 or 18 inches in mountains.

Average seasonal precipitation, 9.5 to 13 or 14 inches in mountains.

Average seasonal snowfall, 25 to 40 inches and to 80 inches in the mountains.

Mean annual temperature, 48 to 50 degrees.

Mean summer temperature, 65 to 70 degrees.

Mean winter temperature, 32 to 33 degrees.

Crops are grown at all of the altitudes between 5,500 and 9,000 feet, both under dry farming and irrigation. In the high mountain altitudes, between 7,500 and 9,000 feet, particularly on the Johnson Mesa and in the Moreno Valley, excellent Irish potatoes are raised; also oats, barley and wheat. While these are the principal crops in these high altitudes, cabbage, carrots, turnips and celery may also be raised. A large part of the agriculture is carried on by dry farming methods. By reason of the favorable climatic and soil conditions, all of the farming on these mesas is being done in this manner. In the irrigated intermontane districts along the Poño River, Red River, Rayado, Cimarron and Cimarroncito the farming is all under irrigation, and there is a larger variety of crops raised; alfalfa, corn, beans, cane, wheat, barley, oats, cabbage,

onions, beets, carrots and turnips being among the leading crops. There is considerable fruit raised in these valleys, principally apples, although pears, sour cherries, and native and European plums are also raised. In the plains dry farming districts in the central and eastern parts beans, wheat, corn and cane are among the leading crops, in the lower altitudes.

Live stock raising is one of the principal industries, as the mesas, intermontane valleys and mountains afford excellent grazing conditions for both cattle and sheep.

CURRY COUNTY

STATION—CLOVIS. APPROX. LATITUDE—34° 24'. LONGITUDE—103° 11'. ELEVATION—4,129 FEET.

Precipitation	Year	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual	Seasonal	Record, Yrs.
1911	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1912	0.21	0.82	0.04	1.61	0.12	3.59	1.07	0.78	6.26	3.72	1.67	0.35	1.56	17.95	15.53	17.95
1913	0.21	0.82	0.04	1.61	0.12	3.59	1.07	0.78	6.26	3.72	1.67	0.35	1.56	17.95	15.53	17.95
1914	0	0.04	0.04	3.33	6.59	1.23	1.95	1.71	0.84	3.40	0.35	0.52	0.52	20.00	16.65	20.00
1915	0.25	1.01	1.38	6.77	0.54	1.41	3.81	2.85	5.74	1.38	0.32	1.53	1.53	26.89	21.12	26.89
1916	0.44	0	0.45	2.14	0.40	0.93	0.57	7.45	2.37	2.04	0.05	0.86	0.86	17.70	13.86	17.70
1917	0.44	0.06	0.07	0.57	1.13	0.00	2.35	1.77	1.10	0	0.07	0.00	0.00	7.56	6.92	7.56
Average	0.32	0.66	0.39	2.44	2.04	1.67	2.07	3.41	2.45	1.33	0.36	0.95	0.95	17.79	14.08	17.79
Av. No. days with precipitation . .	2	2	2	5	5	6	6	5	6	4	3	4	4	50	33	50
Av. snowfall, in..	1.6	3.9	3.4	0.5	0	0	0	0	0	0.5	0.9	5.5	5.5	16.3		16.3
Temperature—																
Mean	35.1	40.0	44.6	55.6	65.6	74.7	78.4	75.6	70.0	58.2	46.6	33.3	33.3	57.4		57.4
Mean Max.	49.4	55.3	60.3	72.3	80.4	89.9	93.9	90.3	85.7	73.9	61.0	45.7	45.7	71.5		71.5
Mean Min.	20.8	24.7	29.0	40.9	50.8	59.5	63.0	61.0	54.4	42.5	32.3	20.9	20.9	41.6		41.6
Highest	68	79	85	91	99	105	108	106	101	92	84	71	71	108		108
Lowest	-4	-4	-4	2	12	28	38	53	48	35	13	8	-9	-9		-9
Prevailing wind . .	W	W	W	W	W	S	S	SW	SW	SW	SW	SW	W	W		W
Days clear	21	20	17	16	19	19	21	21	21	21	22	22	20	239	117	239
Days partly cldy.	4	3	7	5	7	5	5	5	5	4	5	5	6	61	32	61
Days cloudy	6	5	7	9	5	5	5	5	5	4	5	3	5	65	34	65

Frost—Average date of first killing frost in autumn, Oct. 31.
 Average date of last killing frost in spring, April 19.
 Earliest date of killing frost in autumn, Oct. 19.
 Latest date of killing frost in spring, May 6.
 Average length of growing season, 195 days.

This is an eastern border county, entirely rolling prairie lands, mostly 4,100 to 5,000 feet in altitude. Its precipitation averages about 15 to 18 inches a year, giving a seasonal average, from April to September, of about 14 inches. The temperature averages 57 degrees, with maximum above 100 degrees occasionally each summer, and to, or slightly below, zero each winter; while an occasional winter may have from 5 to 10 degrees below zero. Winds over these plains are fresh and prevailing westerly; much clear weather occurs, with a fairly long growing season.

Average seasonal snowfall, 15 to 20 inches.

Average annual precipitation, 15 to 18 inches.

Average seasonal precipitation, 13 to 14.5 inches.

Mean annual temperature, 55 to 57 degrees.

Mean summer temperature, 74 to 76 degrees.

Mean winter temperature, 36 to 39 degrees.

This is practically a dry farming county. Winter wheat, kafir, milo, feterita, broom corn, feed sorghums, Sudan grass, corn and beans are the principal crops raised. Melons, squash and pumpkins may also be raised under dry farming. Wherever water for irrigation may be had the soil can be depended upon for large yields of the crops grown under dry farming, as well as many of the vegetables and fruits. Some vegetable gardening is carried on by windmill irrigation, on a small scale. Rainfall is the limiting factor in the production of large yields in this county. A few fruit trees are planted for home use. Probably the better fruits to grow under the limited amount of rainfall would be some of the earlier ripening varieties, such as sour cherries, American plums and grapes.

Much of the prairie lands afford good pasture for sheep and cattle. On account of the favorable conditions for dry farming and the small size of the county, stock raising on the ranges is not very extensively carried on.

DE BACA COUNTY, (Continued)

Year	Jan.		Feb.		March		April		May		June		July		Aug.		Sept.		Oct.		Nov.		Dec.		Annual		Seasonal		Record, Yrs.
	SW	SW	SW	SW	SW	SW	SW	SW	SW	SW	SW	SW	SW	SW	SW	SW	SW	SW	SW	SW	SW	SW	SW	SW	SW	SW	SW	SW	
Prevailing wind..	23	16	23	20	19	22	18	19	22	18	19	22	18	19	22	18	19	22	18	19	22	18	19	22	18	19	22	18	19
Days clear	5	8	4	7	8	6	11	10	11	11	6	11	10	10	10	6	6	6	6	6	4	4	4	4	27	48	36	48	36
Days partly cl'dy.	3	4	4	3	4	2	4	2	4	2	2	2	2	2	2	2	2	2	2	2	2	2	2	7	38	16	38	16	
Days cloudy																													

Frost—Average date of first killing frost in autumn, Oct. 19.

Average date of last killing frost in spring, April 8.

Earliest date of killing frost in autumn, Oct. 11.

Latest date of killing frost in spring, April 29.

Average length of growing season, 194 days.

*Computed from nearby stations.

This is an east central county, with the Pecos River passing through about the center, north and south. Most of the county is composed of upland, rolling mesas, from 4,800 to 5,300 feet in altitude. The precipitation of the valley is low, climate fairly hot, clear and breezy. The uplands show slightly greater precipitation and are favorable for grazing. The temperature averages about 57 degrees in the valley, and a little lower over the mesas, with maximum around 100, or a little above, at times each summer, and minimum to zero and occasionally 10 to 12 degrees below. The winds are fresh and prevailing southwesterly.

Average annual precipitation, 13.5 to 15 inches.

Annual seasonal precipitation, 9.5 to 12 inches.

Mean annual temperature, 55 to 57 degrees.

Mean summer temperature, 74 to 76 degrees.

Mean winter temperature, 36 to 38 degrees.

Farming is done under irrigation in the Pecos Valley, mostly around Fort Sumner, about 9,000 acres being irrigable under the present system. Alfalfa, corn, the sorghums, wheat, sweet potatoes, cantaloupes, beans, tomatoes and cabbage are among the leading irrigated crops. Considerable fruit is raised, principally apples. In other parts of the county milo, kafir and feterita, Pinto beans and small amounts of broom corn are usually raised by dry farming methods. There are no mountains or high altitude districts in the county.

About 97 per cent of the area of the county is devoted to stock raising under range conditions. In the western part of the county the sheep industry is important.

DOÑA ANA COUNTY

STATION—AGRICULTURAL COLLEGE. APPROX. LAT.—32° 45'. LONG.—106° 45'. ELEV.—3,863 FEET.

Precipitation	Year	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual	Seasonal	Record, Yrs
1851	0.22	0.20	0.04	0.20	0.40	0.40	1.74	3.94	1.00	1.40	0.11	2.13	1.74	12.63	8.95	1851
1852	0.04	0.10	0.03	0.01	0.02	0.02	0.22	2.80	1.00	1.47	0.77	2.66	0.00	12.63	8.95	1852
1853	0.00	0.00	0.05	0.10	0.08	0.07	0.00	2.80	1.83	1.21	0.90	1.15	0.64	9.94	6.48	1853
1854	0.00	0.00	0.10	0.15	0.10	0.07	0.00	2.80	1.38	0.96	0.39	0.67	0.15	6.07	4.21	1854
1855	0.00	0.00	0.10	0.15	0.10	0.07	0.00	2.80	1.38	0.96	0.39	0.67	0.15	6.07	4.21	1855
1856	0.00	0.00	0.10	0.15	0.10	0.07	0.00	2.80	1.38	0.96	0.39	0.67	0.15	6.07	4.21	1856
1857	0.00	0.00	0.10	0.15	0.10	0.07	0.00	2.80	1.38	0.96	0.39	0.67	0.15	6.07	4.21	1857
1858	0.00	0.00	0.10	0.15	0.10	0.07	0.00	2.80	1.38	0.96	0.39	0.67	0.15	6.07	4.21	1858
1859	0.00	0.00	0.10	0.15	0.10	0.07	0.00	2.80	1.38	0.96	0.39	0.67	0.15	6.07	4.21	1859
1860	0.00	0.00	0.10	0.15	0.10	0.07	0.00	2.80	1.38	0.96	0.39	0.67	0.15	6.07	4.21	1860
1861	0.00	0.00	0.10	0.15	0.10	0.07	0.00	2.80	1.38	0.96	0.39	0.67	0.15	6.07	4.21	1861
1862	0.00	0.00	0.10	0.15	0.10	0.07	0.00	2.80	1.38	0.96	0.39	0.67	0.15	6.07	4.21	1862
1863	0.00	0.00	0.10	0.15	0.10	0.07	0.00	2.80	1.38	0.96	0.39	0.67	0.15	6.07	4.21	1863
1864	0.00	0.00	0.10	0.15	0.10	0.07	0.00	2.80	1.38	0.96	0.39	0.67	0.15	6.07	4.21	1864
1865	0.00	0.00	0.10	0.15	0.10	0.07	0.00	2.80	1.38	0.96	0.39	0.67	0.15	6.07	4.21	1865
1866	0.00	0.00	0.10	0.15	0.10	0.07	0.00	2.80	1.38	0.96	0.39	0.67	0.15	6.07	4.21	1866
1867	0.00	0.00	0.10	0.15	0.10	0.07	0.00	2.80	1.38	0.96	0.39	0.67	0.15	6.07	4.21	1867
1868	0.00	0.00	0.10	0.15	0.10	0.07	0.00	2.80	1.38	0.96	0.39	0.67	0.15	6.07	4.21	1868
1869	0.00	0.00	0.10	0.15	0.10	0.07	0.00	2.80	1.38	0.96	0.39	0.67	0.15	6.07	4.21	1869
1870	0.00	0.00	0.10	0.15	0.10	0.07	0.00	2.80	1.38	0.96	0.39	0.67	0.15	6.07	4.21	1870
1871	0.00	0.00	0.10	0.15	0.10	0.07	0.00	2.80	1.38	0.96	0.39	0.67	0.15	6.07	4.21	1871
1872	0.00	0.00	0.10	0.15	0.10	0.07	0.00	2.80	1.38	0.96	0.39	0.67	0.15	6.07	4.21	1872
1873	0.00	0.00	0.10	0.15	0.10	0.07	0.00	2.80	1.38	0.96	0.39	0.67	0.15	6.07	4.21	1873
1874	0.00	0.00	0.10	0.15	0.10	0.07	0.00	2.80	1.38	0.96	0.39	0.67	0.15	6.07	4.21	1874
1875	0.00	0.00	0.10	0.15	0.10	0.07	0.00	2.80	1.38	0.96	0.39	0.67	0.15	6.07	4.21	1875
1876	0.00	0.00	0.10	0.15	0.10	0.07	0.00	2.80	1.38	0.96	0.39	0.67	0.15	6.07	4.21	1876
1877	0.00	0.00	0.10	0.15	0.10	0.07	0.00	2.80	1.38	0.96	0.39	0.67	0.15	6.07	4.21	1877
1878	0.00	0.00	0.10	0.15	0.10	0.07	0.00	2.80	1.38	0.96	0.39	0.67	0.15	6.07	4.21	1878
1879	0.00	0.00	0.10	0.15	0.10	0.07	0.00	2.80	1.38	0.96	0.39	0.67	0.15	6.07	4.21	1879
1880	0.00	0.00	0.10	0.15	0.10	0.07	0.00	2.80	1.38	0.96	0.39	0.67	0.15	6.07	4.21	1880
1881	0.00	0.00	0.10	0.15	0.10	0.07	0.00	2.80	1.38	0.96	0.39	0.67	0.15	6.07	4.21	1881
1882	0.00	0.00	0.10	0.15	0.10	0.07	0.00	2.80	1.38	0.96	0.39	0.67	0.15	6.07	4.21	1882
1883	0.00	0.00	0.10	0.15	0.10	0.07	0.00	2.80	1.38	0.96	0.39	0.67	0.15	6.07	4.21	1883
1884	0.00	0.00	0.10	0.15	0.10	0.07	0.00	2.80	1.38	0.96	0.39	0.67	0.15	6.07	4.21	1884
1885	0.00	0.00	0.10	0.15	0.10	0.07	0.00	2.80	1.38	0.96	0.39	0.67	0.15	6.07	4.21	1885
1886	0.00	0.00	0.10	0.15	0.10	0.07	0.00	2.80	1.38	0.96	0.39	0.67	0.15	6.07	4.21	1886
1887	0.00	0.00	0.10	0.15	0.10	0.07	0.00	2.80	1.38	0.96	0.39	0.67	0.15	6.07	4.21	1887
1888	0.00	0.00	0.10	0.15	0.10	0.07	0.00	2.80	1.38	0.96	0.39	0.67	0.15	6.07	4.21	1888
1889	0.00	0.00	0.10	0.15	0.10	0.07	0.00	2.80	1.38	0.96	0.39	0.67	0.15	6.07	4.21	1889
1890	0.00	0.00	0.10	0.15	0.10	0.07	0.00	2.80	1.38	0.96	0.39	0.67	0.15	6.07	4.21	1890
1891	0.00	0.00	0.10	0.15	0.10	0.07	0.00	2.80	1.38	0.96	0.39	0.67	0.15	6.07	4.21	1891
1892	0.00	0.00	0.10	0.15	0.10	0.07	0.00	2.80	1.38	0.96	0.39	0.67	0.15	6.07	4.21	1892
1893	0.00	0.00	0.10	0.15	0.10	0.07	0.00	2.80	1.38	0.96	0.39	0.67	0.15	6.07	4.21	1893
1894	0.00	0.00	0.10	0.15	0.10	0.07	0.00	2.80	1.38	0.96	0.39	0.67	0.15	6.07	4.21	1894

Year	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual	Seasonal	Record, Yrs.
1895	0.45	0.24	0.01	0.00	0.52	0.10	2.03	2.19	0.36	1.20	0.45	0.32	9.47	6.30	60
1896	0.31	0.11	0.00	0.11	0.10	1.01	2.50	0.47	1.14	1.24	0.00	0.45	7.09	5.23	53
1897	0.35	0.00	0.46	0.23	1.54	0.07	2.25	1.16	1.74	0.72	0.00	0.00	7.99	5.93	53
1898	0.38	0.02	0.26	0.69	1.47	1.83	2.18	2.43	1.43	0.72	0.43	1.25	8.92	6.23	53
1899	0.05	0.09	0.19	0.13	1.17	0.63	4.54	1.31	0.77	0.02	0.00	0.00	11.31	8.41	53
1900	0.33	0.42	1.36	0.31	0.88	0.16	1.52	0.90	1.80	0.45	0.23	0.04	9.61	6.49	53
1901	0.31	0.95	0.61	0.30	1.08	1.08	2.23	1.35	1.15	0.85	0.23	0.05	8.40	5.71	53
1902	0.02	0.14	0.05	0.00	0.01	0.07	2.16	1.77	1.23	0.72	0.61	0.99	11.95	6.11	53
1903	0.20	0.98	0.37	0.08	0.10	3.65	0.97	1.50	2.43	0.00	0.00	0.01	10.29	6.22	53
1904	T.	0.11	0.00	0.00	0.05	0.70	1.86	1.24	1.52	0.50	0.63	0.00	10.90	6.31	53
1905	1.01	1.26	2.03	1.89	0.06	0.58	1.83	1.88	3.08	0.82	2.14	0.90	17.00	9.23	53
1906	0.81	0.68	0.13	0.50	0.40	T.	2.21	0.45	0.11	0.24	2.03	1.04	8.80	5.43	53
1907	0.74	T.	0.05	T.	0.22	0.58	0.75	1.42	1.16	0.57	0.23	0.00	6.42	4.23	53
1908	0.38	0.65	0.17	0.27	0.22	0.00	1.99	1.33	0.03	0.22	0.65	0.06	5.97	3.44	53
1909	0.01	0.09	0.89	0.00	T.	0.55	0.71	1.11	0.32	0.12	0.00	0.48	4.94	3.29	53
1910	0.22	0.02	0.33	0.10	T.	0.25	1.10	1.46	0.33	0.03	0.11	0.17	4.02	3.44	53
1911	0.27	0.78	0.60	0.32	0.10	0.33	1.36	0.14	1.18	0.30	0	0.42	5.80	3.43	53
1912	T.	0.08	0.30	0.80	0.08	0.12	0.48	5.04	0.70	0.98	0.32	0.30	9.26	7.33	53
1913	0.49	0.80	0.20	1.40	0.01	2.63	1.27	1.33	1.70	T.	0.80	1.10	11.72	8.41	53
1914	0.10	0.10	0.16	T.	0.32	1.85	2.68	1.48	0.56	0.54	0.56	3.74	11.85	6.65	53
1915	0.64	0.59	1.23	0.11	0	T.	1.24	1.32	2.11	0.01	T.	0.12	7.37	4.86	53
1916	0.25	0.18	0.67	0.07	0.97	0	0.50	1.38	0.69	2.50	0.52	0.15	7.78	3.51	53
1917	0.19	T.	0.01	0.01	0.34	T.	1.31	3.09	0.51	T.	0.12	T.	5.58	5.56	53
Average	0.32	0.44	0.31	0.20	0.24	0.55	1.76	1.70	1.33	0.69	0.56	0.50	8.60	5.78	
Av. No. days with precipitation ...	2	3	3	2	1	3	8	8	5	3	2	3	43	27	
Av. snowfall, in. . .	0.5	0.4	0.6	0.1	0	0	0	0	0	0	0	0.6	0.9	3.1	
Temperature—															
Mean Max.	42.6	45.4	52.4	59.1	65.6	76.4	79.2	78.0	71.6	60.3	49.7	41.4	60.3	41.4	17
Mean Min.	59.2	61.7	69.5	76.8	85.4	94.1	93.3	92.7	87.2	77.5	66.8	55.4	76.8	55.4	17
Mean Max.	25.9	29.2	35.4	41.4	45.7	58.6	64.6	63.4	65.1	45.8	32.6	26.3	45.5	32.6	17
Highest	77	86	90	94	99	106	106	105	101	92	82	77	106	82	17
Lowest	-8	2	14	22	27	36	51	47	33	22	7	3	-8	7	17
Prevailing wind. .	W	W	W	W	W	W	SE	SE	SE	*	SE	N	W	W	17
Av. hrly. velocity	6	7	9	9	8	7	6	6	6	6	6	6	7	7	

*Prevailing wind for October, SE., SW., W.

DONA ANA COUNTY, (Continued)

	Year	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual	Seasonal	Record, Yrs
Days clear		19	15	18	20	21	20	12	13	18	21	20	18	215	104	
Days partly cl'dy.		8	8	8	7	8	9	14	14	8	6	6	7	102	60	
Days cloudy		4	5	5	3	2	1	5	4	4	4	4	6	47	19	
Mean rel. humid..		52	52	46	42	40	42	54	59	56	55	53	51			

Frost—Average date of first killing frost in autumn, Oct. 32.
 Average date of last killing frost in spring, April 12.
 Earliest date of killing frost in autumn, Oct. 1.
 Latest date of killing frost in spring, May 22.
 Average length of growing season, 193 days.
 Record in year 17.

NOTE—From September, 1851, to May, 1861, the values given are for Fort Fillmore, about ten miles southeast of State College; from November, 1855, to February, 1877, and from January, 1886, to September, 1896, the values given are for Fort Selden, about eighteen miles northwest of State College; from August, 1877, to July, 1882, they are for La Mesilla, about three miles west of State College.

This is a southern border county, traversed from north to south by the Rio Grande, with a narrow strip along the stream below 4,000 feet, but largely 4,000 to 5,000 feet in altitude, rising abruptly along its eastern border to the Organ Mountains and San Andres range. It is a warm, dry, sunshiny district. The precipitation for 66 years averages between 8 and 9 inches annually along the Rio Grande, and is slightly higher over the mesas and foothills, affording sparse grazing lands. The mean temperature of the lower districts is about 60 degrees, with maximum well above 100 degrees each summer and minimum toward zero each winter; which, however, is usually clear, dry and pleasant. Rather fresh westerly winds prevail.

Average annual precipitation, 8 to 10 or 12 inches.

Average seasonal precipitation, 5.5 to 7.5 inches.

Average seasonal snowfall, 3 to 10 inches, with 15 to 20 inches in mountains.

Mean annual temperature, 60 degrees.

Mean summer temperature, 78 degrees.

Mean winter temperature, 43 degrees.

Average hourly wind movement, 7 miles.

Prevailing direction of wind, westerly.

Mean relative humidity, 51 per cent.

All of the farming done in this county is by irrigation. As the rainfall is very light there is no dry farming being carried on. The Mesilla Valley is located in about the center of the county, and is under the Elephant Butte Irrigation Project. About 90,000 acres of land can be irrigated from this reservoir. Almost any of the temperate zone crops can be raised here, but the principal ones are alfalfa, corn, wheat, oats, barley, feed and grain sorghums, Sudan grass and field peas. Among the leading cool season vegetables are early cabbage, onions, spinach, asparagus, garden peas, table beets, carrots, turnips, and radishes; while among the warm season vegetables are the sweet potato, tomato, chile, cantaloupe, watermelon, beans, sweet corn and eggplant, which are well suited to both the soil and climatic conditions. The Irish potato, as a rule, is not dependable, and should not be grown on a large scale until more information is obtained regarding its adaptability here.

Peaches, grapes (mostly the European varieties), apples, pears, quinces, European and native plums and sour cherries are raised. Sweet cherries are not considered a success. Almonds, Japanese plums and apricots are failures on account of the fact that they bloom so exceedingly early in the spring they are killed by the frost.

The mesas west of the Rio Grande, as well as those east, the Organ Mountains and San Andres range afford considerable grazing for cattle, while the northern part of the county affords good range for sheep. The raising of hogs is becoming an important industry in the Mesilla Valley. Sheep are also being raised on the farms.

EDDY COUNTY

STATION—CARLSBAD. APPROX. LATITUDE—32° 24'. LONGITUDE—104° 19'. ELEVATION—3,120 FEET.

Precipitation	Year	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual	Seasonal	Record, Yrs
Mean	1889	0.29	0.38	0.51	0.94	0.50	2.10	3.03	2.20	1.61	1.24	0.70	0.61	14.11	10.38	1908
Av. No. days with precipitation . . .	1891	2	2	2	3	2	5	7	6	5	3	3	3	43	28	1908
Av. snowfall, in. .	1894	1.4	1.5	0.5	0	0	0	0	0	0	0	0.9	1.6	5.9	5.9	1908
Temperature—	1894	45.4	47.2	56.4	63.2	71.7	78.9	80.4	79.8	72.6	63.0	52.8	43.2	62.0	62.0	1894
Mean	1894	62.4	64.5	74.6	81.0	89.1	95.1	94.9	94.4	88.4	79.9	70.7	59.4	79.5	79.5	1894
Mean Max.	1894	28.3	29.8	38.1	45.4	54.3	62.7	65.8	65.1	58.8	46.1	34.8	27.1	46.4	46.4	1894
Mean Min.	1894	88	100	97	100	105	112	110	108	104	100	97	85	112	112	1894
Highest	1894	-3	-2	15	24	31	45	53	49	33	22	2	0	-3	-3	1894
Lowest	1894	0.29	0.38	0.51	0.94	0.50	2.10	3.03	2.20	1.61	1.24	0.70	0.61	14.11	10.38	1908
Mean	1894	0.29	0.38	0.51	0.94	0.50	2.10	3.03	2.20	1.61	1.24	0.70	0.61	14.11	10.38	1908
Av. No. days with precipitation . . .	1894	2	2	2	3	2	5	7	6	5	3	3	3	43	28	1908
Av. snowfall, in. .	1894	1.4	1.5	0.5	0	0	0	0	0	0	0	0.9	1.6	5.9	5.9	1908
Temperature—	1894	45.4	47.2	56.4	63.2	71.7	78.9	80.4	79.8	72.6	63.0	52.8	43.2	62.0	62.0	1894
Mean	1894	62.4	64.5	74.6	81.0	89.1	95.1	94.9	94.4	88.4	79.9	70.7	59.4	79.5	79.5	1894
Mean Max.	1894	28.3	29.8	38.1	45.4	54.3	62.7	65.8	65.1	58.8	46.1	34.8	27.1	46.4	46.4	1894
Mean Min.	1894	88	100	97	100	105	112	110	108	104	100	97	85	112	112	1894
Highest	1894	-3	-2	15	24	31	45	53	49	33	22	2	0	-3	-3	1894
Lowest	1894	0.29	0.38	0.51	0.94	0.50	2.10	3.03	2.20	1.61	1.24	0.70	0.61	14.11	10.38	1908

EDDY COUNTY, (Continued)

	Year	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual	Seasonal	Record, Yrs
Prevailing wind..		SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	
Days clear		20	18	21	21	20	19	17	17	19	20	21	19	222	113	
Days partly cl'dy.		7	6	6	5	9	8	10	11	5	7	5	7	86	48	
Days cloudy		4	4	4	4	2	3	4	3	6	4	4	5	47	22	

Frost—Average date of first killing frost in autumn, Oct. 30.
 Average date of last killing frost in spring, March 29.
 Earliest date of killing frost in autumn, Oct. 16.
 Latest date of killing frost in spring, May 7.
 Average length of growing season, 201 days.

*Computed from nearby stations.

This is a southeastern border county, varying from 3,000 to 4,000 feet in altitude along the lower Pecos, which traverses it from north to south. Portions of the county along its western border, however, are broken and mountainous, while east of the river some distance there is a rise to the "cap rock." As a whole it is a warm, dry, sunshiny district, with an annual precipitation of about 14 inches, which increases to 18 and possibly 20 inches over the mountains in its southwestern border; mean annual temperature 60 to 63 degrees, with maximum well above 100 degrees each summer and about zero each winter. The winds of the valley are light, south to southeast, but are fresh over the mesas east and west. A long, hot growing season obtains, but one requiring irrigation for most successful culture.

Average annual precipitation, 13 to 15 inches, and to 18 in the mountains.

Average seasonal precipitation, 10 to 12 inches.

Average seasonal snowfall, 5 to 10 inches, and 20 to 30 inches in the mountains.

Mean annual temperature, 60 to 63 degrees.

Mean summer temperature, 78 to 80 degrees.

Mean winter temperature, 42 to 46 degrees.

Practically all of the agriculture in this county is carried on under irrigation. Alfalfa, wheat, barley, oats, cotton, corn, milo, kafir, feterita, the feed sorghums, sweet potatoes, beans, and onions are some of the leading crops raised under the Carlsbad Reclamation Project. Apples are not successfully grown under the project, although in the Artesia valley and in the Hope district there are a number of commercial apple orchards which produce excellent fruit. In these districts, sour cherries, pears, American and European plums and peaches are raised; while all the vegetables, grains and alfalfa are also grown. The famous Denia onion has been grown more extensively around Lakewood than in any other place in the state. Tomatoes of excellent quality are grown around Lakewood and Dayton, where there are two canning factories in operation. To the west, on the Peñasco River, apples, alfalfa, corn, barley, oats and wheat are raised. Some Irish potatoes have been suc-

cessfully grown in the silt bottom of this river, but not in the Pecos Valley.

This is an important grazing county. The mesas east of the Pecos River and west extending into the Sacramento and Guadalupe Mountains afford good grazing for sheep and cattle. The raising of hogs on alfalfa in the irrigated valleys, as well as the feeding of lambs and old ewes, is also becoming an important industry.

GRANT COUNTY

STATION—FORT BAYARD. APPROX. LAT.—32° 48'. LONG.—108° 10'. ELEVATION—6,152 FEET.

Year	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual	Seasonal	Record, Yrs.
1867	0.71	1.25	0.67	0.20	T.	0.00	4.45	2.19	1.60	0.75	0.55	1.50	13.87	8.44	
1868	1.35	0.50	0.58	0.43	0.90	0.00	4.81	2.52	2.66	6.05	0.35	1.08	15.23	11.32	
1869	0.60	0.44	0.53	0.19	0.00	3.74	0.87	4.17	0.72	0.76	0.57	0.94	12.84	9.00	
1870	0.38	0.32	0.33	0.02	0.00	1.10	2.56	3.57	0.03	0.01	0.00	0.45	10.97	8.38	
1871	0.64	0.05	0.40	0.10	0.00	0.05	0.05	0.09	0.19	0.27	0.75	1.50	0.45	5.79	2.70
1872	0.85	0.27	0.27	0.66	0.11	1.26	2.85	3.87	1.25	0.15	0.04	0.28	13.61	9.50	
1873	0.48	1.91	0.87	0.04	0.29	1.10	3.02	1.73	1.30	0.00	0.70	0.74	13.18	7.48	
1874	1.79	5.68	1.72	2.32	0.90	0.30	2.09	2.38	0.83	1.00	0.65	0.72	20.38	8.82	
1875	0.75	1.55	0.80	0.02	T.	0.04	7.22	2.08	5.99	T.	0.00	1.30	19.66	15.26	
1876	0.98	0.08	0.24	T.	0.40	2.44	2.88	3.16	3.24	4.17	1.13	0.22	18.94	12.12	
1877	0.38	3.54	0.29	0.60	0.47	0.00	2.84	1.71	0.97	0.61	0.17	1.54	13.13	6.50	
1878	0.03	0.71	1.05	....	....	0.05	3.92	7.70	0.27	0.00	0.31	0.77	11.94	11.94	
1879	2.78	1.12	0.32	0.01	0.00	0.08	1.17	3.85	2.41	1.06	0.58	0.49	13.77	7.72	
1880	0.79	0.80	0.33	0.30	0.00	0.99	3.05	3.51	3.57	1.56	0.60	1.85	16.90	11.42	
1881	1.62	0.73	0.91	0.48	1.01	0.43	9.23	8.69	3.80	3.21	1.55	0.98	30.92	24.12	
1882	1.83	2.06	1.17	0.08	1.37	1.32	1.44	6.00	1.05	0.00	1.37	0.58	19.27	13.26	
1883	1.83	0.93	1.17	....	....	4.69	7.67	1.06	....	....	....	....	....	....
1884	1.05	1.07	0.18	....	....	1.26	3.99	2.93	1.60	....	....	....	....	....
1885	1.08	1.51	0.80	....	....	0.52	1.56	1.39	2.53	1.60	....	....	....	....
1886	0.08	1.51	0.90	0.01	0.06	0.35	1.57	3.64	3.00	0.55	0.00	0.77	12.74	9.83	
1887	0.15	0.29	0.90	*0.35	0.10	0.30	4.79	0.27	3.00	3.00	0.06	1.02	13.42	6.01	
1888	0.59	0.41	0.18	T.	0.13	0.90	0.91	0.76	2.19	0.67	2.56	1.07	15.86	10.20	
1889	1.89	T.	0.11	T.	0.00	T.	4.17	3.86	2.17	0.52	2.56	1.07	15.86	10.20	
1890	1.40	T.	0.11	T.	0.00	T.	4.17	3.86	2.17	0.52	2.56	1.07	15.86	10.20	
1891	0.87	1.03	0.56	0.00	1.55	0.35	1.00	1.82	1.49	0.97	0.06	1.70	10.30	6.21	
1892	0.91	0.87	1.48	0.30	0.00	0.10	2.37	1.37	1.37	0.13	0.47	0.39	0.51	8.80	4.07
1893	0.85	0.14	0.85	0.00	1.50	T.	3.76	4.80	3.88	0.00	0.03	T.	15.47	14.04	
1894	1.00	1.04	0.65	0.00	0.00	0.00	1.99	3.29	0.10	1.40	0.00	0.80	8.67	5.38	
1895	1.25	0.80	0.98	0.00	0.30	0.32	6.25	2.09	0.85	0.40	1.40	0.20	14.45	10.32	
1896	0.25	0.10	T.	0.10	0.10	0.20	7.35	2.35	6.15	T.	0.00	0.10	18.85	12.25	
1897	1.10	0.20	1.65	0.10	0.60	3.58	5.31	4.11	1.90	0.00	0.25	18.00	13.50	12.50	
1898	1.25	0.00	0.96	0.57	0.00	2.27	6.56	2.45	1.05	0.00	0.30	0.70	15.21	13.00	
1899	0.30	0.20	0.30	0.23	T.	1.32	4.66	1.30	1.23	0.90	0.33	T.	10.78	8.75	
1900	1.90	0.15	0.58	1.55	0.41	0.17	0.91	1.35	0.40	0.49	0.55	0.16	12.16	8.82	
1901	0.41	0.65	0.60	0.25	T.	T.	2.10	0.60	1.00	2.57	0.33	3.00	15.67	11.04	
1902	0.15	0.35	0.04	0.00	0.31	0.23	0.31	1.32	3.26	T.	0.00	T.	12.93	8.76	
1903	0.78	0.59	1.27	0.16	0.17	1.15	0.45	3.87	3.26	T.	0.00	T.	12.93	8.76	
1904	0.16	0.09	0.32	0.00	0.26	0.13	1.76	4.12	2.81	8.18	0.31	0.13	20.62	9.43	

GRANT COUNTY, (Continued)

Year	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual	Seasonal	Record, Yrs.
1905	3.07	4.26	4.33	2.93	0.07	0.75	2.84	2.33	4.07	0.35	3.66	1.51	31.17	13.99	16
1906	0.41	1.63	0.85	0.79	0.08	T.	2.68	4.84	0.86	0.23	1.93	4.18	18.48	9.35	15
1907	3.35	0.30	0.15	0.80	1.07	0.88	1.34	4.15	1.69	1.12	0.87	0.00	15.72	9.33	16
1908	1.94	2.05	0.37	0.74	0.51	0.14	2.38	2.85	0.81	0.00	0.21	0.52	12.52	7.43	16
1909	0.33	0.86	1.05	0.00	0.00	0.94	2.05	2.65	1.55	0.03	0.07	0.30	11.43	8.19	16
1910	0.64	T.	T.	0.55	0.32	2.40	1.45	0.90	0.35	0.43	0.95	0.30	8.29	5.97	16
1911	1.65	1.29	1.70	0.40	T.	2.20	4.59	2.02	2.94	3.31	T.	0.63	20.63	12.15	16
1912	0.19	0.85	2.81	0.15	0.52	1.80	2.42	4.47	1.17	1.04	0.01	0.73	15.66	10.93	16
1913	0.72	2.37	0.27	0.23	0.47	0.51	2.20	3.28	1.18	1.03	2.95	1.15	15.67	7.37	16
1914	0.42	0.49	0.83	0.01	0.64	1.03	7.40	3.54	1.02	3.40	0.15	4.57	24.40	13.64	16
1915	1.74	2.49	1.91	1.40	T.	T.	3.88	3.62	3.08	0.09	0.01	2.00	20.37	11.98	16
1916	1.87	1.14	1.00	0.40	0.32	0	2.77	5.34	1.92	2.68	0.01	0.47	18.12	10.95	16
1917	2.45	0.12	0.02	0.59	0.31	0.66	1.24	1.19	1.85	0.21	0.00	0.00	8.04	5.24	16
	0.95	1.02	0.76	0.37	0.31	0.71	3.15	3.25	1.97	1.18	0.73	0.89	15.29	9.76	16
Mean	4	4	4	3	2	4	10	11	6	4	2	3	57	36	16
Days with precip.	1.7	3.1	2.7	T.	0	0	0	0	0	0	1.2	3.2	12.2	16	16
Av. snowfall, in. .															
Prevailing wind. .															
Temperature—															
Mean	W	W	W	SW	SW	W	W	W	W	W	W	W	W	W	15
Mean Max.	38.5	40.6	46.3	53.2	61.7	71.1	72.7	71.2	66.5	56.7	46.4	39.1	55.4	55.4	38
Mean Min.	53.4	55.2	61.4	69.0	77.3	86.4	86.4	84.8	80.2	70.6	60.8	51.2	69.6	69.6	16
Mean	26.4	27.7	33.0	38.8	45.0	52.6	58.2	57.1	52.0	40.7	32.3	25.4	40.8	40.8	16
Highest	72	80	85	87	92	102	100	98	100	85	78	72	103	103	16
Lowest	-12	5	9	19	25	37	48	48	34	19	-1	9	-12	-12	16
Days clear	21	20	22	23	25	22	14	15	20	23	22	22	250	119	17
Days partly cldy.	7	5	6	5	4	6	13	13	8	6	5	5	83	49	17
Days cloudy	3	4	3	2	2	2	4	3	2	3	2	4	33	15	17

Frost—Average date of first killing frost in autumn, Oct. 21.
 Average date of last killing frost in spring, April 23.
 Earliest date of killing frost in autumn, Oct. 3.
 Latest date of killing frost in spring, May 27.
 Average length of growing season, 181 days.
 Years recorded, 16.

*Computed from nearby stations.

GRANT COUNTY

STATION—LORDSBURG. APPROX. LATITUDE—32° 22'. LONGITUDE—108° 42'. ELEVATION—4,245 FEET.

Year	Jan.	Feb.	Mar.	Apr.	May.	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual	Seasonal	Record, Yrs.
1881	0.95	0.35	0.38	0.00	0.59	0.83	1.32	3.12	0.00	0.00	0.49	0.49	0.44	0.49	1881
1882	0.83	0.37	0.00	0.00	0.00	0.00	1.00	3.45	0.11	0.56	1.20	0.20	0.74	0.56	1882
1883	0.83	0.37	0.00	0.00	0.00	0.00	1.00	3.45	0.11	0.56	1.20	0.20	0.74	0.56	1883
1884	0.80	0.13	1.20	0.20	0.49	0.39	0.75	1.30	2.35	2.25	0.00	1.46	1.46	0.44	1884
1885	0.00	0.20	0.40	0.00	0.00	0.39	0.75	1.30	2.35	2.25	0.00	1.46	1.46	0.44	1885
1886	0.00	0.33	0.00	0.00	0.00	0.00	1.54	1.65	1.17	0.17	0.20	0.00	0.00	0.00	1886
1887	0.00	0.12	0.00	0.00	0.10	0.30	3.17	2.67	1.31	0.00	0.32	0.70	0.69	0.69	1887
1888	0.44	0.10	0.83	0.00	0.00	0.28	2.97	0.84	0.76	2.14	1.50	0.92	10.82	4.85	1888
1889	4.07	0.45	0.10	0.20	0.00	0.25	1.70	1.28	1.76	0.41	0.02	0.10	10.34	5.29	1889
1890	0.92	0.05	0.00	0.13	0.00	1.43	3.11	3.69	1.99	0.56	0.60	1.86	13.95	10.36	1890
1891	0.10	1.52	0.65	0.00	1.01	0.00	0.00	1.10	0.88	0.00	0.00	0.40	5.65	2.90	1891
1892	0.50	1.01	0.92	0.71	0.00	0.00	0.05	0.20	0.05	0.69	0.00	0.00	4.12	1.01	1892
1893	0.70	0.66	1.00	0.00	1.96	0.90	0.90	2.36	2.15	0.00	0.00	0.05	9.32	7.37	1893
1894	0.70	0.66	0.20	0.00	0.00	0.00	0.89	4.30	1.10	0.80	0.00	0.00	7.59	7.59	1894
1895	0.20	0.00	0.00	0.00	0.45	0.40	1.22	4.45	0.84	0.40	1.38	0.10	5.44	3.26	1895
1896	0.48	0.00	0.00	0.00	0.28	0.30	1.91	2.34	1.51	6.46	0.20	0.15	13.55	6.26	1896
1897	1.21	0.20	0.12	0.00	0.05	0.12	3.95	1.25	4.50	1.75	0.00	0.18	13.33	9.37	1897
1898	1.00	0.00	0.75	0.16	0.00	0.33	2.30	0.17	1.16	0.00	0.60	0.66	6.12	5.24	1898
1899	0.33	0.08	0.18	0.04	0.00	0.70	2.62	0.50	1.18	0.00	0.10	0.10	15.73	5.04	1899
1900	0.24	0.10	1.25	0.45	0.00	0.00	0.38	1.25	2.71	0.12	0.45	0.00	6.99	4.32	1900
1901	0.40	0.50	0.20	0.13	0.00	0.00	0.30	0.93	0.00	0.17	0.76	0.00	7.41	3.38	1901
1902	0.10	0.00	0.00	0.00	0.00	0.20	0.85	2.55	0.40	0.13	0.52	1.12	5.87	4.00	1902
1903	0.00	0.00	0.27	0.58	0.45	0.70	0.93	0.00	0.00	0.00	0.00	0.21	4.04	2.32	1903
1904	0.14	0.16	0.23	0.00	0.04	0.38	1.09	1.12	3.09	0.69	0.55	1.21	8.07	5.72	1904
1905	1.57	2.25	3.24	1.27	0.12	0.56	2.10	0.92	2.59	0.32	2.93	0.53	19.50	7.56	1905
1906	0.16	1.07	0.07	0.07	0.00	0.00	1.67	1.80	0.02	0.00	1.31	3.42	9.58	3.56	1906
1907	2.52	0.51	0.00	0.27	0.60	0.00	2.20	4.05	0.00	1.20	0.30	0.00	12.15	7.13	1907
1908	1.75	0.71	0.34	0.68	0.20	0.00	1.61	0.97	0.65	1.10	0.35	1.30	8.66	4.11	1908
1909	0.00	0.00	0.00	0.00	0.00	0.05	4.22	2.36	0.95	0.70	0.00	0.40	10.18	7.58	1909
1910	0.48	0.00	0.00	0.02	0.42	0.60	2.09	0.87	0.00	0.00	0.26	0.02	4.95	4.00	1910
1911	0.64	0.95	0.26	0.82	0.00	1.31	2.46	0.50	0.58	1.60	0.00	2.60	11.72	5.68	1911
1912	1.00	1.15	2.14	0.07	0.06	0.51	4.19	2.14	0.00	1.07	0.18	2.64	14.15	6.37	1912
1913	1.00	2.43	0.51	0.35	0.00	0.28	0.43	0.38	1.70	0.30	3.89	0.42	11.69	2.14	1913
1914	0.88	0.62	0.45	0.00	1.17	0.93	2.63	4.06	1.00	2.81	0.59	4.46	19.70	9.79	1914

GRANT COUNTY, (Continued)

Year	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual	Seasonal	Record, Yrs.
1915	1.08	0.87	1.75	0.80	0.00	0.00	2.83	1.50	0.24	0.00	0.00	1.64	10.91	5.57	13
1916	3.85	0.51	0.99	0.30	0.00	0.00	1.00	...	...	...	0.73	...	...	...	14
1917	1.25	0.50	0.00	0.46	1.25	0.56	0.36	0.92	2.69	0.00	0.00	...	8.28	6.53	13
	0.76	0.57	0.56	0.20	0.25	0.30	1.81	1.96	1.09	0.79	0.60	0.79	5.38	5.31	13
Mean	2	3	3	2	1	2	6	5	3	2	2	3	34	19	13
Av. No. days with precipitation ...	0.1	1.2	0.8	0.3	0	0	0	0	0	0	0.2	2.4	5.0	...	14
Av. snowfall, in...															13
Temperature—															13
Mean Max.	42.9	46.2	53.5	60.8	68.7	78.6	82.3	80.1	74.3	61.4	50.4	42.6	61.8	...	13
Mean Min.	50.4	62.5	71.1	76.9	85.8	95.4	95.3	91.5	89.9	79.3	68.1	55.7	77.9	...	13
Mean	29.0	31.6	37.5	42.0	47.1	57.2	64.4	63.6	57.3	43.4	32.0	26.4	41.3	...	13
Highest	79	79	93	93	100	105	108	104	98	94	84	78	108	...	13
Lowest	-9	8	21	23	27	43	50	51	36	23	9	3	-3	...	13
Prevailing wind...	E	E	W	W	W	W	E	E	E	E	E	E	E	...	13
Days clear	21	14	19	20	19	14	10	9	13	22	20	22	203	...	15
Days partly cl'dy.	5	5	6	6	10	11	12	15	11	5	5	4	99	...	15
Days cloudy	5	5	6	4	2	5	9	7	6	4	5	5	63	...	15

Frost.—Average date of first killing frost in autumn, Oct. 31.
 Average date of last killing frost in spring, March 26.
 Earliest date of killing frost in autumn, Oct. 18.
 Latest date of killing frost in spring, May 8.
 Average length of growing season, 219 days.
 Years recorded, 14.

*Computed from nearby stations.

This is a large southwestern border county, with a large area of comparatively low mesa land (4,000 to 5,000 feet) and vast mountain areas rising to 10,000 feet, in localities, over its northeast portions. The southern mesa districts are hot and dry, having an average annual precipitation of 9 to 10 inches and about 62 degrees annual mean temperature. Precipitation increases to 14, 16 and even 20 inches in the higher northern districts, and the temperature decreases to 58 degrees, 55 degrees, and probably as low as 50 degrees in the higher districts. The maximum of the summer in the lowlands will go well above 100 degrees each summer and toward zero each winter, while 90 to 100 degrees will be the highest of the summer in the foothills and mountains, and zero to 10 degrees below the minimum of the winter. Winds, throughout the district, are prevailing westerly and rather blustery in the spring, over the mesas, but lighter in the foothills and mountains.

Average annual precipitation, 10 to 14 inches, to 16 or 20 inches in the mountains.

Average seasonal precipitation, 5 to 10 or 12 inches.

Average seasonal snowfall, 5 to 12 inches, and to 50 inches in the mountains.

Mean annual temperature, 55 to 62 degrees.

Mean summer temperature, 72 to 80 degrees.

Mean winter temperature, 39 to 44 degrees.

Farming is done in the intermontane valleys where there is water for irrigation, and on the slopes of the mountains and hills where the rainfall is enough to insure successful growing of some crops under dry farming conditions. Outside of the early spring frosts the climatic and soil conditions are favorable for the growing of most of the temperate zone fruits, principally apples, pears, European and native plums, sour cherries and grapes. Alfalfa, beans, chile, melons, onions, cabbage, tomatoes, beets, turnips, corn and saccharine sorghums are the principal crops grown under irrigation along the Mimbres and Gila Valleys, which are the largest irrigated districts. Under dry farming, in the higher altitudes, where the rainfall is usually a little heavier, fairly good results may be expected from corn of the short season varieties, wheat, oats, barley, beans, pumpkins, squash and melons. Irish potatoes are

grown in the Upper Mimbres and Gila Valleys, and are more of a success in these higher mountain districts, where they are able to get sufficient moisture from rainfall or from irrigation, than in other localities. In the southwestern part of the county very little farming is done, on account of the lack of sufficient moisture, although the soil is capable of growing many crops, if water could be had for irrigation.

Conditions are exceptionally good for stock raising, more cattle being grazed in this county than in any other in the state. The growing of Angora goats in the mountain sections has been taken up to a considerable extent.

GUADALUPE COUNTY

STATION—SANTA ROSA. APPROX. LATITUDE—34° 55'. LONGITUDE—104° 40'. ELEVATION—4,624 FEET.

Precipitation	Year	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual	Seasonal	Record, Yrs.
1884	1884	0.92	0.18	0.74	T.	1.20	1.07	2.10	5.62	1.29	1.04	*0.14	0.26	16.70	11.29	11.29
1885	1885	0.92	0.18	0.74	0.26	2.40	2.18	1.00	5.81	1.42	0.33	0.14	0.66	16.70	10.72	10.72
1886	1886	1.04	0.71	0.81	0.39	0.60	1.09	1.65	5.56	2.85	0.77	0.14	0.66	16.70	11.50	11.50
1895	1895	*0.52	*0.61	*0.66	T.	3.41	0.24	4.87	4.67	2.00	0.77	0.82	0.31	11.72	12.20	12.20
1896	1896	0.15	0.05	0.10	0.15	T.	2.00	2.13	2.42	2.00	2.00	0.10	2.05	11.52	8.70	8.70
1897	1897	1.70	0.20	0.80	0.35	2.05	2.02	1.23	2.09	0.53	0.80	0.10	*0.50	*13.86	9.76	9.76
1898	1898	0.10	0.00	0.30	0.78	T.	2.04	5.31	*0.99	1.56	0.10	0.75	1.93	*13.98	10.78	10.78
1899	1899	T.	0.40	1.00	0.22	0.00	2.27	0.91	3.51	0.43	0.18	0.52	0.12	12.99	10.82	10.82
1908	1908	0.09	0.54	T.	1.49	0.10	1.92	4.77	3.48	0.60	1.64	0.22	0.22	10.77	7.52	7.52
1909	1909	0.15	0.11	1.42	0.07	0.98	1.19	3.50	3.18	1.32	1.63	0.46	0.03	8.91	6.88	6.88
1910	1910	0.82	T.	0.27	0.56	0.38	1.10	0.23	2.08	1.41	1.00	0.41	0.62	13.97	9.22	9.22
1911	1911	0.27	1.88	0.17	0.06	0.42	0.59	2.56	1.08	0.81	0.27	0.00	0.20	10.50	8.22	8.22
1912	1912	T.	1.47	0.35	0.47	0.94	2.55	2.28	0.64	1.87	0.22	1.02	1.52	13.99	7.23	7.23
1913	1913	0.37	0.25	0.13	1.32	0.88	2.68	0.22	0.96	0.50	0.22	0.00	1.07	21.61	17.23	17.23
1914	1914	0.00	0.28	0.12	1.19	0.89	2.68	4.32	1.30	0.56	0.22	0.08	0.42	12.16	10.92	10.92
1915	1915	1.02	0.52	1.30	3.39	0.59	0.50	3.67	1.30	0.34	1.37	0.08	0.04	9.94	7.04	7.04
1916	1916	0.58	0.00	0.23	2.62	0.16	1.41	2.62	2.83	1.16	1.08	0.35	0.67	13.76	10.02	10.02
Mean		0.48	0.67	0.49	0.86	1.12	1.43	2.62	2.83	1.16	1.08	0.35	0.67	13.76	10.02	10.02
Av. No. days with precipitation ..		2	3	4	4	6	6	10	9	6	4	2	3	59	41	8
Av. snowfall, in. . .		1.8	5.1	4.1	T.	0	0	0	0	T.	0.6	2.0	3.9	17.5	8	8
Temperature—																
Mean		39.2	40.7	47.8	55.5	63.6	73.6	76.8	75.0	67.6	56.6	47.2	36.9	56.7	48	48
Mean Max.		53.7	56.6	64.0	71.6	80.2	90.6	92.5	89.8	83.8	73.3	63.9	51.0	72.6	58	58
Mean Min.		24.7	24.8	31.5	39.4	47.0	56.6	61.2	60.2	51.5	40.0	30.6	22.8	40.9	48	48
Highest		76	74	85	93	98	104	107	102	96	92	84	74	107	88	88
Lowest		-10	0	2	21	23	42	51	47	32	20	2	-12	107	88	88
Prevailing wind..		W	W	W	W	S	S	S	S	W	W	W	W	W	8	8
Days clear		22	16	20	15	17	15	12	14	19	21	24	20	215	92	92
Days partly cldy..		6	7	6	10	10	11	15	13	9	6	4	7	194	68	68
Days cloudy		3	5	5	5	4	4	4	4	2	4	2	4	46	23	23

GUADALUPE COUNTY, (Continued)

Frost—Average date of first killing frost in autumn, Oct. 23.
Average date of last killing frost in spring, April 12.
Earliest date of killing frost in autumn, Oct. 14.
Latest date of killing frost in spring, May 2.
Average length of growing season, 194 days.
Years reported, 11.

*Computed from nearby stations.

This is an east central county, traversed from northwest to southeast by the upper Pecos within a fairly deep channel. Altitudes within the county run from about 4,000 feet to well above 6,000 feet along its northwest border, and there is much broken, upland grazing country within the county. The precipitation averages about 14 inches in the lower levels and increases slightly over the mesas and plateaus; mean temperature about 57 degrees, with maximum close to 100 degrees each summer, and minimum to zero and occasionally 5 to 10 degrees below. The winds are fresh and prevailing westerly, with much clear, dry weather.

Average annual precipitation, 13.5 to 15 inches.

Average seasonal precipitation, 10 to 12.5 inches.

Average seasonal snowfall, 15 to 20 inches.

Mean annual temperature, 54 to 57 degrees.

Mean summer temperature, 72 to 75 degrees.

Mean winter temperature, 36 to 39 degrees.

All along the Pecos River farming is done under irrigation. Wherever water can be put on the land good crops of alfalfa, peas, corn, the sorghums, wheat, barley, oats, onions, beans, chile, cabbage, tomatoes and squash are successfully raised. Among the fruits the apple is the principal one, although good pears, sour cherries, American and European plums, as well as peaches, are also raised. Under dry farming the most dependable crops are the feed and grain sorghums and the New Mexico Pinto bean. On a smaller scale broom corn, cowpeas, pumpkins, watermelons and Indian corn are raised. The results from the dry farming crops depend upon the amount of rainfall during the growing season. Irish potatoes have not proven a success. Most of the dry farming is done in the east and northeast portions of the county, as well as in the higher western parts.

For many years this has been an important stock raising county. The southern and southwestern mesas are used mostly for grazing sheep, while the northern and northeastern parts of the county are used for cattle.

LEA COUNTY

STATION—KNOWLES. APPROX. LATITUDE—32° 52'. LONGITUDE—103° 09'. ELEVATION—4,300 FEET.

	Year	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual	Seasonal	Record, Yrs
Precipitation	1910	0.48	1.88	0.46	1.05	0.68	0.94	0.45	2.71	0.51	0.45	0.35	1.16	14.14	9.48	
	1911	0.01	0.50	0.47	0.35	0.20	1.59	4.22	0.53	2.06	0.51	0.17	1.16	14.14	9.48	
	1912	0.02	0.56	0.77	1.10	0.05	2.05	1.28	1.12	1.29	0.97	0.93	0.49	9.00	6.53	
	1913	0.03	0.56	0.77	1.10	0.05	2.05	1.28	1.12	1.29	0.97	0.93	0.49	9.00	6.53	
	1914	T.	0.22	0.30	0.88	2.31	3.10	3.87	1.89	1.84	6.73	1.02	1.63	23.69	13.89	
	1915	0.30	1.60	2.62	3.48	0.45	2.16	1.58	2.00	7.02	0.12	0.03	0.84	22.20	16.69	
	1916	0.16	T.	...	...	...	...	...	...	...	...	...	...	...	...
	1917	0.13	T.	0.10	T.	0.52	0.07	0.43	1.11	2.67	T.	0.11	0.00	5.15	4.81	
Mean		0.31	0.44	0.46	0.92	0.99	1.36	2.84	1.67	2.40	2.16	0.76	0.64	14.96	10.18	
Av. No. days with precipitation ..		1	2	5	6	4	8	6	7	6	4	3	4	56	37	9
Snowfall, in.		1.1	0.9	1.3	T.	0	0	0	0	0	T.	1.8	2.4	7.5		
Temperature—																
Mean		42.2	42.6	48.3	58.4	61.8	74.6	78.0	77.2	70.7	59.3	49.5	39.4	59.		
Mean Max.		59.3	58.6	64.3	74.4	83.1	88.3	92.3	91.3	85.7	74.3	65.6	52.7	74.2		
Mean Min.		25.1	26.7	32.3	42.3	52.4	60.2	63.7	63.1	55.7	44.4	33.4	26.1	43.8		
Highest		81	84	87	94	100	104	104	104	99	92	83	75	104		
Lowest		-10	3	1	25	24	42	54	52	35	20	6	4	-10		
Prevailing wind...		SW	SW	SW	SW	SE	SE	SE	SE	SE	SW	SW	SW	SW		
Days clear		22	15	18	18	18	16	17	18	19	22	21	18	22	106	
Days partly c'dy.		5	8	6	8	10	11	12	12	9	5	5	6	36	61	
Days cloudy		4	5	7	4	3	3	3	1	3	4	4	7	47	16	

Frost—Average date of first killing frost in autumn, Oct. 27.

Average date of last killing frost in spring, March 30.

Earliest date of killing frost in autumn, Oct. 15.

Latest date of killing frost in spring, May 7.

Average length of growing season, 211 days.

This is the newly created southeast border county, a rolling prairie district, in what was long known as the "staked plains." The county averages about 4,000 feet in altitude, with an annual precipitation of about 15 inches, 10 to 12 inches of which occurs during the crop growing season from April to September. It is an open, rather dry, sunshiny district, with an average annual temperature of about 60 degrees. The maximum will go well above 100 degrees each summer and to zero or somewhat below each winter during one or two brief storms.

Average annual precipitation, 14 to 16 inches.

Average seasonal precipitation, 10.5 to 13 inches.

Average annual snowfall, 7 to 12 inches.

Mean annual temperature, 59 to 61 degrees.

Mean summer temperature, 77 to 80 degrees.

Mean winter temperature, 41 to 42 degrees.

In this county all of the agriculture is carried on under dry farming methods, as there are no streams or artesian wells. The principal crops are the grain sorghums, such as milo, kafir and feterita, and a number of the feed sorghums. Corn and cotton are also raised. The New Mexico Pinto bean is being introduced; and the results have been satisfactory. Since there is no irrigation in this county and the rainfall is the limiting factor in farming operations, the number of varieties of agricultural plants is somewhat limited. Naturally the grain and feed sorghums, as well as corn, beans and cotton, will be the principal paying crops. Many home gardens and orchards, of a half acre or so, are raised by windmill irrigation; and garden peas, beans, melons, pumpkins, sweet potatoes, tomatoes, cabbage, cherries, peaches and grapes are grown. Some comparatively shallow water belts are found, from 35 to 50 feet, which may develop into pumping projects; provided, of course, that cheap power and efficient machinery may be obtained.

Because of the open condition of the country it is subject to an occasional norther in winter; but nevertheless it is a most promising cattle and stock raising, as well as stock farming, county.

LINCOLN COUNTY

STATION—CORONA. APPROX. LATITUDE—34° 16'. LONGITUDE—105° 38'. ELEVATION—6,666 FEET.

	Year	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual	Seasonal	Record, Yrs.
Precipitation	1909	...	1.62	0.35	...	...	0.61	2.93	2.35	1.63	1.29	0.25	1.08	...	...	...
	1910	0.53	0.21	1.63	T.	0.12	0.61	1.40	2.59	0.50	0.65	...	0.05	...	...	...
	1911	0.21	1.63	0.99	1.98	0.48	1.48	4.04	0.60	1.00	0.83	0.39	1.08	14.71	9.53	...
	1912	0.08	1.52	0	0.44	0.43	2.36	1.97	2.55	0.72	0.55	0.04	0.70	11.36	8.47	...
	1913	1.80	0.46	0.61	0.54	0	2.30	0.40	1.52	2.14	0.09	0.55	1.30	11.61	6.80	...
	1914	0.15	0.38	0.11	1.30	1.21	2.41	5.28	5.56	T.	2.23	0	0.82	19.35	15.76	...
	1915	0.81	0.89	1.69	2.00	0.94	0.66	4.32	3.35	1.55	0.35	0	1.07	17.66	12.95	...
	1916	0.67	T.	0.62	1.67	0.40	T.	1.59	2.20	T.	2.70	0.42	0.22	10.42	12.95	...
	1917	0.60	0.83	0.30	0.20	0.32	0.45	0.19	2.52	0.55	0.00	0.11	0.90	6.58	4.74	...
		0.61	0.90	0.59	1.01	0.46	1.37	2.44	2.69	0.90	0.97	0.22	0.70	12.58	8.77	...
Average																
Av. No. days with precipitation ..		3	3	4	4	2	5	6	7	3	3	1	5	46	27	8
Snowfall, in.		7.8	14.1	5.8	3.0	0.3	0	0	0	1.3	1.2	2.2	9.9	45.6	8	8
Temperature—																
Mean		28.7	38.4	43.8	51.0	59.9	68.2	70.0	68.8	64.0	53.4	39.0	33.4	51.6	...	...
Mean Max.		34.7	50.5	55.6	63.0	73.4	81.1	81.5	80.3	76.8	67.0	46.8	44.1	62.9	...	...
Mean Min.		22.7	26.2	31.9	39.0	46.4	55.4	58.4	56.7	51.3	39.9	31.3	22.7	40.2	...	...
Highest		64	64	76	78	86	92	102	95	88	83	76	66	105	...	...
Lowest		-12	6	0	14	23	38	44	42	30	18	0	-12	...	...	...
Prevailing wind.		W	SW	SW	SW	SW	SW	SW	SW	SW	SW	SW	W	SW	...	...
Days clear		16	13	16	14	16	11	3	7	15	16	21	16	164	66	...
Days partly cloudy.		10	10	9	11	12	15	19	20	11	11	6	9	143	88	...
Days cloudy		5	5	6	5	3	4	9	4	4	4	3	6	58	29	...

LINCOLN COUNTY

STATION—FORT STANTON. APPROX. LATITUDE—33° 30'. LONGITUDE—105° 32'. ELEVATION—6,331 FEET.

Precipitation	Year	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual	Seasonal	Record, Yrs.
1856	0.59	1.59	0.58	1.59	0.24	0.26	0.88	1.99	3.52	2.81	0.19	2.14	2.21	16.81	9.60	1856
1857	0.67	0.97	0.97	1.17	0.62	0.69	1.37	4.88	9.24	6.14	2.59	0.87	0.19	28.70	22.84	1857
1858	0.65	0.12	1.47	0.31	0.70	2.00	2.00	3.49	8.93	0.74	0.47	0.24	0.48	18.76	15.33	1858
1859	0.09	0.53	1.00	0.30	0.20	3.19	3.19	3.30	6.53	3.77	2.60	0.25	1.65	23.81	17.69	1859
1860	0.39	3.55	0.08	1.41	T.	1.03	1.03	1.50	2.87	0.78	0.08	0.75	1.21	13.65	7.59	1860
1861	1.76	0.50	.....	T.	3.14	3.14	3.38	4.23	.....	1.14	.....	.....	.....	.....	.....	1861
1864	.....	.....	.....	.....	.....	.....	.....	.....	.....	1.16	.....	.....	.....	.....	.....	1864
1866	.....	.....	.....	.....	.....	.....	.....	.....	.....	1.15	.....	.....	.....	.....	.....	1866
1867	.....	.....	.....	.....	.....	.....	.....	.....	1.50	0.50	.....	.....	.....	.....	.....	1867
1868	.....	.....	.....	.....	.....	.....	.....	.....	1.50	0.50	.....	.....	.....	.....	.....	1868
1869	0.49	1.36	1.18	2.75	4.17	4.17	3.70	1.44	2.45	0.05	0.88	0.39	0.62	22.81	14.56	1869
1870	0.00	0.00	2.20	0.22	0.18	2.08	2.08	4.45	4.70	0.94	2.84	0.00	0.36	17.97	12.57	1870
1871	1.88	0.07	4.28	0.00	0.65	0.14	5.80	1.13	2.10	1.50	1.50	0.15	3.00	20.50	9.82	1871
1872	0.68	0.63	0.37	0.66	0.00	2.29	4.78	3.19	3.27	3.02	3.54	2.34	2.34	22.75	14.19	1872
1881	.....	.....	.....	.....	.....	.....	.....	.....	1.05	2.65	2.59	0.68	0.35	.....	.....	1881
1882	0.55	0.30	0.22	T.	T.	T.	0.50	0.56	1.87	0.70	0.00	1.21	0.21	6.78	3.85	1882
1883	0.00	0.00	.....	0.00	0.00	0.10	0.95	4.10	.....	.....	.....	.....	.....	.....	.....	1883
1884	1.20	0.40	0.70	0.30	1.73	2.11	2.48	6.98	3.21	2.65	0.30	.....	1.44	23.50	16.81	1884
1885	0.72	0.53	0.52	0.50	0.62	1.35	2.17	2.57	1.36	0.18	0.50	0.35	12.57	19.57	.....	1885
1886	0.36	0.17	0.50	1.50	0.10	1.61	4.71	5.45	4.29	1.32	0.15	0.08	20.24	17.57	.....	1886
1887	0.01	0.11	0.25	0.04	0.72	2.50	2.50	2.43	4.21	1.75	0.17	0.93	16.77	13.56	.....	1887
1888	0.33	0.39	0.82	1.69	0.25	0.88	1.60	4.51	1.16	2.14	1.53	0.15	18.04	10.09	.....	1888
1889	1.23	0.39	0.86	0.24	0.17	2.51	2.36	0.89	2.76	1.90	1.04	0.04	14.49	8.93	.....	1889
1890	0.87	0.08	0.12	0.57	0.00	1.05	1.92	2.93	1.33	0.12	1.19	1.85	1.06	11.87	7.99	1890
1891	1.00	1.66	0.98	0.02	2.83	2.37	1.30	1.65	1.33	0.12	0.19	1.23	14.68	9.50	.....	1891
1892	0.55	0.36	1.15	0.27	0.11	0.45	2.87	1.41	0.33	1.76	0.30	0.20	1.43	15.34	5.42	1892
1893	0.75	1.60	0.11	0.00	0.72	1.07	1.35	4.74	3.47	0.04	0.20	.....	1.15	15.80	12.95	1893
1894	0.00	0.61	0.27	0.36	1.02	1.06	1.45	6.03	1.61	0.65	0.78	1.34	.....	12.14	9.43	1894
1895	0.47	1.02	0.11	T.	1.06	1.06	1.07	1.35	4.38	0.15	1.46	T.	.....	12.14	9.43	1895
1900	1.00	.....	0.25	0.48	0.90	1.09	1.03	1.98	1.61	0.65	0.78	1.34	.....	10.80	10.80	1900
1901	1.00	.....	0.50	0.30	0.64	1.34	1.34	2.96	1.85	2.00	1.43	0.40	0.36	17.16	13.84	1901
1902	0.05	0.38	0.22	0.00	1.88	0.24	2.96	1.67	1.67	1.67	1.67	2.85	0.92	18.14	11.44	1902
1903	0.56	0.75	0.17	0.20	0.38	2.41	0.62	1.55	1.55	0.48	0.00	0.05	0.94	6.73	7.71	1903
1904	0.40	0.02	0.15	0.14	0.14	0.14	2.87	2.87	6.06	2.68	0.08	0.35	0.35	16.50	13.64	1904
1905	0.40	1.32	1.76	0.03	T.	T.	1.50	2.87	2.87	0.50	0.20	.....	1.80	12.57	12.57	1905
1906	0.35	0.35	T.	1.40	0.02	0.02	0.15	4.38	1.95	1.45	0.86	0.86	1.98	17.03	12.34	1906

LINCOLN COUNTY, (Continued)

Year	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual	Seasonal	Record, Yrs.
1907	0.25	0.52	0.15	0.15	0.20	3.35	2.74	4.58	1.85	2.64	0.99	0.04	17.29	12.87	12.87
1908	0.15	0.60	0.15	1.15	0.48	0.19	2.49	6.46	1.32	0.05	0.75	0.25	13.79	12.09	12.09
1909	0.18	0.20	2.02	0.00	0.20	0.57	3.28	3.54	0.59	0.82	0.75	0.25	11.75	8.28	8.28
1910	0.19	0.37	0.35	0.44	0.18	2.85	1.57	4.57	0.90	0.56	0.77	0.25	12.89	10.51	10.51
1911	0.15	1.82	0.80	1.99	0.75	3.11	5.62	1.83	1.50	2.28	0.16	0.47	20.48	14.80	14.80
1912	T.	0.53	0.34	0.69	0.57	5.04	2.63	4.90	2.24	1.18	0.25	0.13	18.49	16.07	16.07
1913	1.04	0.34	0.71	1.13	0.08	2.81	2.07	1.37	3.57	0.70	0.88	1.50	16.20	11.03	11.03
1914	0.21	0.38	0.20	0.90	1.12	1.85	4.84	2.29	0.80	2.82	0.14	1.35	16.60	11.80	11.80
1915	0.50	1.33	1.40	3.93	0.87	0.20	5.30	1.65	3.05	6.50	T.	1.24	20.04	15.00	15.00
1916	1.81	0.21	0.75	1.60	T.	0.08	2.65	4.16	1.78	1.35	0.32	0.19	14.90	10.27	10.27
1917	0.49	0.56	0.31	0.08	0.74	0.48	1.59	4.38	0.81	0.99	0.35	0.60	9.79	8.08	8.08
Mean	0.53	0.68	0.78	0.73	0.68	1.67	3.03	3.45	3.02	1.32	0.77	0.84	16.50	11.58	11.58
Av. No. days with precipitation	4	5	5	3	4	7	12	12	8	3	4	4	71	46	46
Av. snowfall, in.	2.6	3.2	4.7	0.1	T.	0	0	0	0	0.5	3.0	4.9	19.0		20
Temperature—															
Mean	35.4	38.6	44.0	51.3	59.1	67.2	69.2	67.2	61.4	51.9	41.8	36.2	51.9	51.9	32
Mean Max.	49.4	52.1	57.8	66.2	73.2	82.9	82.7	80.7	76.5	67.3	57.1	50.2	66.3	66.3	19
Mean Min.	22.0	24.8	28.5	34.6	42.0	49.2	57.9	53.5	46.3	35.6	26.8	21.7	37.9	37.9	19
Highest	75	76	78	86	94	105	97	94	89	86	77	72	105	105	20
Lowest	-6	-9	-3	12	32	28	40	38	27	13	0	-18	-18	-18	20
Prevailing wind	W	W	W	W	W	W	W	W	W	W	W	W	W	W	20
Av. velocity	8	9	9	9	8	16	5	5	4	5	6	7	7	7	20
Days clear	19	17	18	20	20	18	13	14	16	21	20	17	213	101	101
Days partly cloudy	8	7	8	7	9	9	12	11	10	6	6	9	102	58	58
Days cloudy	4	5	5	3	2	3	5	6	4	4	4	5	151	24	24
Relative humidity	58	54	45	34	33	39	55	58	59	54	59	61	61	61	61

Frost—Average date of first killing frost in autumn, Oct. 5.
 Average date of last killing frost in spring, May 8.
 Earliest date of killing frost in autumn, Sept. 17.
 Latest date of killing frost in spring, June 2.
 Average length of growing season, 150 days.

*Computed from nearby stations.

This is a south central upland county, largely mesas, foothills and mountains, with altitudes ranging from 4,500 to 10,000 feet. Large areas within the county are from 6,000 to 8,000 feet, but the altitude decreases along its eastern border to the rolling prairie. The lower levels are dry, averaging 10 to 14 inches annual precipitation, but the precipitation increases with altitude to about 16 inches at 7,000 feet and to 18 or 20 inches above 8,000 feet. The mean temperature averages from 51 to 55 degrees, with maximum up to 100 degrees in the lower levels and to 90 degrees in the foothills, while zero temperature to 10 or 12 degrees below occurs almost every winter for one or two brief periods.

Average annual precipitation, 10 to 14 inches, to 16 or 20 inches in mountains.

Annual seasonal precipitation, 8 to 12 inches, to 14 or 16 inches in mountains.

Average seasonal snowfall, 20 to 50 inches.

Mean annual temperature, 51 to 55 degrees.

Mean summer temperature, 69 to 75 degrees.

Mean winter temperature, 34 to 36 degrees.

Prevailing wind direction, westerly.

Average hourly velocity (at Fort Stanton), 7 miles.

Average relative humidity, 51 per cent.

Some agriculture is carried on under irrigation and dry farming. Most of the irrigation farming is done in the intermontane irrigated valleys, particularly on the Hondo, Ruidoso and Bonito Rivers. In these valleys alfalfa, beans, peas, wheat, oats, barley, and corn, as well as cabbage, chile, onions, tomatoes, beets, celery, and carrots, are among the principal crops raised. Considerable fruit is also grown in these valleys, principally apples. The Delicious, Jonathan, King David, White Winter Pearmain, Rome Beauty and Winesap are among the leading commercial varieties. Pears, sour cherries, European and native plums, as well as peaches, are grown on a smaller scale. Up in the higher altitudes of over 7,000 feet on the mountain slopes where the rainfall is greater, Irish potatoes and oats are raised. Some of the other dry farming

crops on the higher mesas are beans, both New Mexico Pinto and California Pink, peas and turnips, oats, wheat, short season corn, and barley.

This is an important cattle and sheep raising county; and goat raising is also becoming an important industry. Aside from cattle raising under range conditions, stock farming offers many possibilities.

LUNA COUNTY
STATION—DEMING. APPROX. LATITUDE—32° 16'. LONGITUDE—107° 45'. ELEVATION—4,333 FEET.

Precipitation . . .	Year	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual	Seasonal	Record, Yrs
1869	0.57	1.38	0.90	1.10	3.52	1.07	4.94	0.08	0.44	0.52	0.65	16.11	11.61	16.11	11.61	11.61
1870	T.	0.96	0.26	0.00	0.00	0.00	1.59	8.99	0.44	0.13	0.00	2.00	17.92	17.92	17.92	17.92
1871	0.68	0.15	0.05	0.00	0.00	0.00	1.40	2.84	1.83	2.88	0.72	0.14	10.79	10.79	10.79	10.79
1872	0.22	0.00	0.00	0.20	0.11	0.44	2.58	2.58	0.31	0.13	0.00	0.00	8.95	8.95	8.95	8.95
1873	2.00	0.62	0.32	0.15	0.05	1.27	1.27	0.00	0.00	0.00	0.00	0.00	13.52	13.52	13.52	13.52
1881	0.75	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1882	0.10	0.90	0.50	0.00	0.43	1.22	2.55	0.52	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1883	0.10	0.90	1.77	0.00	0.00	0.10	2.95	1.41	0.53	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1884	0.80	0.70	0.20	0.20	0.00	0.00	0.52	1.04	0.80	1.52	0.24	0.00	0.00	0.00	0.00	0.00
1885	0.00	0.75	0.52	0.00	0.77	1.32	1.38	0.81	0.09	0.28	0.00	0.00	0.00	0.00	0.00	0.00
1886	0.68	0.60	0.00	0.00	0.00	0.00	1.12	4.19	4.36	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1887	0.00	0.20	0.00	0.00	0.00	0.00	2.02	3.45	3.39	2.13	0.00	0.00	0.00	0.00	0.00	0.00
1888	0.26	1.77	0.24	0.50	0.70	0.50	1.09	0.64	0.00	1.60	0.00	0.00	0.00	0.00	0.00	0.00
1889	1.09	0.10	0.12	0.05	0.00	0.00	1.09	0.64	3.55	0.47	0.00	0.00	0.00	0.00	0.00	0.00
1890	0.53	0.00	0.00	0.13	0.00	0.16	4.09	2.20	2.26	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1891	0.40	0.00	0.00	0.00	0.48	0.14	0.18	1.20	0.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1892	0.45	0.86	1.34	0.10	0.00	0.90	0.20	0.39	0.08	1.29	0.00	0.00	0.00	0.00	0.00	0.00
1893	0.19	0.50	0.42	0.00	1.45	0.81	2.82	3.19	2.64	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1894	0.05	0.66	0.45	0.00	0.00	0.00	0.65	0.92	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1895	0.60	0.15	0.00	T.	0.58	0.25	3.75	0.32	1.47	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1896	0.60	T.	T.	0.00	0.20	T.	4.26	1.92	2.00	3.12	0.00	0.00	0.00	0.00	0.00	0.00
1897	1.55	0.00	0.42	0.00	0.00	0.50	3.80	1.41	1.87	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1898	0.05	T.	1.42	0.20	0.00	T.	1.66	3.38	0.21	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1899	0.56	T.	T.	0.00	0.00	T.	2.92	0.78	0.21	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1900	0.56	0.46	0.74	0.00	0.10	T.	2.16	0.08	0.74	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1901	0.40	1.87	0.11	T.	T.	T.	0.38	0.90	3.00	0.16	0.00	0.00	0.00	0.00	0.00	0.00
1902	T.	T.	T.	0.00	0.00	T.	0.31	1.61	0.35	0.01	0.00	0.00	0.00	0.00	0.00	0.00
1903	0.49	0.85	1.60	0.00	0.13	3.22	0.07	0.10	2.84	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1904	0.00	0.00	0.00	0.00	0.00	0.00	1.57	1.58	4.16	2.80	0.00	0.00	0.00	0.00	0.00	0.00
1905	1.53	2.08	2.15	1.27	0.00	1.05	0.80	2.25	2.74	0.32	0.00	0.00	0.00	0.00	0.00	0.00
1906	0.65	0.63	0.56	0.10	0.05	0.00	1.98	2.98	0.64	0.02	0.00	0.00	0.00	0.00	0.00	0.00
1907	1.42	0.98	0.06	0.19	0.39	0.38	3.18	1.95	2.40	0.41	1.26	0.00	0.00	0.00	0.00	0.00
1908	0.64	0.31	0.18	0.14	0.03	0.08	1.18	1.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1909	T.	1.03	0.51	0.00	0.00	0.02	0.40	1.58	0.88	0.89	0.00	0.00	0.00	0.00	0.00	0.00
1910	0.00	0.00	0.12	0.52	0.00	0.43	0.96	1.02	0.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1911	0.77	1.40	0.67	0.33	0	0.96	7.13	0.30	1.77	1.30	0.42	0.42	15.10	15.10	15.10	15.10

LUNA COUNTY (Continued)

	Year	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual	Seasonal	Record, Yrs.
1912	0	0.48	0.89	0.68	0	0.88	2.00	4.04	0	1.76	0	1.50	0.40	11.13	7.60	24
1913	0.20	1.20	0.20	0.60	0	0.28	3.95	1.46	0.77	0.30	0.30	1.50	0.98	11.44	7.06	22
1914	0.40	0.25	0.25	0	1.40	2.84	5.86	2.50	0.55	0.40	0.30	0.30	2.90	17.55	13.05	11
1915	0.83	0.97	2.06	0.11	0	0	2.73	2.65	2.47	1.45	0	0	1.08	11.58	7.66	11
1916	0.51	0.49	0.52	0.20	1.50	0	2.38	5.40	0.60	3.50	0	0	0.18	15.38	10.98	11
1917	0.47	0.13	0.00	0.00	0.50	0.00	0.40	1.10	0.80	0.00	0.00	0.00	0.00	3.40	2.80	11
Mean	0.52	0.51	0.53	0.19	0.36	0.60	2.19	2.91	1.32	0.74	0.49	0.67	0.67	10.03	6.57	16
Av. No. days with precipitation ..	2	2	2	1	1	2	7	6	4	2	2	2	2	33	21	24
Av. snowfall, in..	0.9	1.2	0.8	T.	0	0	0	0	0	0	0.2	0.2	1.3	4.4	22	22
Temperature—																
Mean	42.5	44.8	51.8	56.8	65.1	75.2	78.0	76.6	71.6	60.2	49.2	49.2	41.5	59.5	59.5	11
Mean Max.	58.9	60.4	69.1	74.6	84.6	94.8	94.3	92.1	88.5	79.2	66.9	66.9	58.4	76.8	76.8	11
Mean Min.	25.1	28.4	34.1	38.9	45.7	55.9	61.8	61.4	55.6	41.4	31.7	31.7	24.8	42.1	42.1	11
Highest	80	81	90	98	100	106	110	109	104	95	89	89	82	110	110	11
Lowest	-7	10	12	24	32	38	48	50	38	18	6	6	0	-7	-7	11
Prevailing wind..	W	W	W	W	W	W	W	W	W	W	W	W	W	W	W	16
Days clear	20	16	20	20	22	21	13	15	19	22	22	22	22	232	110	24
Days partly cldy.	5	6	7	6	6	5	10	9	6	4	4	4	4	72	42	24
Days cloudy	6	6	4	4	3	4	8	7	5	5	5	4	5	61	31	24

Frost—Average date of first killing frost in autumn, Oct. 29.
 Average date of last killing frost in spring, March 24.
 Earliest date of killing frost in autumn, Oct. 4.
 Latest date of killing frost in spring, April 23.
 Average length of growing season, 217 days.

*Computed from nearby stations.

This is a southern border county, comparatively low in altitude (3,800 to 5,000 feet). The average annual precipitation is about 10 inches; mean temperature 60 degrees, with maximum well above 100 degrees each summer and occasionally touching zero in the winter. Much clear weather occurs, with prevailing westerly winds. Successful culture is possible only with irrigation.

Average annual precipitation, 9 to 10 inches.

Average seasonal precipitation, 6 to 7 inches.

Average seasonal snowfall, 5 inches, to 10 inches in mountains.

Mean annual temperature, 58 to 62 degrees.

Mean summer temperature, 77 to 80 degrees.

Mean winter temperature, 40 to 44 degrees.

The soil and climatic conditions in many localities are favorable for the growing of a number of the temperate zone fruits, but as yet there are no large commercial plantations. Wheat, barley, oats, rye, corn, the feed and grain sorghums, alfalfa, field peas, beans, tomatoes, melons, onions, garden peas, chile, cantaloupes, sweet potatoes, cabbage, table beets, carrots, spinach, and turnips can be grown successfully under irrigation, although beans, alfalfa and milo are the principal cash crops. The Irish potato is not very dependable, though occasionally a farmer here and there may produce a fair crop. Wherever water for irrigation can be had, because of the mild winter climate, early spinach, lettuce, cabbage, asparagus, onions, beets, garden peas and many of the other cool season crops can be produced for the early market.

Nearly all of the irrigation agriculture is being carried on by pumping from wells in the comparatively shallow water belts of the Lower Mimbres Valley. There is an abundance of underground water, which is awaiting the proper installation of pumps and cheap power for irrigation purposes.

The rainfall is not sufficient to insure success in the growing of crops under dry farming conditions.

A large part of the mesas and highlands are being used for grazing cattle and sheep. These are flourishing industries.

MCKINLEY COUNTY

STATION—FORT WINGATE. APPROX. LAT.—35° 29'. LONGITUDE—108° 32'. ELEVATION—6,997 FEET.

Year	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual	Seasonal	Record, Yrs.
1864	...	...	...	...	...	0	1.89	2.42	1.10	1.16	...	...	...	...	...
1865	0.20	1.25	...	0.15	...	0	0.09	...	1.12	1.16	0.15	0.33	...	...	...
1866	0.25	...	...	0.32	...	...	...	...	0.83	0.60	...	...	...	...	...
1867	0.61	0.60	0.17	0.47	0.20	...	...	4.60	1.30	4.60	...	...	...	...	...
1868	0.75	1.63	0.85	0.85	0	...	7.60	4.60	1.30	4.60	...	...	...	...	...
1869	3.30	4.20	0.50	1.50	0.80	0	0	3.39	1.20	4.60	0.0	1.16	...	...	...
1870	0.10	0.87	1.86	1.20	0.50	1.48	1.50	3.40	0.70	1.50	0.0	1.16	...	...	...
1871	2.65	5.06	0.58	1.80	0.31	0.66	3.88	3.20	0.40	1.50	0.0	1.16	...	...	...
1872	3.30	1.59	0.53	1.99	3.00	0.67	2.37	3.15	2.80	1.20	0.0	1.16	...	...	...
1873	0.75	1.20	0.94	0.15	0.20	2.25	1.10	3.15	2.80	1.20	0.0	1.16	...	...	...
1874	1.85	0.44	0.55	0.07	0.30	3.15	0.26	2.64	3.60	0.50	0.0	1.16	...	...	...
1875	0.33	1.07	0.51	0.14	0.20	0.03	1.94	1.10	3.15	0.48	0.0	1.16	...	...	...
1876	0.75	0.33	1.07	0.11	0.14	0.33	1.23	1.44	1.10	0.10	0.0	1.16	...	...	...
1877	0.91	0.29	0.51	0.20	0.24	0.17	2.32	2.44	1.10	0.10	0.0	1.16	...	...	...
1878	1.68	1.05	1.58	1.27	0.22	1.18	3.78	5.90	0.90	0.53	0.0	1.16	...	...	...
1879	0.53	1.36	0.70	0.22	0	0.19	3.55	1.49	0.31	0.68	0.0	1.16	...	...	...
1880	0.72	1.21	0.86	0.72	0.04	0	0.37	2.29	0.29	0.81	0.0	1.16	...	...	...
1881	0.16	0.65	0.59	0.42	0.18	0	3.48	2.18	0.31	1.81	0.0	1.16	...	...	...
1882	1.24	1.02	0.40	0.40	0.14	2.06	3.48	2.90	0.75	2.38	0.0	1.16	...	...	...
1883	1.18	0.60	1.14	0.22	0.78	0	4.64	2.74	0.42	1.14	0	1.16	...	...	...
1884	1.14	0.50	1.16	1.14	1.04	1.18	1.78	4.64	0.42	1.14	0	1.16	...	...	...
1885	0.46	1.63	0.94	1.14	1.14	6.58	2.28	1.14	1.35	0.82	0.0	1.16	...	...	...
1886	2.52	0.94	0.32	1.08	0.24	0.34	0.42	2.96	1.00	1.50	0.0	1.16	...	...	...
1887	0.52	1.72	0.80	0.90	0.22	1.24	2.94	3.20	2.92	1.10	0.0	1.16	...	...	...
1888	1.08	1.30	1.58	2.35	0.24	0.04	2.02	0.24	3.02	0.50	0.0	1.16	...	...	...
1889	1.15	1.60	0.94	1.14	0.22	0.30	2.54	0.75	1.30	0.41	0.0	1.16	...	...	...
1890	1.44	1.79	2.70	1.00	0	0.10	2.02	2.20	2.90	0.95	1.0	1.16	...	...	...
1891	0.81	2.07	2.40	0.10	0.95	0.60	1.86	1.23	2.40	0.95	1.0	1.16	...	...	...
1892	0.52	1.40	0.90	1.05	0.33	T.	2.09	1.35	2.40	1.30	0	1.16	...	...	...
1893	0.65	1.85	1.10	0.80	0.92	T.	2.60	0.60	1.50	1.30	0	1.16	...	...	...
1894	0.70	1.80	1.10	0.80	1.02	T.	1.91	2.32	1.10	1.27	0	1.16	...	...	...
1895	2.05	0.70	T.	0.30	1.50	0.57	1.23	2.70	0.10	1.86	0.0	1.16	...	...	...
1896	0.12	1.20	0.45	0.90	T.	0.57	1.94	2.05	0.10	2.32	0.0	1.16	...	...	...
1897	0.41	4.20	1.60	0.11	0.0	0.25	0.91	1.02	0.31	2.67	0.0	1.16	...	...	...
1898	0.66	0.30	0.46	0.20	0.18	1.78	3.83	2.23	0.21	0.67	0.0	1.16	...	...	...
1899	0.28	0.58	0.70	0.10	0.10	0.42	2.25	1.23	0.63	0.85	0.0	1.16	...	...	...

	Year	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual	Seasonal	Record, Yrs.
1900	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	9.40	5.89	
1901	0.32	1.17	0.68	0.20	1.10	0.41	0.92	0.34	0.34	0.21	0.92	1.25	0.17	9.32	5.18	
1902	1.95	0.69	1.01	0.95	1.56	0.71	0.98	1.72	1.72	1.62	0.06	1.27	1.22	12.37	6.24	
1903	0.46	0.27	0.48	0.27	1.05	1.36	1.18	1.82	1.82	1.77	0	0	0.06	10.34	8.45	
1904	0.17	0.57	1.82	0.56	0.22	0.85	2.55	5.65	5.65	0.67	1.29	0	2.27	15.06	10.24	
1905	2.30	2.51	2.85	4.05	0.50	1.59	1.15	1.00	1.55	0.60	0.60	2.70	1.00	21.31	9.75	
1906	0.45	1.06	4.80	4.65	0.60	0	3.48	2.10	2.10	0.30	0.30	1.28	1.58	22.66	13.20	
1907	1.38	0.88	0.62	1.19	0.86	2.45	1.48	6.22	6.22	0.30	2.00	0.80	0.98	19.17	12.50	
1908	1.28	1.92	0.92	1.73	1.98	0.25	1.37	4.17	4.17	1.59	0.30	0.37	0.10	15.68	11.99	
1909	0.32	0.79	0.29	0.23	0.08	0.02	2.40	5.40	5.40	0.46	T.	0.13	0.87	15.00	12.69	
1910	0.29	0.17	0.68	1.66	T.	0.39	2.49	1.50	0.80	0.80	0.49	0.65	0.65	9.84	6.66	
1911	1.10	1.33	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Mean	0.97	1.32	1.04	1.00	0.58	0.66	2.25	2.38	2.38	1.38	1.03	0.78	0.97	14.36	8.91	
Av. No. days with precipitation ..	4	4	5	4	4	2	7	8	8	4	3	3	4	52	29	17
Av. snowfall, in..	7.1	8.8	4.9	2.3	1.2	0	0	0	0	0	0.7	5.8	7.1	37.9	15	15
Temperature—																
Mean	30.7	34.6	41.3	48.6	58.1	67.9	71.9	69.5	69.5	63.0	52.0	40.6	32.8	50.9	46	46
Mean Max.	46.1	49.3	55.5	63.0	70.8	81.1	84.6	82.4	82.4	77.3	67.7	57.8	47.2	95.2	85.2	14
Mean Min.	18.1	22.4	26.1	32.8	39.6	49.7	54.7	54.2	54.2	46.8	34.8	26.1	17.4	35.2	24	24
Highest	72	70	78	79	94	100	99	99	99	92	92	83	82	100	100	25
Lowest	-12	-15	-2	9	10	23	35	34	34	26	14	-13	-11	-15	-15	14
Prevailing wind..	W	W	W	W	W	W	W	W	W	W	W	WSW	W	W	W	14
Days clear	17	15	17	18	19	23	12	11	19	22	19	20	19	219	102	
Days partly cldy.	7	7	9	7	8	5	14	12	12	8	5	6	5	93	54	
Days cloudy	7	6	5	5	4	2	5	8	8	3	4	5	6	60	27	

Frost—Average date of first killing frost in autumn, Oct. 2.

Average date of last killing frost in spring, May 17.

Earliest date of killing frost in autumn, Sept. 12.

Latest date of killing frost in spring, June 11.

Average length of growing season, 138 days.

Years recorded, 18.

*Computed from nearby stations.

This is a large western border county, with much rough broken mesa and low mountain country, touching, however, 8,000 to 10,000 feet over the Chacra Mountains in the northeast, the Zuni Mountains in the southwest and Mount Taylor district in the southeast. There is an irrigated district for the Zuni Indians in the extreme southwest portion of the county, but the lands of the county are largely more suitable for grazing. There is a mean annual precipitation of about 11 to 14 or 16 inches; mean annual temperature of 50 degrees, with maximum 90 to 100 degrees in summer and zero to 10 degrees below in winter. Winds are prevailing westerly and there is much bright, sunshiny, dry weather. Owing to altitude and clear skies the growing season is short, with late spring frosts.

Average annual precipitation, 11 to 14 inches, to 16 inches in mountains.

Average seasonal precipitation, 8 to 12 inches.

Average seasonal snowfall, 30 to 50 inches.

Mean annual temperature, 50 to 51 degrees.

Mean summer temperature, 70 degrees.

Mean winter temperature, 33 degrees.

Very little farming is carried on in this county, as there are no permanent streams and the seasonal rainfall is insufficient to insure the successful growing of many of the crops; beans, corn, oats, wheat, barley, rye and potatoes being, as a rule, the more dependable ones. Irish potatoes are grown successfully in the higher altitudes, particularly in the Zuni Mountains, where there is considerable rainfall and where most of the farming is done.

Wherever water can be had for irrigation, either from springs, pumping plants or artesian wells, a large variety of crops, such as alfalfa, corn, beans, wheat, barley, oats, beets, cabbage, peas, onions and turnips, could be depended upon in the flatter sections of the county. In these high altitude counties it should be kept in mind that it is imperative to select the earlier ripening varieties of these crops, because

if the later ripening varieties are planted, in some cases, at least, they may not mature properly before the fall frost comes.

This county is excellently adapted to the raising of sheep and cattle, which is a profitable industry.

MORA COUNTY

STATION—FORT UNION, APPROX. LATITUDE—35° 54', LONGITUDE—104° 54'. ELEVATION—6,835 FEET.

Precipitation	Year	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual	Seasonal	Record, Yrs.
1851	0.48	0.59	0.00	0.24	0.73	7.05	2.73	5.49	4.63	0.61	1.97	0.33	0.23	26.64	19.28	32
1852	0.19	0.08	0.77	0.32	0.91	0.11	4.19	3.43	3.02	3.44	2.83	0.18	0.18	13.43	10.54	19
1853	0.19	0.02	0.63	0.46	0.50	0.69	3.98	1.75	1.59	1.29	0.38	0.18	0.18	12.33	10.54	19
1854	0.07	0.00	0.40	0.00	0.28	2.12	4.37	1.46	2.99	0.88	1.80	0.60	0.60	14.77	10.37	19
1855	0.00	0.00	0.40	0.00	0.28	2.12	4.37	1.46	2.99	0.88	1.80	0.60	0.60	14.77	10.37	19
1856	0.76	1.08	1.11	1.06	0.56	0.65	3.39	6.74	4.04	3.00	0.70	0.12	0.12	20.21	16.44	19
1857	0.70	0.11	1.12	0.98	0.25	2.49	4.03	2.96	4.32	3.32	1.10	0.55	0.55	20.94	15.04	19
1858	1.13	1.36	1.15	0.40	1.20	3.20	5.80	5.71	0.40	0.30	0.72	1.45	1.45	22.79	16.71	19
1859	0.25	0.00	1.00	0.65	0.60	4.80	5.76	7.18	3.55	1.10	0.60	0.25	0.25	24.54	21.94	19
1860	1.28	0.92	0.48	0.44	1.57	3.45	1.54	3.95	1.50	T.	0.56	0.86	0.86	16.49	12.45	19
1861	1.09	0.30	T.	0.64	T.	4.14	4.14	3.30	2.04	0.64	0.29	0.25	0.25	24.05	21.79	19
1862	0.20	0.12	0.76	0.28	1.18	2.39	12.60	3.30	2.04	0.64	0.29	0.25	0.25	24.05	21.79	19
1863	0.75	T.	0.65	0.03	0.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1864	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1865	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1866	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1867	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1868	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1869	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1870	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1871	0.50	0.41	0.04	0.16	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10
1872	0.50	0.51	0.56	0.76	3.45	4.05	8.13	2.77	2.04	T.	0.24	0.24	0.24	10.38	9.95	19
1873	0.58	0.20	0.94	0.94	1.18	3.38	3.20	1.18	0.84	T.	0.24	0.24	0.24	10.38	9.95	19
1874	0.54	1.26	0.23	0.24	4.88	1.10	1.94	1.18	0.84	T.	0.24	0.24	0.24	10.38	9.95	19
1875	0.50	0.30	2.52	0.20	0.94	1.10	1.94	1.18	0.84	T.	0.24	0.24	0.24	10.38	9.95	19
1876	0.50	T.	0.08	0.30	0.94	1.10	1.94	1.18	0.84	T.	0.24	0.24	0.24	10.38	9.95	19
1877	0.12	2.70	0.36	2.08	1.50	0.24	4.30	4.30	4.30	4.30	4.30	4.30	4.30	18.12	15.01	19
1878	0.42	0.44	1.16	0.87	0.42	4.16	4.28	3.88	4.81	0.16	0.20	0.60	0.60	22.58	15.18	19
1879	0.40	0.30	T.	0.12	0.56	0.24	4.50	3.98	0.18	0.00	0.20	0.60	0.60	22.58	15.18	19
1880	0.58	0.44	0.08	0.11	1.18	0.25	1.98	4.98	0.36	1.24	0.51	0.12	0.12	10.38	9.95	19
1881	1.25	0.90	0.30	2.03	1.51	0.30	4.74	4.59	0.36	0.89	0.64	0.48	0.48	18.12	15.01	19
1882	0.42	0.44	0.48	0.88	1.30	2.24	2.60	3.30	T.	0.51	0.51	0.16	0.16	12.32	10.32	19
1883	0.14	0.12	0.48	0.22	0.40	0.28	2.80	4.31	2.96	1.34	T.	1.12	1.12	14.77	11.17	19
1884	0.18	0.54	0.28	0.28	4.33	3.06	0.76	7.80	1.08	0.64	T.	2.00	2.00	21.55	17.91	19
1885	0.14	0.30	0.42	0.72	2.15	3.54	2.51	4.76	1.24	0.58	0.15	0.42	0.42	17.91	14.92	19
1886	0.38	T.	0.50	3.22	2.15	1.66	1.18	8.04	3.24	0.96	0.36	0.45	0.45	21.45	18.22	19

Year	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual	Seasonal	Record, Yrs.
1887	0.45	0.44	0.33	1.91	2.72	4.23	2.82	1.82	1.70	1.70	0.40	3.75	1.98	1.98	20
1888	3.10	0.99	2.05	2.16	0.70	2.58	4.46	8.28	0.18	0.18	0.92	0.30	25.54	16.26	46
1889	1.26	T.	0.90	0.50	1.27	2.60	2.73	2.30	0.58	0.58	0.45	T.	13.03	9.98	19
1890	T.	0.11	0.14	3.96	0.03	1.30	5.10	2.31	0.59	0.59	0.82	0.14	14.72	13.29	18
1891	0.33	0.32	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	17
1892	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	16
1893	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	15
1894	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	14
1895	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	13
1896	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	12
1897	0.20	0.05	0.32	0.70	3.73	3.29	2.46	4.33	1.16	6.33	0.00	T.	29.17	23.67	11
1898	0.39	0.60	0.62	2.17	0.49	3.20	5.74	2.75	1.35	0.55	0.62	1.50	30.13	17.00	10
1899	T.	0.50	0.52	0.17	T.	0.95	3.36	0.52	4.92	0.00	1.10	T.	13.69	16.54	9
1900	0.60	0.25	0.30	1.55	5.75	4.67	3.93	1.73	5.03	1.32	0.20	0.30	35.26	21.76	8
1901	0.10	0.80	0.50	0.95	5.32	1.47	2.78	3.71	2.10	2.00	0.95	0.20	35.26	21.76	7
1902	0.07	T.	0.60	0.05	2.00	0.15	1.18	3.05	0.55	0.23	0.53	0.84	1.78	1.78	6
1903	T.	1.60	0.11	0.54	1.05	5.69	0.75	2.02	1.92	0.05	0.00	0.05	14.82	13.33	5
1904	T.	0.17	0.12	0.32	0.59	2.07	4.00	2.01	6.84	1.00	0.21	0.70	18.60	13.01	4
1905	1.00	1.90	2.44	3.30	0.33	1.50	1.97	1.62	1.44	1.44	3.48	0.50	30.17	3.81	3
1906	0.07	0.58	0.30	1.72	0.58	2.57	8.05	2.40	3.01	3.00	1.00	1.23	17.38	13.67	2
1907	0.88	T.	0.08	1.26	1.39	1.32	5.25	5.03	0.82	0.33	0.77	0.05	17.38	13.67	1
1908	0.11	0.48	T.	1.92	0.65	1.35	6.21	4.78	0.80	1.33	0.42	0.35	18.41	11.77	0
1909	0.04	0.26	1.11	0.40	1.17	3.43	2.86	3.78	3.37	1.55	0.43	0.33	17.94	11.23	0
1910	0.17	0.07	0.57	1.65	0.40	3.40	4.20	6.17	0.68	0.17	0.38	0.22	18.40	11.51	0
1911	0.05	0.91	0.05	1.02	3.30	1.51	3.41	2.56	1.14	2.58	0.36	0.45	17.41	11.31	0
1912	T.	0.85	0.39	0.67	2.35	4.40	1.59	4.04	0.80	0.23	0.00	0.19	15.70	13.65	0
1913	0.30	0.53	0.46	0.98	0.45	1.54	0.80	2.56	1.95	0.50	0.65	1.54	22.36	13.93	0
1914	T.	0.11	0.82	3.75	4.20	8.02	8.02	4.80	1.58	3.14	0.00	0.63	25.05	21.77	0
1915	0.30	0.57	0.77	4.16	2.65	0.54	3.12	4.88	0.86	0.23	0.25	0.14	18.57	11.32	0
1916	0.75	0.00	0.65	1.14	0.25	0.22	3.62	4.63	0.95	3.65	T.	0.10	16.75	13.00	0
1917	0.27	0.28	0.05	0.32	1.50	0.33	3.06	2.20	3.37	0.15	0.47	T.	12.51	11.29	0
1918	0.42	0.45	0.52	0.94	1.65	2.39	3.86	3.87	2.07	1.32	0.64	0.51	18.44	14.78	0
Mean .....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Av. No. days with precipitation ..	1	2	3	5	6	7	11	11	6	3	2	2	59	46	20
Av. snowfall, in..	1.6	5.4	3.2	1.7	0.1	0	0	0	T.	0.9	2.6	4.7	20.3	19	19
Temperature—	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Mean Max.	32.0	34.4	40.5	47.4	56.3	64.0	69.9	66.7	60.4	49.5	40.1	32.0	49.2	49.2	18
Mean Min.	50.0	49.2	55.7	61.3	69.7	73.0	80.6	80.1	75.5	66.9	59.0	48.2	64.4	64.4	17
Highest	16.7	16.6	22.7	29.2	37.3	45.0	53.0	49.1	43.2	31.7	22.5	14.5	31.5	31.5	16
Lowest	7.6	7.8	8.1	7.9	9.0	9.9	9.6	9.2	8.7	8.7	8.2	7.8	9.0	9.0	15
.....	-30	-27	-23	1	10	28	33	35	21	1	-6	-1.3	-30	-30	14

MORA COUNTY (Continued)

Year	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual	Seasonal	Record, Yrs.
Prevailing wind..															14
Days clear	26	21	21	21	20	20	16	17	22	24	25	25	259	116	21
Days partly cldy.	22	22	22	22	8	8	13	13	6	3	1	8	377	150	21
Days cloudy	12	17	15	15	7	2	12	12	12	17	14	11	257	117	21
					4	4			12	4		11	39	11	21

Frost.—Average date of first killing frost in autumn, Oct. 5.
 Average date of last killing frost in spring, May 16.
 Earliest date of killing frost in autumn, Sept. 4.
 Latest date of killing frost in spring, June 18.
 Average length of growing season, 141 days.

*Computed from nearby stations.

This is one of the northeast counties of the state, with much mesa and rolling plateau land above 6,000 feet in altitude, rising on its western border to the crest of the Sangre de Cristo range, well above 12,000 feet. This gives a wide variation in climate and cultural possibilities. In the central and eastern mesa districts there is an annual precipitation of 15 to 18 inches, increasing to 18 or 20 inches in the foothills, and to 20 to 25 inches over the mountains. Albert, Union County, well represents the eastern mesa climate. Mean annual temperature 49 to 51 degrees; maximum 90 to 100 degrees each summer, and minimum zero to 10 below, with an occasional record of 20 degrees below. The mountains are, of course, much colder, with short seasons, long winters and much snow. The precipitation, temperature and other weather data given for Albert, Union County, can be applied to the eastern part of Mora County, around Roy.

Average annual precipitation, 15 to 18 inches, to 20 to 25 inches in mountains.

Average seasonal precipitation, 12 to 15 inches.

Average seasonal snowfall, 20 to 30 inches, to 50 and 80 inches in mountains.

Mean annual temperature, 49 to 52 degrees.

Mean summer temperature, 66 to 70 degrees.

Mean winter temperature, 33 to 38 degrees.

Practically the same crops that are raised in San Miguel County can be raised in this county. Along the Mora River Valley considerable irrigation farming is carried on; and alfalfa, wheat, barley, oats, peas, corn, cabbage, onions, beans, celery, carrots and turnips are among the leading crops. Some fruit, principally apples, is raised in this valley. The potato is more dependable in the higher altitudes in the western part of the county. Considerable dry farming is also done, particularly in the central and eastern parts, where the New Mexico Pinto bean, wheat and corn are the principal dry land crops. Some milo, kafir and Sudan grass are also grown, in the lower portions. Because of the large mesa and plateau areas and the comparatively high precipitation, the agricultural possibilities are very promising.

The grazing conditions are most excellent on the mesas, plateaus and in the mountains; and for years this county has been noted for its cattle and sheep raising industries.

OTERO COUNTY (Continued)

	Year	Jan.		Feb.		Mar.		Apr.		May.		June		July		Aug.		Sept.		Oct.		Nov.		Dec.		Annual		Seasonal		Record, Yrs.
		W	MS	W	MS	W	MS	W	MS	W	MS	W	MS	W	MS	W	MS	W	MS	W	MS	W	MS	W	MS	W	MS	W	MS	
Prevalling wind...		13	16	19		20		23	18	12	14	14	18	23	21	18	220	104					12	7	8	5	113	66		
Days clear		3	5	3	8	8	10	16	14	14	10	6	6	7	5							12	7	8	5	113	66			
Days partly cldy.		3	4			1	2	3	3		2		2									12	7	8	5	113	66			
Days cloudy																														

Frost—Average date of first killing frost in autumn, Oct. 25.
 Average date of last killing frost in spring, April 11.
 Earliest date of killing frost in autumn, Oct. 9.
 Latest date of killing frost in spring, April 30.
 Average length of growing season, 197 days.

*Computed from nearby stations.

NOTE—Record at La Luz, 4 miles northeast, from November, 1889, to January, 1889.

This is a southern border county. Its lower altitudes range from 4,000 to 5,000 feet, including the Tularosa Basin; but the altitude increases along its northeast and east sides in the Sacramento and White Mountain ranges to over 10,000 feet. Over the mountains there is a marked increase in precipitation, which in the lower levels is small, averaging from 10 to 12 inches. Prevailing winds are southwesterly and fresh over the lower country, but often light for long periods in the mountains. Much clear, bright weather obtains over the lower country, which is warm and dry, but showers are frequent in the mountains.

Average annual precipitation, 10 to 12 inches, to 20 inches in mountains.

Average seasonal precipitation, 7 to 9.5 inches, to 15 inches in mountains.

Average seasonal snowfall, 8 to 15 inches, to 50 inches in mountains.

Mean annual temperature, 50 to 61 degrees.

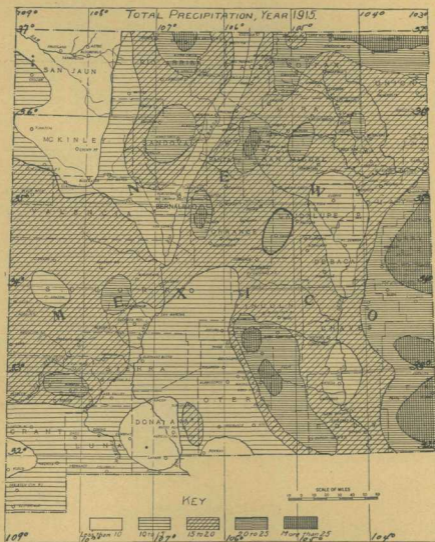
Mean summer temperature, 67 to 78 degrees.

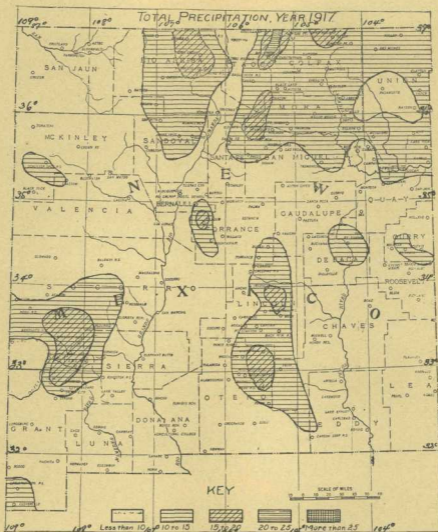
Mean winter temperature, 33 to 44 degrees.

Considerable irrigation and dry farming is done in the county. On the west side of the mountains, the principal irrigated districts are Three Rivers, Tularosa, La Luz and Alamogordo. Some of the principal crops grown in these irrigated areas are alfalfa, corn, wheat, barley, oats, beans, field peas, tomatoes, squash, chile and sweet corn. In the irrigated intermontane districts higher up in the mountains on both the east and west slopes, cabbage, cauliflower, celery, carrots, beets, peas, sweet corn, lettuce, and some Irish potatoes are among the more important vegetables. Wheat, oats, barley and short season corn are raised. Apples are grown extensively in the High Rolls, Mountain Park and a few other high altitude districts; and the Delicious, Wine-sap, Jonathan, White Winter Pearmain and Gano are the principal winter varieties. Sour cherries do well also. In the higher altitudes in the mountains where there is considerable rainfall for dry farming, oats, barley, wheat, beans, peas, short season corn, Irish potatoes, turnips and other root crops are raised. In the lower basins, both east and west of the mountains, little or no dry farming is being carried on, because of the limited amount of rainfall. Some pump irrigation

is practiced in a number of places in the Tularosa Basin. Wherever water for irrigation can be had the soils are capable of producing good yields.

Cattle and sheep raising are important industries in this county, on account of the excellent grazing afforded by the mountain and mesa ranges.





QUAY COUNTY

STATION—SAN JON. APPROX. LATITUDE—35° 6'. LONGITUDE—103° 20'. ELEVATION—4,200 FEET.

	Year	Jan.	Feb.	Mar.	Apr.	May.	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual	Seasonal	Record, Yrs.
Precipitation	1907	0.56	0.84	1.00	1.12	0.45	4.54	1.19	4.65	0.08	1.72	0.66	1.15	10.00	7.52	10
	1908	0.36	0.84	1.00	1.12	0.45	4.54	1.19	4.65	0.08	1.72	0.66	1.15	10.00	7.52	10
	1909	0.36	0.84	1.00	1.12	0.45	4.54	1.19	4.65	0.08	1.72	0.66	1.15	10.00	7.52	10
	1910	0.93	0.98	0.50	0.45	0.59	1.28	1.61	2.22	0.91	0.37	0.51	0.29	13.08	8.98	10
	1911	0.03	1.19	0.93	1.14	0.59	1.28	1.61	2.22	0.91	0.37	0.51	0.29	13.08	8.98	10
	1912	0.03	1.19	0.93	1.14	0.59	1.28	1.61	2.22	0.91	0.37	0.51	0.29	13.08	8.98	10
	1913	0.30	0.97	0.14	2.05	1.01	1.37	1.79	2.22	1.11	0.11	0.00	0.47	14.24	11.66	10
	1914	0.10	0.15	0.10	1.24	0.47	1.61	2.22	2.22	0.91	0.37	0.51	0.29	14.64	8.81	10
	1915	0.13	0.32	0.24	4.17	2.42	2.32	3.31	3.53	3.88	1.20	0.02	0.01	19.76	14.97	10
	1916	0.15	0.21	1.56	0.20	1.45	1.45	1.45	1.45	1.45	0.63	0.17	0.20	23.07	19.85	10
	1917	0.30	0.03	0.16	0.20	2.14	0.19	1.49	2.23	1.90	0.11	0.19	0.02	9.56	8.75	10
Average		0.31	0.53	0.37	1.42	1.79	1.65	2.04	3.58	1.19	1.18	0.51	0.49	14.85	11.66	10
Av. No. days with precipitation ...		2	3	3	5	6	6	8	8	5	4	3	3	56	38	9
Av. snowfall, in..		1.8	4.5	1.8	0.3	T.	0	0	0	0	0.9	1.8	4.6	15.7	8	8
Temperature—																
Mean	40.0	40.6	48.7	57.0	65.4	74.8	78.6	78.6	77.2	70.5	58.4	47.4	36.0	57.9	57.9	10
Mean Max.	55.4	55.9	64.5	72.2	80.6	88.8	92.1	90.4	84.4	73.3	62.9	49.8	42.6	72.6	72.6	10
Mean Min.	24.5	25.4	32.9	41.7	50.2	59.9	65.0	63.9	56.7	43.5	31.9	22.2	43.2	43.2	43.2	10
Highest	78	81	87	93	98	105	106	105	105	99	92	91	77	106	106	10
Lowest	-19	-9	-3	19	22	37	50	45	34	16	0	-9	-19	10	10	10
Prevailing wind..	SW	SW	SW	SW	SW	SW	SW	SW	SW	SW	SW	SW	SW	SW	SW	8
Days clear	20	17	20	19	20	19	17	18	23	23	22	19	237	237	116	10
Days partly c'dy..	7	7	6	6	6	7	10	8	4	4	4	4	6	75	41	10
Days cloudy	4	4	5	5	5	5	4	4	5	3	4	4	6	55	26	10

Frost—Average date of first killing frost in autumn, Oct. 25.
 Average date of last killing frost in spring, April 25.
 Earliest date of killing frost in autumn, Oct. 8.
 Latest date of killing frost in spring, May 9.
 Average length of growing season, 185 days.
 Years recorded, 8.

QUAY COUNTY

STATION—TUCUMCARI. APPROX. LATITUDE—35° 16'. LONGITUDE—103° 48'. ELEVATION—4,194 FEET.

Precipitation	Year	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual	Seasonal	Record, Yrs.
Av. No. days with precipitation ...	1904	0.53	1.15	2.96	2.10	2.25	2.50	4.07	1.01	2.50	T.	4.00	1.00	24.97	14.43	.....
Av. snowfall, in..	1905	0.70	0.70	0.95	1.79	1.00	0.46	4.21	2.92	0.33	0.62	1.66	1.61	16.05	10.71	.....
Temperature—	1906	0.74	0.90	0.90	2.31	2.39	2.36	2.56	3.92	0.08	1.43	0.75	0.80	17.75	14.53	.....
Mean	1907	0.24	0.60	0.90	1.60	0.24	0.44	2.45	1.78	1.03	0.93	0.85	T.	11.35	8.54	.....
Mean Max.	1908	0.20	0.90	0.60	1.60	0.24	0.44	2.45	1.78	1.03	0.93	0.85	T.	11.35	8.54	.....
Mean Min.	1909	T.	T.	1.72	0.48	0.97	2.42	2.03	1.04	0.85	1.90	1.59	0.20	13.20	7.79	.....
Highest	1910	0.09	0.04	0.09	0.76	0.16	0.26	1.77	5.88	0.49	0.45	0.22	0.15	10.36	9.32	.....
Lowest	1911	0.13	1.70	0.17	0.88	0.92	1.13	2.90	5.01	2.75	1.89	0.40	0.74	18.42	13.39	.....
Prevailing wind..	1912	0.00	2.40	0.15	1.91	1.59	1.57	3.11	3.74	1.16	0.10	0.00	0.13	14.87	12.09	.....
Days clear	1913	0.28	0.64	0.16	4.00	1.21	3.05	0.56	1.97	1.58	0.08	2.09	2.82	18.34	12.37	.....
Days partly c'd'y.	1914	0.16	0.32	0.32	2.38	9.36	1.30	4.46	1.02	1.31	3.75	0.00	0.86	25.04	19.63	.....
Days cloudy	1915	0.75	0.98	1.03	4.57	1.48	0.82	3.13	2.28	2.94	0.47	T.	0.37	18.87	15.22	.....
	1916	0.70	0.90	0.69	1.55	0.56	0.63	1.16	4.43	0.56	0.78	0.29	0.32	11.07	8.89	.....
	1917	0.58	0.11	0.12	0.32	1.82	0.90	0.74	6.11	2.74	0.16	0.52	0.04	14.56	12.69	.....
Mean	1917	0.33	0.69	0.53	1.79	1.83	1.45	2.63	3.16	1.41	0.98	0.37	0.62	16.39	12.97	.....
Av. No. days with precipitation ...		1	2	2	4	5	4	7	7	4	2	2	2	42	31	11
Av. snowfall, in..		2.6	6.5	3.8	2.1	T.		0	0	0	1.1	6	5	271	10	10
Temperature—																
Mean		41.8	40.9	50.2	57.1	65.3	75.5	78.2	77.7	71.3	58.8	48.6	38.3	58.6	11	11
Mean Max.		57.0	56.0	66.0	72.5	80.1	90.2	91.9	91.3	85.4	74.2	63.5	52.4	73.4	11	11
Mean Min.		26.6	25.8	34.4	41.7	50.5	60.8	64.6	63.9	57.3	43.4	33.7	24.8	44.0	11	11
Highest		80	81	92	95	99	105	105	105	99	92	85	75	105	11	11
Lowest		-8	-3	3	32	25	39	53	49	35	13	-1	-3	-8	11	11
Prevailing wind..		SW	SW	SW	SW	SW	SW	SW	SW	SW	SW	SW	SW	SW	SW	11
Days clear		24	20	22	18	21	20	19	19	21	24	21	22	251	118	118
Days partly c'd'y.		4	5	5	7	6	8	9	9	6	4	4	4	71	44	71
Days cloudy		3	3	4	5	5	2	3	3	4	3	5	4	43	21	21

Frost—Average date of first killing frost in autumn, Oct. 25.
 Average date of last killing frost in spring, April 19.
 Earliest date of killing frost in autumn, Oct. 14.
 Latest date of killing frost in spring, May 7.
 Average length of growing season, 189 days.
 Years recorded, 10.

This is an eastern border county, of moderately low altitude (3,900 to 4,500 feet), with a few isolated mountain peaks rising above 5,000 feet. It is largely a rolling, somewhat broken prairie country. The annual precipitation averages from 15 to 18 inches, giving promise of successful dry land culture. The winds of the district are prevailing southwesterly and rather high, because of the open nature of the country.

Average annual precipitation, 15 to 18 inches.

Average seasonal precipitation, 12 to 15 inches.

Average seasonal snowfall, 15 to 25 inches.

Mean annual temperature, 55 to 58 degrees.

Mean summer temperature, 75 to 78 degrees.

Mean winter temperature, 35 to 39 degrees.

This is a dry farming county; and with the exception of a few garden patches which are raised by windmill irrigation, or possibly some gravity irrigation along the Canadian River, all of the farming is done by dry farming methods. The principal crops are beans, corn, milo, kafir, feteria, broom corn, Sudan grass, cowpeas, melons, squash and pumpkins. Irish potatoes are not dependable; and while occasionally a farmer here and there may get a fair yield, it is not advisable to plant on a large scale. Over in the plains district where the elevation is a little greater, winter and spring wheat are often quite successful.

This is a grazing section, and affords good ranges for large herds of cattle and sheep. Stock raising is also becoming an important industry; and some attention is being given to the dairying industry by the dry farmers.

RIO ARRIBA COUNTY

STATION—CHAMA. APPROX. LATITUDE—36° 54'. LONGITUDE—106° 35'. ELEVATION—7,851 FEET.

Year	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual	Seasonal	Record, Yrs.
Precipitation															
1889	2.25	2.90	1.64	1.66	0.77	0.56	0.47	2.16	1.67	1.04	1.60	3.85	...	...	...
1890	2.40	7.10	3.43	0.40	0.93	0.76	2.61	2.05	1.91	2.77	1.50	0.50	...	9.05	...
1891	1.84	3.95	2.01	1.76	0.93	0.45	3.24	*1.50	5.25	0.75	0.10	4.37	...	14.08	...
1892	1.84	4.32	5.15	0.30	1.57	0.14	1.48	3.62	0	2.00	0.53	1.77	...	7.48	...
1893	1.73	4.32	2.60	0.98	0.55	0.03	1.12	4.10	3.99	0.25	0.85	1.60	...	10.80	...
1894	1.60	2.70	2.35	...	2.58	*1.25	2.20	3.05	2.30	0.90	0.10	3.20	...	20.18	...
1895	6.30	2.70	2.35	...	2.58	...	...	3.05	0.45	1.27	3.45	2.90	...	9.08	...
1896	1.65	2.10	2.20	2.30	0.95	0.19	2.16	0.78	1.80	1.47	2.15	1.80	...	...	...
1897	2.58	4.90	5.53	0.79	...	...	...	...	...	...	...	...	...	7.28	...
1898	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
1899	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
1900	2.10	1.10	4.00	2.89	1.50	0.60	3.09	1.45	1.27	0.20	1.86	0.80	...	...	...
1901	2.03	1.70	0.94	2.90	3.71	1.03	1.90	5.13	1.85	1.73	0.96	3.22	...	...	...
1902	1.70	1.70	1.12	1.74	1.00	0.28	1.80	5.13	2.44	0.92	0.20	2.40	...	...	...
1903	1.73	2.53	0.45	1.56	1.05	0.32	2.33	4.55	0.89	1.48	2.35	0.60	...	...	...
1904	2.39	3.04	1.22	1.05	0.32	0.60	2.30	3.22	1.83	1.55	1.32	3.32	...	...	...
1905	3.04	1.68	1.53	0.86	0.49	1.65	1.70	2.27	0.15	1.86	0.79	1.31	...	...	...
1906	0.79	0.60	5.76	2.39	0.76	1.09	2.10	3.39	3.46	4.15	1.65	0.75	...	...	...
1907	1.57	3.58	2.33	0.44	0.21	1.87	1.78	1.13	2.65	1.08	2.65	3.73	...	...	...
1908	2.11	1.16	0.73	2.33	2.09	1.42	5.58	2.25	1.68	3.67	0.12	3.87	...	...	...
1909	1.64	2.68	0.55	4.87	2.88	0.32	4.52	1.87	2.52	T	1.55	3.10	...	...	...
1910	11.29	1.48	4.07	1.49	1.05	T	1.97	2.53	1.13	4.97	0.10	2.26	...	...	...
1911	2.76	2.15	1.51	1.97	3.17	0.10	1.88	1.15	1.24	0.00	T	T	...	...	...
1912	2.62	2.70	2.46	1.72	1.41	0.68	2.70	2.43	1.86	1.62	1.14	2.13	...	...	...
1913	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
1914	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
1915	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
1916	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
1917	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Mean													23.47	10.80	
Av. No. days with precipitation ..	8	8	8	6	5	3	9	10	6	4	4	7	78	39	16
Av. snowfall, in...	31.0	29.3	26.0	12.7	5.7	0	0	0	0.7	4.4	9.5	26.9	15.25	16	
Temperature—															
Mean	33.6	35.8	32.3	42.0	49.9	58.4	64.2	63.4	56.4	46.5	36.7	25.0	43.8	19	
Mean Max.	39.6	38.8	42.3	58.6	66.6	77.1	80.5	79.1	72.8	63.0	53.2	39.9	59.8	19	
Mean Min.	8.4	9.9	18.1	27.1	31.8	39.2	46.9	46.7	38.6	29.0	19.5	9.2	27.0	16	
Highest	69	65	73	81	89	97	97	99	94	90.0	85.9	68	99	16	
Lowest	-24	-26	-20	-11	13	23	31	34	18	2	-1	-20	-26	16	

	Year	Jan.		Feb.		March		April		May		June		July		Aug.		Sept.		Oct.		Nov.		Dec.		Annual	Seasonal	Record, Yrs.
		SW	SW	SW	SW	SW	SW	SW	SW	SW	SW	SW	SW	SW	SW	SW	SW	SW	SW	SW	SW	SW	SW	SW	SW			
Prevalling wind..		SW	SW	SW	SW	SW	SW	SW	SW	SW	SW	SW	SW	SW	SW	SW	SW	SW	SW	SW	SW	SW	SW	SW	SW	SW	96	12
Days clear		17	15	19	13	17	17	19	13	17	20	14	13	19	13	19	19	22	20	20	17	206	17	206	17	206	96	12
Days partly cl'dy.		9	9	7	12	11	11	7	12	11	9	9	9	14	15	9	9	7	7	7	9	118	7	118	7	118	70	12
Days cloudy		5	5	5	5	3	3	5	5	3	1	3	3	3	2	2	2	2	3	2	3	42	5	42	5	42	17	12

Frost—Average date of first killing frost in autumn, Sept. 21.

Average date of last killing frost in spring, May 31.

Earliest date of killing frost in autumn, Sept. 12.

Latest date of killing frost in spring, June 22.

Average length of growing season, 113 days.

Years recorded, 16.

*Computed from nearby stations.

RIO ARriba COUNTY

STATION—ESPAÑOLA. APPROX. LATITUDE—36° 0'. LONGITUDE—106° 5'. ELEVATION—5,590 FEET.

Precipitation ...	Year	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual	Seasonal	Record, Yrs.
...	1896	...	...	...	0.09	2.10	0.68	3.01	0.84	0.36	1.39	0.96	0.81	...	6.99	...
...	1897	0.04	0.32	0.06	0.50	0.94	0.22	1.36	0.71	1.18	2.42	0.71	0.53	8.08	5.71	...
...	1898	0.32	0.14	0.94	0.16	3.48	0.08	0.92	1.01	2.20	0.87	0.50	0.30	*10.92	7.85	...
...	1899	0.45	0	0.22	1.04	T.	0.56	2.22	1.32	0.22	0.60	0.65	0.60	7.78	5.36	...
...	1899	0.05	0.10	0.20	0.02	0	1.34	1.66	0.94	1.23	0.22	0.49	0	6.25	5.19	...
...	1900	0.10	0.27	0.10	1.57	1.20	0.68	1.07	0.48	3.27	0.73	0.30	0.33	10.20	8.37	...
...	1901	0.43	0.22	0.10	0.52	1.65	0.21	1.54	2.09	...	...	...	...	...	...	...
...	1902	...	...	...	...	0.75	0.05	0.80	2.49	0.52	0.16	0.37	0.30	...	...	...
...	1905	...	...	...	1.01	0.12	1.62	1.18	1.01	0.29	0.26	2.38	T.	...	5.23	...
...	1906	T.	...	0.37	0.95	0.76	0.45	2.19	...	...	...	...	...	...	...	...
...	1907	*1.20	0.13	T.	2.53	0.99	0.79	2.31	5.94	*0.65	0.87	0.14	T.	*15.55	13.21	...
...	1908	0.16	0.90	0.39	1.01	1.05	0.20	0.94	3.05	0.41	0.35	1.33	0.40	10.24	6.66	...
...	1909	0.33	0.22	1.63	0.58	0.49	T.	0.48	2.45	2.51	0.84	0.93	0.37	9.99	6.51	...
...	1910	0.45	0.76	0	0.63	0.35	0.11	0.15	...	...	...	0.58	0.23	...	...	...
...	1911	0.34	0.99	0.10	0.79	0.59	0.90	4.25	0.37	2.02	3.64	1.35	0.04	15.38	8.92	...
...	1912	0.12	0.56	1.11	0.45	1.42	1.82	1.73	1.10	0.03	0.25	1.18	0.28	9.05	6.55	...
...	1913	0.37	0.38	0.02	0.87	0.32	1.58	0.38	0.61	0.64	0.17	1.08	0.54	7.66	5.10	...
...	1914	T.	T.	0.13	0.54	1.67	0.32	3.88	1.50	0.26	1.67	0	1.13	11.10	8.17	...
...	1915	0.66	0.60	0.72	3.67	0.73	0.42	2.24	0.88	1.03	0	0.16	0.43	11.44	8.87	...
...	1916	2.84	0.04	1.27	2.64	0	0.45	2.72	0.87	0.31	2.77	T.	0.12	13.44	6.40	...
...	1917	1.02	0.62	0.38	0.10	1.20	0.00	0.70	0.41	1.34	0.00	0.08	0.00	5.85	3.76	...
Average		0.49	0.35	0.43	0.95	0.89	0.82	1.70	1.48	1.10	0.96	0.82	0.34	9.93	6.74	...
Av. No. days with precipitation ..		3	2	2	4	4	3	8	7	5	4	3	2	47	31	17
Av. snowfall, in..		1.7	2.2	2.8	0.6	T.	0	0	0	0	0.4	2.3	3.5	13.5	16	16
Temperature—																
Mean		29.7	35.0	43.2	50.5	58.4	67.7	71.8	71.1	64.4	51.9	39.3	32.4	66.9	11.9	17
Mean Max.		44.0	49.9	59.6	66.7	75.2	85.6	87.4	86.8	81.1	68.6	56.7	42.7	77.7	42.7	17
Mean Min.		15.3	20.1	26.9	34.6	41.6	49.9	56.2	55.6	47.6	35.3	23.3	14.1	35.0	17.1	17
Highest		71	67	81	86	95	101	100	101	95	88	77	68	101	20	17
Lowest		-23	-5	-3	10	22	33	41	42	24	17	-6	-14	-23	20	20
Prevailing wind..		N	N	S	S	SW	S	S	N	SSW	S	N	N	S	S	20
Days clear		20	17	17	17	20	22	15	17	21	23	20	20	229	112	20
Days partly cldy.		6	6	10	7	7	6	11	11	7	6	6	7	90	49	20
Days cloudy		5	5	4	6	4	2	5	3	2	2	4	4	46	22	20

Frost—Average date of first killing frost in autumn, Oct. 9.
Average date of last killing frost in spring, April 27.
Earliest date of killing frost in autumn, Sept. 12.
Latest date of killing frost in spring, May 31.
Average length of growing season, 165 days.
Years recorded, 20.

*Computed from nearby stations.

RIO ARriba COUNTY

STATION—HAYNES. APPROX. LATITUDE—36° 16'. LONGITUDE—107° 26'. ELEVATION—6,600 FEET.

	Year	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual	Seasonal	Record, Yrs.
Precipitation	1910	0.55	1.54	0.59	1.02	0.01	0.04	1.12	1.20	0.35	2.26	0.54	0.50	9.82	3.74	
	1911	0.29	1.41	0.90	1.41	0.26	1.33	5.64	1.29	1.80	1.48	0.44	0.22	16.07	11.73	
	1912	0.02	0.45	1.15	0.36	0.50	0.38	1.36	2.00	0.50	0.01	0.19	7.52	5.20	6.20	
	1913	0.16	1.00	0.50	0.13	0.04	0.81	0.04	2.70	2.34	1.40	0.95	2.03	12.09	6.06	
	1914	0.86	0.33	0.32	0.77	1.51	1.06	4.35	1.02	1.26	1.95	0	1.72	15.15	9.97	
	1915	0.42	0.22	0.24	2.55	0.01	0.20	4.40	0.88	1.83	Tv.	Tv.	0.40	11.75	10.47	
	1916	1.25	0.07	0.15	0.15	0	0	0.16	1.50	...	4.60	0.01	...	...	...
	1917	0.51	0.38	0.26	0.08	1.26	0.25	1.32	1.33	0.87	0.52	0.00	0.00	6.78	5.11	
Average		0.51	0.68	0.47	0.87	0.53	0.45	2.30	1.49	1.20	1.59	0.24	0.77	11.31	6.85	
Av. No. days with precipitation ...		6	5	5	5	2	3	7	4	4	4	2	5	52	25	
Av. snowfall, in..		5.6	6.5	2.2	0.8	0.1	0	0	0	0	0.4	0.1	8.7	24.4		
Temperature—																
Mean.....	22.4	28.0	35.0	44.0	52.4	62.4	67.8	67.0	59.7	47.4	36.3	19.8	45.2			
Mean Max.	39.2	44.6	53.5	61.4	70.2	79.3	83.3	82.3	75.0	64.4	54.8	39.1	62.3			
Mean Min.	6.6	11.4	16.5	26.5	34.7	45.5	52.3	51.7	44.4	30.4	17.8	0.6	28.1			
Highest	56	63	76	78	84	96	95	96	94	81	70	58	96			
Lowest	-20	-15	-8	6	16	31	30	39	16	14	3	-21	-21			
Prevailing wind...	NW	NW	NW	NW	NW	NW	NW	NW	NW	NW	NW	NW	NW	NW	NW	
Days clear	21	18	19	17	20	21	15	16	21	22	24	20	234	110		
Days partly cloudy.	4	4	8	7	8	7	12	11	5	4	2	3	75	50		
Days cloudy	6	6	4	6	3	2	4	4	4	4	6	4	8	66	23	

Frost—Average date of first killing frost in autumn, Sept. 22.

Average date of last killing frost in spring, May 13.

Earliest date of killing frost in autumn, Sept. 10.

Latest date of killing frost in spring, May 30.

Average length of growing season, 132 days.

This is one of the large northern border counties, with great variation in altitude and climate. Lower levels along the Rio Grande in the southeastern corner have an altitude of about 5,500 feet, and these are dry, rather hot, and successful only as irrigated or grazing lands. From this comparatively low district there rises rapidly vast mesa, plateau and mountain country, reaching an altitude of about 12,000 feet along the northeast border of the county and showing an increase in precipitation to 16, 18, 20 and even 25 inches annually, with deep snow and long winters. Much of the county, however, is below the 8,000 foot level. The winds are prevailing southwest to west, and often fresh over the open lowlands and mesas. Much bright, dry, pleasant weather obtains over the lowlands and mesas, but the uplands are more stormy, with long, cold, snowy winters, and short cool summers. The growing season, except in the lowlands, is short, with late spring frost and early autumn frost.

Average annual precipitation, 10 to 12 inches, 16, 18 to 25 inches in mountains.

Average seasonal precipitation, 6 to 9 inches, 12 to 16 inches.

Average seasonal snowfall, 10 to 20 inches; 40, 60 and 100 inches in mountains.

Mean annual temperature, 43 to 51 degrees.

Mean winter temperature, 24 to 32 degrees.

Mean summer temperature, 62 to 70 degrees.

Along the irrigated intermontane valleys in the northern part of the county, beans, short season corn, wheat, oats, barley, peas, cabbage, turnips, carrots and Irish potatoes are raised. Alfalfa is a crop that can be raised almost any place where water for irrigation can be had. In the southern part of the county in the Chama and Rio Grande Valleys, quite intensive farming is being practiced. The principal crops are alfalfa, beans, corn, wheat, oats, tomatoes, chile, and, on a smaller scale, cabbage, melons, pumpkins, sorghums, and root crops are also raised. In all of the irrigated valleys apples are found to be the most successful fruit, although the European plums and sour cherries are also raised. On the higher mesas and plateaus where there is considerable rainfall, oats, barley, wheat, peas, some beans, and Irish potatoes are raised without irrigation.

This is one of the foremost stock raising counties, on account of the fine grazing afforded by the mesas and mountains; sheep being the principal livestock.

ROOSEVELT COUNTY

STATION—PORTALES, APPROX. LATITUDE—34° 12'. LONGITUDE—103° 20'. ELEVATION—4,004 FEET.

	Year	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual	Seasonal	Record, Yrs.
Precipitation . . .	1905	1.46	1.46	2.60	3.05	1.29	1.37	2.60	2.33	1.22	0.24	2.25	1.03	21.20	13.47	
	1906	0.56	0.54	0.77	3.39	0.74	1.33	3.20	3.07	2.73	0.39	1.81	0.75	22.47	19.06	
	1907	0.56	0.54	0.77	3.39	0.74	1.33	3.20	3.07	2.73	0.39	1.81	0.75	22.47	19.06	
	1908	0.56	0.54	0.77	3.39	0.74	1.33	3.20	3.07	2.73	0.39	1.81	0.75	22.47	19.06	
	1909	0.56	0.54	0.77	3.39	0.74	1.33	3.20	3.07	2.73	0.39	1.81	0.75	22.47	19.06	
	1910	0.56	0.54	0.77	3.39	0.74	1.33	3.20	3.07	2.73	0.39	1.81	0.75	22.47	19.06	
	1911	0.56	0.54	0.77	3.39	0.74	1.33	3.20	3.07	2.73	0.39	1.81	0.75	22.47	19.06	
	1912	0.56	0.54	0.77	3.39	0.74	1.33	3.20	3.07	2.73	0.39	1.81	0.75	22.47	19.06	
	1913	0.56	0.54	0.77	3.39	0.74	1.33	3.20	3.07	2.73	0.39	1.81	0.75	22.47	19.06	
	1914	0.56	0.54	0.77	3.39	0.74	1.33	3.20	3.07	2.73	0.39	1.81	0.75	22.47	19.06	
	1915	0.56	0.54	0.77	3.39	0.74	1.33	3.20	3.07	2.73	0.39	1.81	0.75	22.47	19.06	
	1916	0.56	0.54	0.77	3.39	0.74	1.33	3.20	3.07	2.73	0.39	1.81	0.75	22.47	19.06	
	1917	0.56	0.54	0.77	3.39	0.74	1.33	3.20	3.07	2.73	0.39	1.81	0.75	22.47	19.06	
Average		0.28	0.71	0.81	2.45	2.50	2.00	2.60	2.88	2.13	1.11	0.88	1.04	19.14	14.57	
Av. No. days with precipitation . . .		2	3	5	6	4	5	6	7	7	5	3	3	56	35	
Av. snowfall, in. . .		1.5	6.1	2.9	0.4	0	0	0	0	0	0.5	1.2	4.2	16.8		
Temperature—																
Mean		38.8	39.9	46.8	55.3	65.0	73.6	76.0	74.8	68.2	56.6	46.8	37.1	56.6		
Mean Max.		54.2	56.0	58.5	70.7	81.6	88.8	90.9	89.4	83.7	72.9	64.4	51.8	72.2		
Mean Min.		23.3	23.8	35.1	39.9	48.4	58.3	61.1	59.3	52.7	40.2	29.2	22.4	41.6		
Highest		76	82	86	89	98	101	103	100	98	91	85	75	103		
Lowest		-12	-7	0	17	25	37	50	40	34	15	-3	-4	-12		
Prevailing wind. . .		W	W	W	WS	SSW	SE	SE	SE	SE	E	SE	W	SE		
Days clear		21	6	16	15	20	19	13	15	17	20	22	18	298	95	
Days partly cldy. . .		8	9	8	9	8	13	12	12	10	6	3	7	106	64	
Days cloudy		2	13	7	6	3	2	6	4	3	5	5	6	62	24	

Frost—Average date of first killing frost in autumn, Oct. 15.

Average date of last killing frost in spring, April 11.

Earliest date of killing frost in autumn, Oct. 8.

Latest date of killing frost in spring, May 7.

Average length of growing season, 184 days.

This is an eastern border county in the plains region, with comparatively low altitude, averaging from 4,000 to 4,500 feet. It consists of rolling prairie land that receives from 16 to 18 inches annual precipitation and has proven suitable for dry land culture. The prevailing winds of the county are southwest to west and fresh, with much bright, warm weather and a fairly long growing season.

Average annual precipitation, 16 to 18.5 inches.

Average seasonal precipitation, 13 to 15 inches.

Average seasonal snowfall, 12 to 17 inches.

Mean annual temperature, 54 to 57 degrees.

Mean summer temperature, 72 to 75 degrees.

Mean winter temperature, 36 to 39 degrees.

Like Curry County, this is a good dry farming county, where beans, broom corn, milo, kafir, feterita and corn are the principal crops raised. It also has an extensive shallow water area, which has been widely developed in the Portales Valley, where agriculture is largely carried on by pump irrigation. Here a large variety of crops can be raised. Beans, celery, cabbage, onions, peppers, sweet potatoes, melons, beets, corn and all of the sorghums; also fruit, such as apples, peaches, plums, sour cherries and grapes, are raised, although the fruit industry has not been very highly developed.

Much of the prairie land not used for farming affords excellent pasture for sheep and cattle. Dairying is also developing into an extensive industry.

SANDOVAL COUNTY

STATION—JEMEZ SPRINGS, APPROX. LATITUDE—35° 47'. LONGITUDE—106° 42'. ELEVATION—6,100 FT.

	Year	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual	Seasonal	Record, Yrs
Precipitation	1910	0.81	2.51	0.75	0.47	0.35	0.59	3.34	2.17	0.36	1.96	1.42	0.62	22.25	11.75	7
	1911	T.	0.40	2.36	1.15	0.33	3.01	3.53	2.01	0.34	1.05	2.02	0.22	22.25	11.75	7
	1912	0.80	1.60	0.73	1.57	0.04	3.77	0.65	2.09	1.85	0.08	2.08	1.98	14.58	10.37	7
	1913	0.80	0.40	0.47	0.62	0.89	1.99	3.88	5.30	0.76	3.24	T.	1.38	17.25	9.98	7
	1914	0.90	1.41	1.13	0.79	4.32	1.77	1.06	4.77	2.30	1.75	0.18	0.40	21.76	14.85	7
	1915	1.41	1.13	0.79	4.32	1.77	1.06	4.77	2.30	1.75	0.18	0.40	1.34	21.29	15.97	7
	1916	5.12	0.54	2.12	2.15	0.37	T.	3.45	4.55	0.62	3.72	T.	0.32	23.96	11.14	7
	1917	1.39	0.85	0.68	0.12	2.10	T.	2.32	0.97	1.41	0.10	T.	0.00	9.25	6.83	7
Average		1.49	1.07	0.98	1.52	0.97	1.53	3.33	2.63	1.15	1.94	0.74	0.90	18.61	11.13	7
Av. No. days with precipitation . .		6	5	5	7	5	6	13	12	6	5	3	5	78	49	7
Av. snowfall, in..		10.8	11.3	5.1	2.5	0.4	0	0	0	0.1	1.3	2.3	9.8	43.6		7
Temperature—																
Mean		31.2	34.6	41.6	49.2	57.1	65.6	68.7	63.2	60.6	50.6	41.0	29.6	49.4		7
Mean Max.		32.4	35.6	54.2	63.5	72.6	81.1	82.0	72.3	74.2	64.2	54.6	41.2	62.3		7
Mean Min.		20.0	23.8	28.9	35.0	41.6	50.2	55.4	54.0	46.9	36.9	27.5	17.9	36.5		7
Highest		61	62	75	79	87	95	93	91	86	82	77	66	95		7
Lowest		-13	-6	4	13	23	34	40	45	32	17	0	1	-13		7
Prevailing wind..		SW	SW	SW	SW	SW	SW	SW	SW	SW	SW	SW	SW	SW		7
Days clear		15	15	13	11	17	13	7	9	15	29	17	13	165	72	7
Days partly c'd'y.		8	5	8	9	8	8	12	11	8	4	6	10	97	56	7
Days cloudy		8	8	10	10	6	9	12	11	7	7	7	8	103	55	7

Frost—Average date of first killing frost in autumn, Oct. 26.
 Average date of last killing frost in spring, April 27.
 Earliest date of killing frost in autumn, Sept. 22.
 Latest date of killing frost in spring, May 20.
 Average length of growing season, 182 days.

This is a north central county, mostly west of the Rio Grande, as the stream traverses the southeast corner. Great variation occurs in altitude and climate. There is much rough, mountainous country within the county, which rises in its northeast portion to 10,000 feet, and there are vast plateaus or mesas from 6,000 to 8,000 feet. The precipitation is small along the Rio Grande, averaging about 8 to 10 inches, but increasing to 14, 16, 18 and even 20 inches or more in the higher altitudes, where deep snow and long winters obtain. Winds are prevailing southwest to southeast and fresh over the lower valleys. Much sunshine occurs over the lower levels, but more cloudiness and frequent showers in summer in the higher districts. The growing season is short except in the lower valleys. The precipitation, temperature and other weather data given for Albuquerque, Bernalillo County, can be applied to the Rio Grande Valley in this county.

Average annual precipitation, 8 to 14 inches, to 16, 18 and 20 inches in mountains.

Average seasonal precipitation, 6 to 11 inches, to 14 and 16 inches in mountains.

Average seasonal snowfall, 10 to 40 inches, to 100 inches in mountains.

Mean annual temperature, 45 to 52 degrees.

Mean summer temperature, 63 to 67 degrees.

Mean winter temperature, 28 to 35 degrees.

About 40 per cent of the crops raised are grown under dry farming. Beans, short season corn, wheat, oats, barley and peas are among the principal dry farming crops. In the valleys of the Rio Grande, Jemez and Puerco Rivers the farming is done by irrigation; and alfalfa, wheat, barley, oats, corn sorghum, chile, beans, cabbage, cauliflower, beets, carrots, melons, onions, and tomatoes are among the leading crops. Among the fruits successfully raised are apples, European and native plums, cherries, gooseberries, strawberries, raspberries and grapes. Irish potatoes are also raised in the higher altitudes of 7,500 to 8,500 feet in the mountains where there is enough rainfall to insure the crop. It is not advisable to try to grow fruits without irrigation, particularly the apples, pears and peaches.

This is a good grazing county, and both sheep and cattle are prosperous industries. There are probably eight times as many sheep, however, as there are cattle on the ranges.

SAN JUAN COUNTY

STATION—BLOOMFIELD. APPROX. LATITUDE—36° 43'. LONGITUDE—108° 00'. ELEVATION—5,500 FEET.

Precipitation	Year	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual	Seasonal	Record, Yrs
1891	0.35	1.31	0.85	0.12	0.45	0.00	0.88	0.52	1.58	0	0	0	1.09	.....	.....	.....
1892	0.35	1.25	0.85	0.12	0.45	0.00	0.88	0.52	1.58	0	0	0	0.29	.....	.....	.....
1893	T.	1.25	0.85	0.12	0.45	0.00	0.88	0.52	1.58	0	0	0	0.40	.....	.....	.....
1894	0.15	0.95	0.10	0.03	0.15	T.	0.01	0.01	1.78	1.18	0.51	0	0	.....	3.15	.....
1895	0.94	0.55	0.10	0.03	0.15	T.	0.35	0.54	0.43	1.18	0.51	0	0	.....	6.66	.....
1896	0.16	0.23	0.10	0.05	T.	0.00	0.78	0.87	1.32	1.32	1.32	2.55	0.66	.....	2.53	.....
1897	1.21	1.30	0.94	0.23	1.56	T.	0.78	0.49	2.79	1.53	1.53	0.65	0.32	.....	7.28	.....
1898	0.57	0.14	0.73	1.31	0.90	1.19	2.47	0.89	T.	0.94	0.42	0.45	1.44	.....	11.20	.....
1899	0.67	0.65	0.74	0.97	0.05	0.70	1.26	3.30	0.61	0.94	0.45	0.43	9.77	.....	5.76	.....
1900	0.12	0.07	0.27	1.41	0.49	0.58	0	0.14	1.18	0.76	1.15	0.12	6.29	.....	3.80	.....
1901	1.16	0.07	0.27	1.41	0.49	0.58	0	0.14	1.18	0.76	1.15	0.12	6.29	.....	3.80	.....
1902	0.76	0.31	0.00	0.00	0.77	0.45	0.10	0.51	0.68	1.01	0	0	0	.....	.....	.....
1903	0.59	1.15	1.79	2.07	0.24	1.38	0.54	0.08	0.75	0	1.03	0	1.03	.....	.....	.....
1904	0.59	1.15	1.79	2.07	0.24	1.38	0.54	0.08	0.75	0	1.03	0	1.03	.....	.....	.....
1905	0.19	0.22	2.13	1.97	0.69	0.05	0.33	0.73	1.33	0.34	0.65	1.39	10.02	.....	6.06	.....
1906	0.53	0.25	0.30	1.27	0.68	0.80	1.01	1.45	0.21	0.46	0.44	0.43	7.84	.....	5.10	.....
1907	0.26	1.52	0.30	0.56	0.50	0.06	0.47	3.30	0.05	0.46	0.22	1.23	8.83	.....	5.43	.....
1908	0.76	0.42	1.21	0.54	0.33	0.32	1.71	4.44	1.25	0.18	0.36	0.67	12.09	.....	8.49	.....
1909	0.17	0.23	0.18	0.53	T.	0.07	1.56	0.55	0.86	1.03	0.73	1.85	6.76	.....	3.57	.....
1910	0.47	2.33	0.80	0.87	0.02	0.35	4.01	1.06	1.13	2.35	0.41	0.26	13.96	.....	7.34	.....
1911	0.03	0.26	1.05	0.57	T.	0.32	0.67	1.21	0.08	1.45	0.25	0.33	6.82	.....	3.45	.....
1912	0.10	0.81	0.80	0.29	0.19	0.46	0.44	0.82	1.58	1.42	1.30	1.03	9.24	.....	3.78	.....
1913	0.87	0.55	0.40	0.62	0.78	0.72	4.07	2.08	0.40	1.98	0.01	0.79	13.27	.....	8.68	.....
1914	0.75	0.78	0.47	2.43	0.78	0.64	1.37	0.55	1.62	0	0.23	0.68	9.60	.....	9.95	.....
1915	1.82	0.40	1.40	0.37	0.22	0.12	2.01	0.48	0.52	2.24	0.01	0.36	9.95	.....	3.72	.....
1916	0.55	0.69	0.12	0.80	0.58	0.84	0.50	0.82	0.58	0.33	0.04	0.00	4.91	.....	4.09	.....
1917	0.55	0.69	0.12	0.80	0.55	0.84	0.50	0.82	0.58	0.33	0.04	0.00	4.91	.....	4.89	.....
Mean																
Av. No. days with precipitation ...		5	7	6	8	3	2	8	8	4	5	4	6	67	33	12
Av. snowfall, in. ...		3.5	4.5	2.4	0.5	0.1	0	0	0	T.	1.6	1.0	4.2	17.8	21	21
Temperature—																
Mean		28.1	33.5	42.3	50.2	57.9	67.5	74.0	72.5	64.1	51.5	39.4	27.3	50.7	22	22
Mean Max.		42.8	49.2	60.3	68.4	76.7	86.9	91.3	89.0	81.3	68.8	57.0	41.9	67.8	12	12
Mean Min.		16.8	21.2	26.7	33.4	38.2	45.6	51.3	55.4	45.4	33.8	22.1	13.4	34.1	13	13
Highest		68	66	89	90	100	102	106	104	96	89	77	66	106	22	22
Lowest		-16	-23	3	9	18	29	38	35	21	10	-12	-18	-23	22	22

	Year	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual	Seasonal	Record, Yrs.
Prevailing wind...		SW	SW	SW	SW	SW	SW	SW	SW	SW	SW	SW	SW	SW	SW	12
Days clear		12	11	11	11	14	17	7	7	14	18	17	12	151	70	
Days partly cldy.		12	13	17	17	16	12	23	23	14	11	10	13	181	105	
Days cloudy		7	4	3	2	1	1	1	1	2	2	3	6	33	8	

Frost—Average date of first killing frost in autumn, Sept. 28.

Average date of last killing frost in spring, May 20.

Earliest date of killing frost in autumn, Sept. 12.

Latest date of killing frost in spring, June 14.

Average length of growing season, 131 days.

Years recorded, 14.

	Year	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual	Seasonal	Record, Yrs
Temperature—																
Mean		29.9	35.0	43.6	51.6	59.6	68.0	74.0	72.7	63.6	51.3	39.9	29.0	51.5		20
Mean Max.		43.9	49.7	60.0	69.6	78.3	89.1	91.9	89.5	81.2	69.0	56.4	43.9	68.5		20
Mean Min.		17.3	19.8	27.3	34.3	40.8	47.3	54.9	56.9	45.8	33.7	23.6	14.8	34.6		20
Highest		71	86	83	92	97	108	110	109	95	90	90	79	110		20
Lowest		-10	-14	6	8	13	31	34	39	24	11	-1	-17	-17		20
Prevailing wind..		W	W	W	W	W	W	W	WSW	W	W	W	W	W		20
Days clear		17	15	19	20	20	21	15	16	18	23	21	21	226	110	24
Days partly cldy.		7	7	7	7	9	8	12	14	10	6	6	7	103	162	24
Days cloudy			6	4	3	2	1	2	1	2	2	3	3	36	11	24

Frost—Average date of first killing frost in autumn, Oct. 8.

Average date of last killing frost in spring, May 7.

Earliest date of killing frost in autumn, Sept. 17.

Latest date of killing frost in spring, June 5.

Average length of growing season, 151 days.

Years recorded, 22.

This is a northwest border county, with comparatively low altitude (4,500 to 5,500 feet), except in the northeast, the southeast and the southwest portions, where foothills and mountains 6,000 to 8,000 feet obtain. The lower levels of the county are very dry, probably the driest portions of the state, and the increase of precipitation with altitude is not large. However, the county is traversed by the San Juan River and several of its tributaries, affording irrigation water for a large amount of land, susceptible of easy irrigation and much of which is already under cultivation. The prevailing wind direction over the county is from the southwest and west. Much sunshine, warmth and a fairly long growing season are characteristics.

Average annual precipitation, 5 to 10 inches.

Average seasonal precipitation, 3 to 7 inches.

Average seasonal snowfall, 5 to 15 inches.

Mean annual temperature, 50 to 52 degrees.

Mean summer temperature, 70 to 72 degrees.

Mean winter temperature, 30 to 32 degrees.

There is considerable farming being carried on by irrigation, particularly in the San Juan, Las Animas and La Plata river valleys. In these irrigated basins beans, peas, tomatoes, squash, pumpkins, sweet corn, onions, cabbage, beets, turnips, corn, alfalfa, wheat, barley and oats are among the principal crops grown. While as a rule the Irish potato is not dependable in altitudes lower than 7,500 feet, in the valleys in San Juan County they are being grown quite successfully. Fruit growing, largely the growing of apples, has been one of the principal industries. Peaches, European and native plums, cherries, pears, and grapes are also well suited to the valley conditions.

On the whole, there is not enough rainfall for dry farming in the lower and central part of the county. Even on the higher mesas there is hardly enough to insure the successful growth of crops every year. The soil and climatic conditions in the prairie and mesa districts are favorable, however, for the growth of the same crops that are grown in the valleys, if enough moisture could be had. Again the question of sufficient moisture is to a large degree the limiting factor, and reduces the number of varieties of crops that can be grown. Beans are one of

the most drouth-resistant plants, and if any crop will grow with a limited amount of rainfall it is this. Up near the headwaters of the larger canyons or around the edge of the basin some dry farmers are doing well; but taken as a whole the county is better adapted to irrigated farming, with surrounding ranges for stock.

The grazing of livestock is an important business, and there are probably ten times as many sheep as cattle.

SAN MIGUEL COUNTY

STATION—BELL RANCH. APPROX. LATITUDE—35° 36'. LONGITUDE—104° 07'. ELEVATION—4,500 FEET.

Precipitation	Year	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual	Seasonal	Record, Yrs.
1899	0.65	0.79	0.85	2.69	4.55	1.52	2.81	0.11	0.11	2.54	0.20	1.20	1.80	11.57	17.25	17
1900	0.48	0.81	0.40	1.92	3.29	1.28	2.43	1.23	1.23	1.97	0.73	0.57	0.90	18.37	17.25	17
1901	0.48	0.81	0.40	1.92	3.29	1.28	2.43	1.23	1.23	1.97	0.73	0.57	0.90	18.37	17.25	17
1902	0.22	T.	0.30	0.18	1.44	1.72	1.24	2.65	0.86	0.86	0.73	0.57	0.90	18.37	17.25	17
1903	T.	1.45	0.30	0.18	1.44	1.72	1.24	2.65	0.86	0.86	0.73	0.57	0.90	18.37	17.25	17
1904	T.	0.10	0.07	0.28	1.02	4.04	2.68	2.81	1.04	0.69	T.	0.81	0.33	10.82	10.82	11
1905	0.50	0.15	2.07	4.39	1.90	0.43	3.06	1.44	1.51	0.06	5.34	0.78	0.28	16.34	14.87	11
1906	0.25	0.51	T.	2.66	0.46	0.62	3.16	0.34	2.77	1.19	1.99	0.53	0.33	12.19	12.19	11
1907	0.73	0.00	0.00	2.66	2.42	2.89	2.60	3.16	0.17	0.82	T.	0.50	0.50	13.49	10.01	11
1908	0.40	0.58	0.00	1.95	0.34	1.31	2.98	2.19	0.45	0.65	1.35	T.	0.50	15.75	13.60	11
1909	T.	0.16	0.12	0.34	2.44	1.64	4.01	0.99	3.20	1.93	0.51	0.15	0.15	11.20	8.32	11
1910	0.03	0.14	0.32	0.13	0.18	2.30	2.78	2.69	0.17	0.44	0.56	0.03	0.03	16.09	12.62	11
1911	0.13	1.37	T.	1.17	4.86	0.59	5.34	1.43	1.72	1.18	0.30	0.55	0.55	9.48	8.25	11
1912	T.	1.10	0.37	0.82	2.01	1.85	2.23	3.50	1.79	0.11	0.90	0.35	0.35	19.04	15.41	11
1913	0.31	0.13	0.20	3.80	0.52	4.00	1.41	1.91	1.47	0.23	1.30	2.13	1.32	14.03	12.20	11
1914	0.00	0.20	0.18	3.12	5.87	2.59	5.40	0.48	T.	2.68	0.90	0.81	2.13	17.32	13.12	11
1915	0.27	0.79	1.20	7.21	1.09	0.77	2.56	2.41	1.94	0.73	T.	0.17	0.17	19.14	17.26	11
1916	0.59	T.	0.32	1.59	0.05	0.56	1.70	5.68	0.58	1.12	0.09	0.32	0.32	12.71	10.36	11
1917	0.44	0.14	0.07	0.32	1.57	0.74	1.04	2.04	0.91	1.40	0.40	T.	0.77	6.62	6.62	11
Mean	0.28	0.52	0.40	1.96	1.95	1.80	2.85	2.19	1.43	0.82	0.79	0.50	0.50	15.49	12.18	11
Av. No. days with precipitation ..	1	2	2	5	6	5	9	7	5	3	2	2	2	49	37	17
Av. snowfall, in..	1.6	3.7	1.6	2.0	0	0	0	0	0	T.	0.7	2.4	3.7	15.7	12	12
Temperature—																
Mean	38.3	38.9	48.0	55.2	63.6	73.5	76.8	76.3	69.1	55.9	45.5	35.7	35.7	56.4	56.4	11
Mean Max.	56.8	55.8	66.2	72.5	80.3	89.6	91.2	91.3	85.1	72.3	62.6	51.8	51.8	73.0	73.0	11
Mean Min.	19.8	21.9	29.9	37.9	46.8	57.3	62.3	61.2	53.1	39.5	28.4	19.6	19.6	39.8	39.8	11
Highest	78	76	92	94	97	104	106	103	98	91	85	79	79	106	106	11
Lowest	-20	-18	-3	15	21	40	46	39	31	15	3	-10	-20	-20	-20	11
Prevailing wind...	W	W	W	W	SW	SW	SW	SW	SW	SW	SW	SW	SW	SW	SW	11
Days clear	19	16	17	16	14	14	12	16	17	21	20	19	20	202	90	17
Days partly cldy.	8	7	10	10	14	14	15	13	10	7	7	9	9	124	76	17
Days cloudy	4	5	4	4	3	2	3	2	2	3	3	3	3	39	39	17

Frost—Average date of first killing frost in autumn, Oct. 19.
Average date of last killing frost in spring, April 12.
Earliest date of killing frost in autumn, Sept. 28.
Latest date of killing frost in spring, May 7.
Average length of growing season, 182 days.

SAN MIGUEL COUNTY

STATION—LAS VEGAS. APPROX. LATITUDE—35° 36'. LONGITUDE—105° 14'. ELEVATION—6,384 FEET.

Precipitation . . .	Year	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual	Seasonal	Record, Yrs.
1850	4.23	...	0.02	2.82	0.00	0.00	0.12	2.12
1851	2.11	0.01	2.82	0.00	5.10	2.75	8.10	0.00	0.65	0.20	...	21.40	...
1852	2.40	0.35	1.30	0.85	...	8.15
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Mean	0.45	0.89	0.61	1.12	1.78	1.77	3.85	3.20	2.08	1.11	0.68	0.61	18.15	13.80	...

	Year	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual	Seasonal	Record, Yrs.
Av. No. days with precipitation...		3	4	3	5	6	8	12	11	6	4	2	3	66	48	23
Av. snowfall, in..		3.1	8.3	3.4	2.8	0.4	0	0	0	0.4	1.5	2.5	6.0	28.4		22
Temperature—																
Mean	33.4	34.1	41.3	49.3	57.1	65.4	68.9	67.6	60.6	49.7	40.5	40.5	32.2	50.0		29
Mean Max.	48.6	49.1	56.5	64.2	72.2	81.6	83.2	82.1	75.7	66.2	56.7	46.5	32.2	65.1		22
Mean Min.	19.3	20.1	26.9	33.5	41.5	49.2	54.1	52.9	45.5	34.6	25.0	17.1	17.1	25.0		22
Highest	72	71	82	83	95	99	99	97	93	85	78	70	70	99		22
Lowest	-20	-31	-11	6	21	32	40	42	20	3	-1	-15	-31	-31		22
Prevailing wind..	W	SW	W	W	W	SW	SW	SW	SW	SW	SW	SW	SW	SW		22
Days clear	24	19	22	21	20	20	16	17	21	23	23	23	23	248	115	22
Days partly cloudy.	5	6	6	6	8	8	12	12	7	5	5	5	5	85	63	22
Days cloudy	2	3	3	3	3	2	3	2	2	2	3	3	3	32	15	22
Mean Rel. Humid..	45	44	40	42	44	45	56	58	52	49	47	47	48	48		22

Frost—Average date of first killing frost in autumn, Oct. 5.

Average date of last killing frost in spring, May 5.

Earliest date of killing frost in autumn, Sept. 13.

Latest date of killing frost in spring, May 26.

Average length of growing season, 153 days.

Years recorded, 23.

*Computed from nearby stations.

This is one of the very large northeast counties, with great variation in altitude, ranging from about 4,500 feet in the southeast corner along the Canadian River to about 13,000 feet over the peaks of the main range in the northwest corner. Much of the county is rolling, somewhat broken mesa lands from 5,000 to 6,500 feet in altitude; and is well adapted to dry land culture. The normal precipitation of the western part ranges from 18 to 25 inches, according to altitude, decreasing somewhat over the lower lands to the eastward, but remaining well above 15 inches in the east and south and giving promise of extensive dry land culture and stock raising. The prevailing winds are from the southwest, and fresh, over the central and eastern mesa lands, with much clear, bright weather.

Average annual precipitation, 15.5 to 18 inches, to 25 inches in mountains.

Average seasonal precipitation, 12.2 to 14 inches, to 16 or 18 inches in mountains.

Average seasonal snowfall, 15 to 28 inches, to 50 and 75 inches in mountains.

Mean annual temperature, 50 to 56 degrees.

Mean summer temperature, 67 to 76 degrees.

Mean winter temperature, 33 to 38 degrees.

Mean relative humidity, 48 per cent.

The farming is done under irrigation and dry land methods. Wherever water for irrigation can be had, excellent crops of the different kinds of small grains, alfalfa, and vegetables can be grown. Because of the high altitude in most of the irrigated districts the number of varieties of the different crops is materially reduced. Most of the irrigation farming is being carried on in the small intermontane valleys, while a considerable area is irrigated along the Pecos and Gallinas Rivers in the western part of the county, as well as along the Mora and Canadian Rivers in the northern and eastern portions, respectively. Wheat, oats, barley, peas, cabbage, celery, turnips, beans, carrots, beets, onions, alfalfa, and some short season corn are the principal crops. Chile and tomatoes mature in the lower part of the valleys, and up to 6,300 feet. Under dry farming the New Mexico Pinto bean is probably the leading

cash crop at the present time, although corn, cane, some kafir, milo and feterita, as well as Sudan grass, are grown. Considerable wheat, both winter and spring, is successfully grown under dry farming. Very little fruit is grown in this county, although in the irrigated mountain valleys apples, pears, sour cherries, peaches, and native and European plums do fairly well. Melons, squash and pumpkins can also be raised under dry farming methods. The Irish potato is not dependable in the lower sections, though at 7,500 feet and above they are being grown successfully.

Cattle and sheep grazing are flourishing industries.

SANTA FE COUNTY

STATION—SANTA FE, APPROX. LATITUDE—35° 41'. LONGITUDE—105° 57'. ELEVATION—7,013 FEET.

Year	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual	Seasonal	Record, Yrs.
1890	....	1.26	1.00	0.65	.....	.....	0.38	0.92	0.91	0.38	1.65	0.01	.....	.....	.....
1891	....	0.69	0.50	.....	0.98	1.88	7.15	5.43	2.65	0.91	2.55	1.71	.....	.....	.....
1892	0.36	0.12	0.01	1.68	1.16	0.73	4.11	3.86	4.05	0.92	2.64	0.27	21.77	13.7	1893
1893	0.57	0.20	0.20	0.85	0.58	1.77	2.09	7.89	5.98	2.50	2.64	1.02	24.80	19.6	1894
1894	1.29	1.36	2.59	0.88	0.48	2.22	0.78	7.68	2.52	0.90	2.64	0.20	24.19	14.6	1895
1895	1.03	0.87	0.11	0.73	0.18	0.32	0.44	1.75	1.25	1.46	0.21	0.20	23.01	14.6	1896
1896	1.03	0.87	0.11	0.73	0.18	0.32	0.44	1.75	1.25	1.46	0.21	0.20	23.01	14.6	1897
1897	1.03	0.87	0.11	0.73	0.18	0.32	0.44	1.75	1.25	1.46	0.21	0.20	23.01	14.6	1898
1898	0.01	0.64	0.50	0.08	0	0.57	2.02	2.40	1.58	0.55	0.23	0.21	11.31	9.3	1899
1899	0.43	0.69	0.35	1.18	0	1.55	1.30	0.48	0.17	0.44	0	0.21	11.31	9.3	1900
1900	0.69	0.40	0.44	*0.77	0.78	3.50	1.53	3.08	0	0.44	0	0.09	8.83	9.8	1901
1901	0.69	0.40	0.44	*0.77	0.78	3.50	1.53	3.08	0	0.44	0	0.09	8.83	9.8	1902
1902	0.49	0.14	0	0.69	1.09	1.18	1.32	0.77	0.73	0.17	0.66	0.10	7.75	3.7	1903
1903	0.21	0.09	0	0.69	2.00	3.03	4.31	0.77	3.18	3.00	0.80	0.10	7.75	3.7	1904
1904	0.21	0.09	0	0.69	2.00	3.03	4.31	0.77	3.18	3.00	0.80	0.10	7.75	3.7	1905
1905	0.58	.....	5.20	1.16	1.08	0.73	1.02	5.70	3.32	0.30	3.21	0	25.15	12.5	1906
1906	.....	0.80	.....	.....	.....	.....	.....	.....	.....	.....	.....	0	.....	.....	1907
1907	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	0	.....	.....	1908
1908	1.04	0.07	0.60	0.94	1.10	0.66	3.50	0.55	0.62	0.18	0.62	0.02	5.02	6.2	1909
1909	1.71	1.01	0.88	0.70	1.56	1.55	0.55	1.45	0.20	0.10	1.10	0.12	5.02	6.2	1910
1910	0.05	0.35	0.65	0.42	0.64	0.51	4.00	3.32	3.67	1.19	0.17	0.11	13.92	10.6	1911
1911	0.49	0.20	0.51	0.38	0.85	1.56	0.91	2.85	3.89	0.27	0.10	0	13.12	9.9	1912
1912	0.34	0.20	0.12	0.14	0.45	2.44	2.32	2.58	0.91	0.21	0.01	0.04	9.87	9.0	1913
1913	0.55	0.40	0.15	0.26	0.32	1.78	1.32	2.78	2.07	0.67	0.38	0.26	19.93	10.3	1914
1914	1.39	1.60	1.51	1.71	0.70	0.44	2.02	1.72	1.55	2.47	0.58	0.26	19.93	10.3	1915
1915	0.67	0.72	1.37	0.33	0.83	1.32	5.43	1.72	1.55	0.96	1.50	0.07	18.97	14.3	1916
1916	0.61	0.40	0.64	0.46	0.33	1.32	5.43	1.72	0.85	0.75	0.97	0.08	18.97	14.3	1917
1917	0.18	1.08	0.14	1.83	0.32	0.13	3.54	2.12	0.95	1.32	0.70	0.33	13.15	9.0	1918
1918	0.31	0.89	0.73	0.22	1.01	3.18	3.50	5.15	1.08	0	3.15	0.08	13.15	9.0	1919
1919	0.77	0.23	0.15	0.48	0.27	0.51	2.24	2.30	1.07	1.38	1.34	0.07	13.15	9.0	1920
1920	0.28	0.94	0.15	0.05	0.73	0.55	2.69	1.79	1.13	0.75	0.28	0.66	9.89	6.3	1921
1921	0.38	0.22	0.57	0.98	0.21	0.98	4.72	6.28	0.91	4.19	1.11	0	32.35	15.8	1922
1922	0.47	0.96	0.23	0.26	1.06	1.36	1.17	4.69	0.62	T.	0.90	0.05	32.35	15.8	1923
1923	0.42	0.96	0.40	0.11	0.87	.....	.....	.....	.....	.....	.....	.....	11.37	0.6	1924
1924	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1925
1925	0.26	0.53	1.51	1.38	1.31	1.57	1.13	0.68	0.87	1.07	1.01	1.77	14.89	9.4	1926

Year	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual	Seasonal	Record, Yrs.
1886	0.70	0.85	0.47	1.32	0.21	0.95	1.54	4.15	4.02	1.06	0.30	0.32	15.30	12.70	
1887	0.10	0.85	0.66	0.74	1.32	0.60	2.24	1.57	2.41	1.50	0.56	0.32	12.38	9.29	
1888	0.44	0.30	0.61	1.42	0.70	0.16	1.98	2.08	0.38	1.40	1.20	0.66	12.38	6.22	
1889	0.84	0.53	0.80	0.44	0.15	0.62	1.32	1.32	0.67	0.37	0.45	0.26	17.39	4.54	
1890	0.42	0.88	0.69	2.08	0.41	0.12	2.46	1.49	0.89	0.92	1.31	1.60	12.38	7.05	
1891	1.32	1.91	0.59	0.17	3.21	1.26	0.84	1.02	4.69	0.12	0.13	1.53	16.79	1.19	
1892	1.34	1.22	1.51	0.69	0.06	1.05	2.12	0.81	2.00	1.32	0.36	0.70	11.52	15.17	
1893	0.26	0.76	0.76	0.01	0.88	0.02	3.01	5.12	3.00	0.22	0.29	0.49	14.44	12.44	
1894	0.22	1.11	0.41	1.48	1.29	0.77	2.71	1.95	0.87	1.05	T.	1.28	13.31	9.23	
1895	1.51	1.20	0.51	0.01	3.46	0.89	4.72	3.64	0.09	1.75	1.18	0.09	20.44	12.97	
1896	0.36	0.57	0.52	1.11	0.77	0.69	3.78	1.47	1.39	3.19	0.15	0.67	14.38	8.71	
1897	1.11	1.10	2.06	0.87	4.35	0.57	2.85	2.22	2.49	1.95	0.08	0.64	20.40	18.46	
1898	0.97	0.30	0.88	1.37	0.72	1.52	2.31	4.00	0.18	1.54	0.47	0.40	12.17	9.41	
1899	0.19	0.72	0.35	0.25	0.91	1.22	4.71	0.36	1.39	0.27	0.44	0.13	10.05	11.87	
1900	0.38	1.00	0.63	2.10	1.55	1.44	2.65	0.82	3.00	1.19	0.74	0.08	15.89	11.87	
1901	1.30	1.30	0.89	1.02	2.32	0.29	3.37	2.04	2.00	1.15	0.73	0.20	17.41	11.84	
1902	0.92	0.28	0.42	1.13	0.02	0.24	1.50	2.47	2.05	0.59	0.32	0.78	13.36	9.22	
1903	0.11	1.31	1.32	0.67	0.17	3.87	0.56	1.18	0.55	0.02	0	0.03	9.79	7.00	
1904	0.20	0.36	0.32	0.05	0.79	1.52	0.66	2.21	1.49	1.02	0.39	0.29	17.22	8.08	
1905	1.38	1.60	1.56	2.09	0.22	1.53	1.98	1.75	1.71	1.53	0.58	1.78	16.00	10.56	
1906	0.35	0.55	1.05	2.22	0.45	0.51	3.82	1.84	0.69	1.12	0.36	0.40	15.15	10.41	
1907	2.18	0.39	0.29	2.04	1.32	1.14	1.46	2.16	0.69	1.12	0.10	0.55	12.46	7.99	
1908	0.36	0.85	0.28	1.85	2.70	0.60	2.14	2.74	0.07	1.56	1.14	0.10	12.79	9.50	
1909	0.79	0.56	0.72	0.20	0.38	0.20	2.39	2.02	2.70	0.62	1.02	0.55	12.46	7.99	
1910	0.76	0.08	0.55	0.99	0.40	0.56	0.82	1.91	1.12	0.40	0.86	0.30	8.45	5.70	
1911	0.45	1.99	0.67	0.48	1.00	0.66	5.50	0.51	1.17	3.13	1.34	0.22	17.32	9.22	
1912	0.03	0.40	1.85	0.42	0.99	2.21	1.49	1.15	0.08	0.84	0.03	0.79	10.39	6.35	
1913	0.57	1.15	0.87	1.32	0.17	4.29	1.12	1.07	1.54	0.42	1.75	0.77	15.01	9.48	
1914	0.19	0.63	0.82	0.44	2.28	1.72	3.98	2.51	0.59	2.40	T.	1.70	17.46	11.52	
1915	1.95	0.77	0.70	4.82	0.83	0.16	4.37	1.02	1.62	0.04	0.61	0.97	17.68	13.42	
1916	3.02	0.20	1.36	2.50	0.07	0.38	2.77	1.67	1.45	2.76	0.06	0.17	16.1	8.84	
1917	0.56	0.23	0.27	0.15	1.80	0.06	0.45	1.37	0.64	1.09	0.26	0.02	5.63	2.16	
Mean	0.66	0.87	0.75	0.92	1.04	1.16	2.67	2.43	1.57	1.08	0.78	0.74	14.64	9.78	
Av. No. days with precipitation	6	7	6	6	7	6	14	13	8	5	5	6	39	54	
Av. snowfall, in.	5.7	6.8	4.5	3.2	0.3	0	0	0	T.	0.9	3.7	5.5	30.7	31	
Temperature—															
Mean	38.4	32.3	39.8	47.1	55.0	64.4	68.4	67.1	60.6	49.8	37.1	30.0	48.4	43	
Mean Max.	39.5	43.1	51.5	58.3	68.2	78.0	73.6	79.0	72.8	61.9	49.9	40.5	60.2	43	

SANTA FE COUNTY, (Continued)

	Year	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual	Seasonal	Record, Yrs.
Mean Min.	18.8	22.1	28.3	34.9	42.5	51.8	57.7	56.0	48.9	38.3	27.7	20.1	37.1	37.1	43	43
Highest	76	75	82	84	86	92	96	97	90	85	77	65	97	97	43	43
Lowest	-13	-11	0	11	20	33	43	40	21	13	-11	-13	-13	-13	43	43
Prevailing wind..	NE	NE	SW	SW	NE	SE	NE	NE	SW	NE	NE	NE	NE	NE		
Av. hourly veloc..	7	8	8	9	8	8	7	6	6	7	7	7	7	7		
Days clear	18	14	15	15	15	17	10	11	17	20	19	18	190	190	85	85
Days partly cl'dy.	9	9	12	12	13	11	17	17	10	8	8	9	132	132	80	80
Days cloudy	4	5	4	3	3	2	4	3	3	3	3	4	42	42	18	18
Mean Rel. Humid.	63	64	57	51	48	46	60	63	61	59	57	63	58	58		
6:00 a. m.																
Mean Rel. Humid.	52	49	35	28	26	25	38	39	37	40	47	54	40	40		
6:00 p. m.																
Sunshine percent- age	74	72	73	77	75	81	69	71	79	81	78	78	76	76		

Frost—Average date of first killing frost in autumn, Oct. 18.
 Average date of last killing frost in spring, April 25.
 Earliest date of killing frost in autumn, Sept. 26.
 Latest date of killing frost in spring, May 18.
 Average length of growing season, 176 days.
 Years recorded, 48.

*Computed from nearby stations.

This is a north central county, with much upland, rolling prairie and mountainous areas, traversed across its northwest corner by the Rio Grande. Large areas of the county, however, are upland grazing and dry farming districts. Altitudes vary from about 5,500 feet along the Rio Grande to 12,600 feet over the crest of the range in the northeast corner; and precipitation from 10 inches along the Rio Grande to 14.5 at 7,000 feet, and increasing to 18, 20 and 25 inches with altitude in the mountains. There is much bright, sunshiny, dry weather, with fairly long growing season; winds prevailing southwest to northeast.

Average annual precipitation, 14 to 20 inches.

Average seasonal precipitation, 10 to 15 inches.

Average seasonal snowfall, 15 to 30 inches, to 50 or more in mountains.

Mean annual temperature, 44 to 48 degrees.

Mean summer temperature, 62 to 67 degrees.

Mean winter temperature, 28 to 31 degrees.

Average hourly wind velocity, 7 miles.

Average sunshine, 76 per cent of the possible.

Average relative humidity, 49%.

Farming is done both under irrigation and dry farming methods. Most of the irrigation farming is to be found in the Rio Grande Valley, from Santa Cruz southward to San Ildefonso, and along the smaller streams leading down from the mountains. In the irrigated districts, particularly in the Rio Grande Valley, a great many varieties of crops can be raised, such as watermelons, tomatoes, chile, beans, garden peas, onions, squash, pumpkins, cabbage, beets, cauliflower, turnips, carrots, celery, wheat and corn. Alfalfa is the principal forage crop, although the sorghums can be grown for feed. There are also apples, peaches, sour cherries and European and native plums raised successfully. The late spring frosts occasionally injure the fruit crop. In the higher intermontane valleys, particularly in the Tesuque Valley, many of the cool season crops are successfully grown, and the apple is the principal fruit crop. The soil and climatic conditions are well suited to the growing of some of the orchard fruits, but great care should be taken in the selection of the proper varieties; particularly as regards their

blooming period. Irish potatoes are not dependable in the irrigated valleys, although some very satisfactory crops are frequently raised in the mountain canyons at high altitudes. Even around Santa Fe potatoes cannot be depended upon.

Dry farming is being done, mostly in the higher altitudes and in the central and southeastern part of the county. Beans, barley, oats and short season corn are among the better dry land crops. If more care were given to the proper conservation of the winter and spring moisture by fall and winter plowing of the land, better yields might be obtained in the growing of some of the dry land crops.

Many cattle and sheep are grazed on the uplands and mesas, and in the canyons. On the whole, there are more sheep raised than cattle.

SIERRA COUNTY

STATION—ELEPHANT BUTTE. APPROX. LAT.—33° 10'. LONGITUDE—107° 16'. ELEVATION—4,265 FT.

Precipitation	Year	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual	Seasonal	Record. Yrs.
1864	0.25	0.00	0.00	0.50	0.00	1.75	6.50	3.00	5.00	4.56	0.25	0.00	0.00	0.00	0.00	0.00
1865	0.25	0.00	0.00	0.37	0.00	0.74	0.00	0.00	1.53	1.70	0.40	0.76	0.00	0.00	0.00	0.00
1866	0.25	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1867	0.40	0.67	0.07	0.22	0.07	2.98	1.19	2.98	1.70	0.00	0.10	0.94	0.54	10.67	7.74	0.25
1868	0.40	0.00	0.10	0.00	0.21	0.22	4.11	3.67	0.95	0.95	0.00	0.00	0.54	11.05	9.66	0.25
1869	0.40	0.15	0.00	0.00	0.00	0.35	1.05	3.55	1.25	0.00	0.10	0.10	0.10	17.20	9.65	0.25
1870	0.40	0.15	0.00	0.00	0.00	0.45	1.35	3.45	4.60	1.10	0.00	0.00	0.00	12.20	10.70	0.25
1871	0.45	0.00	0.00	0.00	0.00	0.55	1.35	3.45	4.60	1.10	0.00	0.00	0.00	12.20	10.70	0.25
1872	0.45	0.00	0.12	0.40	0.20	0.55	1.35	3.45	4.60	1.10	0.00	0.00	0.00	12.20	10.70	0.25
1873	0.00	0.12	0.40	0.20	0.55	1.35	3.45	3.45	4.60	1.10	0.00	0.00	0.00	12.20	10.70	0.25
1874	5.01	0.09	0.60	2.20	0.16	0.10	1.10	1.10	3.55	3.90	0.85	0.30	0.05	15.57	11.07	0.25
1875	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	13.35	11.12	0.25
1876	5.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	13.35	11.12	0.25
1877	0.25	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1878	0.25	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1879	0.25	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1880	0.25	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1881	0.25	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1882	0.25	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1883	0.25	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1884	0.25	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1885	0.25	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1886	0.25	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1887	0.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1888	0.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1889	0.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1890	0.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1891	0.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1892	0.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1893	0.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1894	0.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1895	1.20	1.40	0.40	1.30	0.00	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25
1896	0.25	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1897	0.25	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1898	0.25	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1899	0.25	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1900	0.25	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1901	0.25	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1902	0.25	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1903	0.25	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1904	0.25	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1905	0.25	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1906	0.25	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1907	0.25	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1908	0.25	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1909	0.25	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1910	0.25	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1911	0.25	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1912	0.25	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1913	0.25	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1914	0.25	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1915	0.25	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1916	0.25	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1917	0.25	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average	0.77	0.33	0.43	0.49	0.53	0.53	0.51	0.51	0.50	0.46	0.32	0.32	0.32	0.32	0.32	0.32

	Year	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual	Seasonal	Record, Yrs.
Av. No. days with precipitation . . .		1	2	2	2	1	3	6	5	4	2	1	2	31	21	18
Av. snowfall, in. . .		1.1	0.7	0.9	0.1	0	0	0	0	0	T.	0.6	2.6	6.0		18
Temperature—																
Mean		40.1	43.7	50.1	57.3	66.1	75.3	78.0	77.0	70.3	59.2	47.2	37.8	58.5		
Mean Max.		55.3	58.6	66.0	73.8	82.3	91.7	92.0	90.9	84.6	74.9	63.4	52.1	72.6		18
Mean Min.		24.9	28.8	34.2	40.8	48.9	58.9	64.0	62.0	56.0	42.6	31.1	23.5	43.1		18
Highest		78	81	87	92	101	104	108	106	98	92	82	73	108		
Lowest		-2	-5	14	19	26	34	48	53	36	22	2	-3	-12		
Prevailing wind . .		SW	SW	SW	SW	SW	SW	SW	SW	SW	SW	SW	SW	SW		18
Days clear		19	18	18	20	21	16	11	12	16	22	20	20	213	96	18
Days partly cl'd'y. .		6	6	8	6	7	11	15	16	10	6	7	6	104	65	18
Days cloudy		6	4	5	4	3	3	5	3	4	3	3	3	48	52	18

Frost—Average date of first killing frost in autumn, Oct. 30.

Average date of last killing frost in spring, April 6.

Earliest date of killing frost in autumn, Oct. 16.

Latest date of killing frost in spring, May 4.

Average length of growing season, 206 days.

*Estimated from nearby stations.

This is a south central county traversed from north to south by the Rio Grande, through its central part. The stream, however, is largely within canyons that prevent its extensive use in irrigation, but which permit the great reservoir of the Elephant Butte Dam. However, there are about 10,000 acres of land under the project, part of which is under irrigation, and part awaiting development. Great variation in altitude and much broken and mountainous country are found within the county west of the Rio Grande. The Black Range of mountains forms its western boundary, and the altitudes increase from about 4,000 feet to 10,000 feet. Precipitation averages about 10 inches along the Rio Grande, but increases to 15 and possibly 18 inches in the mountains. Winds are prevailing southwest to west, and light, and there is much warm, clear, beautiful weather.

Average annual precipitation, 10 to 15 inches, to 18 inches in mountains.

Average seasonal precipitation, 8 to 12 inches.

Average seasonal snowfall, 6 to 9 inches, to 20 inches in mountains.

Mean annual temperature, 50 to 58 degrees.

Mean summer temperature, 70 to 77 degrees.

Mean winter temperature, 33 to 40 degrees.

Farming in this county is carried on for the most part in the little irrigated mountain valleys that extend from the Black Range eastward to the Rio Grande Valley. Approximately one-third of the total acreage of the tilled land is in the Rio Grande Valley.

The irrigated valleys grow excellent fruits, such as peaches, apples, European and native plums, cherries and grapes, while wheat, oats, corn, barley, beans, chile, melons, root crops and alfalfa form other important crops. English walnut trees have been producing good yields for several years in many parts of the county, Monticello possessing one walnut grove of about 100 trees.

Very little dry farming is done, and that principally in the higher altitudes in the Black Range, where small grains and beans may usually be matured, and potatoes grown successfully.

Thousands of head of cattle, horses, sheep and goats range over the prairies and mountains where there is usually ample rainfall to produce fine grass. The grazing of sheep and cattle has always been a prosperous industry in this county.

SOCORRO COUNTY (Continued)

Frost—Average date of first killing frost in autumn, Oct. 19.
Average date of last killing frost in spring, April 23.
Earliest date of killing frost in autumn, Sept. 22.
Latest date of killing frost in spring, May 27.
Average length of growing season, 180 days.

*Estimated from nearby stations.

SOCORRO COUNTY

STATION—ARAGON. APPROX. LATITUDE—33° 51'. LONGITUDE—108° 55'. ELEVATION—6,686 FEET.

	Year	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual	Seasonal	Record, Yrs
Precipitation	1905	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	1906	0.39	0.49	0.70	0.92	0.93	0.40	0.38	0.38	0.38	0.38	0.38	0.38	0.38	0.38	...
	1907	2.65	0.63	0.37	1.94	0.93	0.40	0.38	0.38	0.38	0.38	0.38	0.38	0.38	0.38	...
	1908	1.42	2.92	1.34	1.10	2.62	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	...
	1909	0.15	1.40	1.70	0.10	0	0	0	0	0	0	0	0	0	0	...
	1910	2.36	0.50	0.75	1.10	0.55	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	...
	1911	1.10	1.81	0.60	0.50	0	0	0	0	0	0	0	0	0	0	...
	1912	0	0.60	0.37	0.90	0	0	0	0	0	0	0	0	0	0	...
	1913	0.95	1.98	0.60	0	0.20	0.42	1.75	2.19	1.72	0.67	1.95	0.70	1.95	1.95	...
	1914	6.75	0.40	0.45	0	1.28	0.58	4.75	2.52	0.52	2.55	0.75	2.58	2.55	2.55	...
	1915	1.96	1.14	0.46	0.90	0.50	0.25	4.13	1.15	0.80	0.30	0.75	2.68	1.42	1.42	...
	1916	2.75	0	1.25	1.00	0	0	2.65	2.88	0.15	4.15	0	0.77	15.65	15.65	...
	1917	0.50	0.70	0.68	0.26	0.00	0	2.20	0.95	1.10	0.00	0.00	0.00	5.79	5.79	...
Average.....		1.21	1.06	0.99	0.83	0.55	0.52	2.54	2.36	1.16	1.43	0.88	1.37	14.61	14.61	7.77
Av. No. days with precipitation ...		4	4	3	2	1	2	8	8	4	3	3	3	45	45	10
Av. snowfall, in.		4.3	9.4	3.2	0.3	0	0	0	0	0	0	0	0	7.5	28.0	10
Temperature—																
Mean		30.7	34.0	39.4	45.8	53.4	63.6	67.9	68.8	62.0	50.2	40.8	29.5	48.6	48.6	10
Mean Max.		47.6	51.9	68.2	64.3	74.0	83.6	84.1	82.3	78.6	68.8	59.2	47.4	66.7	66.7	10
Mean Min.		16.0	17.2	22.0	28.0	34.4	43.7	51.1	51.1	45.4	31.2	21.8	12.2	31.1	31.1	10
Highest		67	70	85	87	94	104	105	97	90	84	80	67	105	105	10
Lowest		-20	-16	-6	11	19	27	38	36	28	10	5	-17	-20	-20	10
Prevailing wind..		SW	SW	SW	SW	SW	SW	SW	..	SW	SW	SW	SW	SW	SW	...
Days clear		17	15	16	18	19	18	6	7	15	22	21	18	192	192	82
Days partly cldy.		7	8	11	9	11	11	21	22	13	7	7	8	135	135	87
Days cloudy		7	5	4	3	1	1	4	2	2	3	2	5	38	38	13

Frost—Average date of first killing frost in autumn, Oct. 1.
 Average date of last killing frost in spring, May 19.
 Earliest date of killing frost in autumn, Sept. 22.
 Latest date of killing frost in spring, June 17.
 Average length of growing season, 135 days.

SOCORRO COUNTY

STATION—MAGDALENA. APPROX. LATITUDE—34° 08'. LONGITUDE—107° 17'. ELEVATION—6,557 FT.

Precipitation	Year	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual	Seasonal	Record. Yrs
1889	0.80	0.10	0.10	0.40	0.80	0.00	0.20	1.00	1.07	0.43	0.36	1.40	0.05	.....	.....	.....
1890	0.80	0.10	0.10	0.40	0.80	0.00	0.20	1.31	1.31	1.55	0.07	0.55	1.50	.....	.....	.....
1905	0.03	0.11	0.24	1.38	0.08	0.00	0.00	0.28	4.05	1.55	0.07	0.55	1.50	.....	.....	.....
1906	0.81	0.13	0.24	1.38	0.08	0.00	0.00	0.28	4.05	1.55	0.07	0.55	1.50	.....	.....	.....
1907	0.81	0.13	0.24	1.38	0.08	0.00	0.00	0.28	4.05	1.55	0.07	0.55	1.50	.....	.....	.....
1908	0.85	0.15	0.24	1.38	0.08	0.00	0.00	0.28	4.05	1.55	0.07	0.55	1.50	.....	.....	.....
1909	0.10	0.20	1.31	0.08	0.00	0.00	0.00	0.28	4.05	1.55	0.07	0.55	1.50	.....	.....	.....
1910	0.50	0.09	0.44	0.55	0.52	0.52	0.52	0.52	0.52	0.52	0.52	0.52	0.52	.....	.....	.....
1911	0.86	1.00	1.39	0.52	0.52	0.52	0.52	0.52	0.52	0.52	0.52	0.52	0.52	.....	.....	.....
1912	0.86	0.89	0.19	1.06	0.43	2.19	2.19	3.55	3.15	3.15	0.55	0.55	0.55	.....	.....	.....
1913	0.56	0.42	0.21	0.40	0.10	1.82	0.85	3.32	3.15	3.15	0.55	0.55	0.55	.....	.....	.....
1914	0.05	0.25	0.55	0.70	1.15	0.90	1.70	2.25	0.77	3.30	0.40	1.82	2.88	.....	.....	.....
1915	1.59	0.10	1.25	3.36	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	.....	.....	.....
Average.....	0.54	0.91	0.56	1.60	0.29	1.05	3.52	3.04	1.38	0.98	0.78	0.83	15.18	10.88	.....	.....
Av. No. days with precipitation	3	3	3	4	2	5	10	11	7	4	3	3	58	39	11	11
Av. snowfall, in..	2.5	7.6	3.2	2.0	0	0	0	0	0	0	1.2	2.5	8.4	27.4	.....	.....
Temperature—																
Mean	36.2	37.3	44.2	50.5	59.2	68.8	70.2	67.8	62.2	51.8	41.7	32.4	51.8	.....	.....	.....
Mean Max.	49.2	51.2	59.1	65.9	76.1	85.0	84.4	81.2	76.8	66.7	56.6	45.4	66.5	.....	.....	.....
Mean Min.	23.2	23.4	29.3	35.2	42.2	52.5	56.0	54.4	47.6	36.9	26.8	19.5	37.2	.....	.....	.....
Highest	70	67	84	89	91	102	102	95	90	86	78	68	102	.....	.....	.....
Lowest	-4	-3	0	14	20	35	45	47	25	11	-4	-21	-21	.....	.....	.....
Prevailing wind..	W	W	W	W	W	W	W	W	W	W	W	W	W	W	W	W
Days clear	19	14	17	17	19	17	8	7	16	20	19	18	191	84	11	11
Days partly c'd'y.	9	10	11	10	11	11	20	22	12	9	8	10	143	86	11	11
Days cloudy	3	4	3	3	1	2	3	2	2	2	3	3	31	31	13	13

Frost—Average date of first killing frost in autumn, Oct. 13.

Average date of last killing frost in spring, May 1.

Earliest date of killing frost in autumn, Sept. 26.

Latest date of killing frost in spring, May 29.

Average length of growing season, 165 days.

Years recorded, 16.

SOCORRO COUNTY (Continued)

	Year	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual	Seasonal	Record. Yrs.
Av. snowfall, in.		1.7	2.1	1.2	0.6	0	0	0	0	0	0.7	0.7	2.3	9.3		18
Temperature—																
Mean		37.9	42.1	49.7	57.6	65.8	75.4	77.4	75.9	69.1	58.0	45.7	36.2	57.6		25
Mean Max.		52.7	58.1	65.7	74.4	83.8	93.4	92.3	91.2	85.6	74.4	62.9	51.4	73.8		21
Mean Min.		23.6	26.6	32.7	40.3	47.4	56.9	61.8	59.8	51.7	39.4	28.9	21.2	40.9		21
Highest		76	80	91	94	102	108	108	106	99	95	86	81	108		21
Lowest		-13	1	9	15	28	40	42	45	27	16	6	-16	-16		21
Prevailing wind..		N	N	S	S	S	S	S	S	SE	N	N	N	S		20
Days clear		24	21	24	23	25	24	17	17	20	23	25	22	265	126	
Days partly cldy.		4	4	5	6	4	5	12	11	7	4	3	5	89	44	
Days cloudy		3	3	3	3	3	1	3	3	3	4	3	4	31	13	

Frost—Average date of first killing frost in autumn, Oct. 19.

Average date of last killing frost in spring, April 4.

Earliest date of killing frost in autumn, Sept. 27.

Latest date of killing frost in spring, May 1.

Average length of growing season, 198 days.

Years recorded, 22.

This is a west central county, the largest in the state, with a great diversity of altitude, contour and climate. Its eastern portion is traversed from north to south by the Rio Grande, and several thousand acres are under irrigation; but there is much upland and mountain country, both east and west, with western ranges exceeding 10,000 feet and many miles of plateau and broken country from 6,000 to 7,000 feet in altitude. The rainfall in the valley of the Rio Grande averages about 10 inches annually, but increases with altitude to 15, 18 and probably 20 inches. The valley is hot, dry and fertile, the uplands cooler, more moist, and almost equally fertile, though largely given to grazing. Winds are prevailing south to west and fresh over the upland districts. Much clear weather occurs.

Average annual precipitation, 10 to 15 inches, to 18 or 20 inches in mountains.

Annual seasonal precipitation, 7 to 10 inches, to 15 inches in mountains.

Average seasonal snowfall, 10 to 20 inches, to 30 and 50 inches in mountains.

Mean annual temperature, 52 to 58 degrees.

Mean summer temperature, 68 to 76 degrees.

Mean winter temperature, 33 to 39 degrees.

In this county the agriculture is largely being carried on in the Rio Grande Valley, where all of the temperate zone fruits, with the exception of apricots, almonds, sweet cherries and Japanese plums, are considered successful. Alfalfa, wheat, oats, barley, corn, feed sorghums, beans, field and garden peas, chile, melons, cabbage, beets, and other root crops, are being successfully raised. In the western part, in among the mountains and in the little valleys, where water for irrigation may be had, some farming is also being carried on; and the crops that are raised in the lower Rio Grande basin can also be raised in these little intermontane districts, with the exception of some of the warm and long season crops, such as chile, tomatoes, melons, sorghum and long season corn. The altitude and moisture are limiting factors as regards the growing of a large number of crops. In the high altitude and mountainous districts, where there is enough rainfall for successful dry farm-

ing, beans, short season corn, wheat, watermelons, barley, oats, and pumpkins are raised. Potatoes grow more successfully from 7,500 feet up. It is reported that two years ago beans were raised at the rate of 1,700 pounds to the acre. Considerable of the higher country east as well as west of the Rio Grande is capable of being farmed under dry farming conditions, as the rainfall is greater there than in the valley.

The mesas, plateaus and mountains afford excellent pasture for grazing sheep, cattle and goats. This is one of the banner stock raising counties of the state, having almost twice as many sheep as any other county, and being exceeded in the number of cattle by only one other county.

TAOS COUNTY

STATION—TAOS. APPROX. LATITUDE—36° 30'. LONGITUDE—105° 35'. ELEVATION—6,983 FEET.

Precipitation	Year	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual	Seasonal	Record, Yrs	
1889	1889	0.90	0.10	0.24	1.08	0.17	1.21	2.70	1.64	1.22	0.78	0.54	0.52	11.10	8.02	18	
1890	1890	0.90	0.62	0.83	1.98	0	0.29	2.55	2.64	0.88	0.79	0.80	1.39	13.73	8.34	18	
1891	1891	0.39	1.34	1.01	0	2.85	1.34	1.17	0.40	3.55	0	0	2.26	14.31	9.21	18	
1892	1892	0.96	1.35	1.69	0.57	0.75	0.84	1.60	T.	0.85	0.27	0.65	9.53	3.76	3.76	18	
1893	1893	0.97	1.32	1.10	T.	1.62	T.	0.70	2.29	2.09	0	T.	0.17	10.26	6.70	18	
1894	1894	0.68	0.79	0.91	0.87	1.39	0.15	1.17	2.11	1.87	0.93	.....	.....	7.96	7.96	18	
1895	1895	.....	.....	0.56	0.21	3.60	1.18	3.84	2.20	0.26	1.31	1.40	1.60	.....	11.29	11.29	18
1896	1896	0.52	0.39	0.48	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
1901	1901	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	0.88	0.40	.....	.....	.....	.....
1902	1902	0.50	0.15	0.97	T.	1.90	T.	0.53	2.57	0.98	0.30	2.00	0.95	10.75	5.38	.....	.....
1903	1903	0.25	1.92	1.40	1.58	T.	3.56	0.37	2.26	0.30	T.	0	0	11.75	8.07	.....	.....
1904	1904	0.40	0.90	1.28	0.15	0.25	2.01	0.77	1.18	3.06	1.26	0.21	0.30	11.77	7.52	.....	.....
1905	1905	1.16	2.09	0.64	1.80	0.47	1.27	2.94	0.68	0.97	1.35	1.72	T.	15.09	8.13	.....	.....
1906	1906	0.26	0.75	1.66	1.18	0.82	0.76	3.05	1.25	1.25	0.89	0.91	0.74	14.52	8.31	.....	.....
1907	1907	1.42	0.23	0.63	1.04	1.80	0.47	1.02	5.21	0.55	1.24	0.03	0.11	13.74	10.09	.....	.....
1908	1908	2.11	0.97	0.48	2.87	1.33	T.	2.75	2.23	0.92	0.46	0.69	0.40	15.31	10.30	.....	.....
1909	1909	1.06	1.04	0.46	1.55	.....	.....	1.81	0.90	1.40	0.71	0.69	.....	.....	.....	.....	.....
1910	1910	1.07	1.15	0.27	0.88	0.46	0.37	1.24	1.80	0.26	0.31	0.42	0.71	8.94	5.01	.....	.....
1911	1911	0.94	2.00	1.41	0.67	1.28	1.14	2.67	1.82	2.40	3.24	0.81	0.40	18.78	9.98	.....	.....
1912	1912	0.06	0.29	3.00	0.93	0.77	1.97	0.90	0.95	0.38	0.28	0.20	0.04	9.77	5.90	.....	.....
1913	1913	0.31	1.00	0.72	1.16	0.33	1.52	1.02	1.34	1.88	0.26	1.13	1.05	11.72	7.25	.....	.....
1914	1914	0.30	0.47	0.44	1.01	2.17	1.04	1.92	1.23	0.56	1.50	0	1.06	11.70	7.23	.....	.....
1915	1915	0.51	0.86	0.69	3.77	2.75	0.51	1.16	1.31	1.20	0.01	0.38	0.32	13.46	10.09	.....	.....
1916	1916	3.29	0.23	0.85	2.08	0.83	0.24	0.90	1.15	0.54	3.26	T.	0.60	14.07	5.74	.....	.....
1917	1917	0.86	0.28	0.55	1.06	2.33	0.15	2.14	0.53	0.34	0.26	0.21	T.	8.71	6.55	.....	.....
Average		0.86	0.88	0.92	1.14	1.36	0.96	1.64	1.68	1.15	0.86	0.58	0.61	12.64	7.93	.....	.....
Av. No. days with precipitation ...		5	4	5	6	6	5	9	8	5	3	3	4	63	40	.....	.....
Av. snowfall, in..		5.7	7.7	3.2	1.9	0.6	0	0	0	T.	1.9	2.1	5.8	28.9	28.9	.....	.....
Temperature—																.....	.....
Mean		27.3	31.8	40.0	47.9	55.2	62.8	68.1	67.0	60.2	49.3	38.4	26.3	47.9	47.9	.....	.....
Mean Max.		41.6	46.2	55.0	64.4	72.3	81.8	85.1	83.9	77.8	66.8	55.0	41.6	64.2	64.2	.....	.....
Mean Min.		13.0	17.4	25.0	31.4	38.2	43.7	51.1	50.2	42.6	31.8	21.9	11.0	31.4	31.4	.....	.....
Highest		60	67	78	82	92	101	101	99	95	89	77	67	101	101	.....	.....
Lowest		-20	-15	-5	-10	-21	-30	-34	-37	-25	-11	-5	-23	-23	-23	.....	.....

TAOS COUNTY (Continued)

	Year	Jan.		Feb.		March		April		May		June		July		Aug.		Sept.		Oct.		Nov.		Dec.		Annual		Seasonal	Record, Yrs
		SW	SW	SW	SW	SW	SW	SW	SW	SW	SW	SW	SW	SW	SW	SW	SW	SW	SW	SW	SW	SW	SW	SW	SW	SW	SW		
Prevailing wind..		19	15	17	17	17	18	19	12	15	19	19	23	21	19	214	100												
Days clear		8	9	11	10	10	10	10	17	14	10	10	6	7	9	131	71												
Days partly cl'd'y.		4	4	3	3	3	3	3	2	2	2	1	2	2	3	30	12												
Days cloudy																													

Frost—Average date of first killing frost in autumn, Sept. 30.
 Average date of last killing frost in spring, May 13.
 Earliest date of killing frost in autumn, Sept. 14.
 Latest date of killing frost in spring, June 11.
 Average length of growing season, 133 days.

This is a northern border county, traversed from north to south by the Rio Grande, which passes through a deep canyon and is not available for irrigation. Very little of the county is below 6,000 feet in altitude, and much of its eastern and western borders exceeds 8,000 feet, rising above 13,000 feet at the crest of the range. The precipitation on the lower levels is light, averaging about 12 to 16 inches, but rising rapidly in the foothills and mountains to 18, 20 and possibly 25 to 28 inches, with heavy snow and long, severe winters. Winds are prevailing southwesterly and light to fresh, while much clear weather occurs, with rather short growing season, especially over the plateau and foot-hill districts.

Average annual precipitation, 12.6 to 16 inches, to 18, 20 and 25 inches in mountains.

Average seasonal precipitation, 8 to 12 inches, to 15 and 20 inches in mountains.

Average seasonal snowfall, 28 to 40 inches, up to 100 inches in mountains.

Mean annual temperature, 44 to 48 degrees.

Mean summer temperature, 62 to 66 degrees.

Mean winter temperature, 26 to 28 degrees.

Practically all of the irrigation farming is done on the west side of the Sangre de Cristo Range and east of the Rio Grande Gorge, comprising an area known as the Taos Basin or Taos Valley, watered by the Red, Taos, Hondo and Cabresto Rivers. In the past this was known as the "Granary of New Mexico," and wheat has, for many years, been the principal crop raised. The so-called San Luis Valley pea, or Colorado stock pea, originated in the Taos Valley, where it is grown very extensively. At present wheat, field peas, barley, oats, some corn, beans, cabbage, carrots, and turnips are grown successfully. On account of the high altitude of the valley, tomatoes, chile and other long, warm season crops are not very successfully raised. Alfalfa and Vega grass are the principal forage crops. The Irish potato does not seem to be a success in the valley, but on the slope of the Sangre de Cristo Range, where the rainfall is quite heavy, some good Irish potatoes are raised.

Some dry farming is done, west of the Rio Grande Gorge; but the rainfall in many cases, particularly in the valleys, is not sufficient for successful dry farming, although the New Mexico Pinto bean can be raised almost every year under dry farming methods. In the higher altitudes and mountain districts, where the seasonal precipitation is greater, the chances are better for successfully growing some of the short season crops under dry farming conditions. Apples, sour cherries, native plums and European plums are the principal fruits grown.

This is an important stock raising county. Sheep, goats and cattle are grazed on the mesas and plateaus and in the mountains. The raising of hogs is becoming an important industry, also.

TORRANCE COUNTY

STATION—ESTANCIA. APPROX. LATITUDE—34° 45'. LONGITUDE—106° 04'. ELEVATION—6,140 FEET.

	Year	Jan.	Feb.	Mar.	Apr.	May.	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual	Seasonal	Record, Yrs.
Precipitation . . .	1889	..	..	..	..	..	..	8.34	0.16	0.52	1.68	0.82	0.74	..	..	..
	1890	0.14	0.56	0.75	1.57	0.09	0.20	4.53	1.65	1.49	0.15	0.83	0.22	..	..	..
	1891	0.74	0.81	1.42	0	2.24	0.50	1.42	0.85	1.73	0	0.15	1.15	..	..	..
	1892	1.15	0.13	0.81	..	..	..	..	..	..	..	..	..	..	..	6.85
	1893	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	1894	..	..	..	..	..	..	..	..	..	..	..	0.10	..	..	..
	1895	1.09	0.84	0.38	2.69	0.01	1.13	..	1.07	1.16	..	..	0.75	..	..	..
	1896	0.08	0.33	0.69	1.37	0.03	0	4.41	1.73	1.49	2.17	1.32	1.13	..	..	..
	1897	0.40	0.21	0.00	1.97	1.22	0.90	0.56	4.71	0	1.94	2.11	0.89	14.91	9.36	9.03
	1898	0.20	*T.	0.13	3.54	0.78	0	4.46	..	..	..	..	..	..	..	..
	1899	..	..	..	..	..	..	0.99	1.30	1.35	1.36	0.10	0.78	..	..	..
	1900	0.21	0.87	0.14	0.24	..	0.04	0.20	0.44	2.59	1.96	2.04	0.54	9.44	5.47	..
	1901	1.57	2.00	0.56	0.87	0.33	1.01	7.79	1.88	0.55	1.54	0.14	0.89	19.13	12.43	..
	1902	0.15	1.40	0.58	..	..	..	..	..	..	0.16	0.06	0.35	..	..	..
	1903	1.05	0.61	0.45	1.03	T.	1.07	1.21	0.73	1.49	0.12	1.52	1.01	10.29	5.52	..
	1904	0.03	0.38	0.12	0.59	1.05	1.39	3.15	2.37	1.16	2.63	0.22	1.59	15.13	10.21	..
	1905	0.83	1.28	1.21	1.91	0.89	0.28	4.14	1.47	1.59	0.16	0.48	0.89	15.23	10.28	..
	1906	2.25	0.17	2.45	2.24	T.	0	2.22	2.64	0.56	4.55	0.25	0.22	17.35	7.46	..
	1907	0.39	0.79	0.21	0.21	0.88	0.24	0.31	1.37	2.37	0.09	0.48	0.09	7.73	5.88	..
	1908	0.69	0.70	0.66	1.40	0.92	0.57	3.18	1.74	1.22	1.32	0.61	0.69	13.40	8.73	..
Average																
Av. No. days with precipitation . . .		3	3	3	5	2	3	8	9	5	4	2	4	51	32	11
Av. snowfall, in. . .		5.0	6.9	3.8	3.1	0.2	0	0	0	0.1	1.2	2.0	6.8	30.1	20.1	11
Temperature—																
Mean	21.4	34.5	42.6	49.4	56.2	65.8	69.2	69.4	61.2	49.5	39.4	29.6	49.8			
Mean Max.	46.1	50.1	59.9	60.8	75.7	85.5	88.0	87.3	80.6	68.5	58.6	45.2	67.2			11
Mean Min.	16.9	15.0	25.3	31.1	37.4	45.6	51.1	52.0	42.5	30.5	19.8	12.1	32.0			11
Highest	64	69	77	82	87	94	92	92	85	77	77	69	94			11
Lowest	-30	-21	0	6	21	31	35	36	27	10	-5	-33	-33			11
Prevailing wind..	NW	W	E	W	W	W	SW	E	E	E	E	E	NW	E		11
Days clear	18	17	18	17	20	19	13	14	17	20	21	18	212	212	100	11
Days partly cldy..	9	7	11	10	10	9	16	14	11	8	6	9	120	70	11	11
Days cloudy	4	4	2	3	1	2	2	2	3	2	3	3	33	33	13	11

TORRANCE COUNTY (Continued)

Frost—Average date of first killing frost in autumn, Oct. 4.
 Average date of last killing frost in spring, May 9.
 Earliest date of killing frost in autumn, Sept. 12.
 Latest date of killing frost in spring, June 13.
 Average length of growing season, 146 days.
 Years recorded, 11.

*Computed from nearby stations.

TORRANCE COUNTY

STATION—MOUNTAINAIR. APPROX. LATITUDE—34° 31'. LONGITUDE—106° 20'. ELEVATION—6,547 FEET.

	Year	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual	Seasonal	Record, Yrs.
Precipitation	1902	...	...	...	...	1.60	0.76	0.19	4.93	1.30	0.37	1.76	2.77	...	...	...
	1903	0.60	5.29	0.46	0.43	0.06	2.96	0.52	1.71	0.36	...	...	0.52	13.01	6.04	...
	1904	0.10	...	0.14	0.14	0.57	2.38	1.11	2.45	2.66	0.98	0.03	0.34	10.99	9.31	...
	1905	0.72	1.64	1.09	3.66	0.32	1.11	2.47	1.60	3.12	0.31	3.74	3.04	22.82	12.28	...
	1906	0.40	1.11	0.28	...	...	...	...	...	1.43	1.96	1.49	2.84	...	...	...
	1907	1.38	0.21	0.06	2.68	4.24	0.12	...	4.88	1.99	3.45	2.22	0.34	22.86	15.10	...
	1908	0.69	0.51	0.36	3.00	0.51	0.66	4.78	2.50	0.78	0.67	1.73	0.37	16.57	12.33	...
	1909	0.18	0.80	4.22	0.22	0.18	0.06	2.31	2.53	1.90	1.61	T.	1.79	16.50	7.20	...
	1910	0.46	1.24	0.27	1.32	0.25	0.86	2.24	3.28	0.46	0.87	0.86	0.45	12.56	8.41	...
	1911	1.62	2.73	0.81	1.44	1.14	0.34	5.07	1.10	3.28	2.00	T.	0.65	20.49	12.37	...
	1912	T.	1.58	0.77	0.24	0.32	2.30	4.15	1.62	1.78	0.64	0.30	1.22	14.72	10.41	...
	1913	1.15	0.48	0.59	0.77	0.02	0.79	1.33	4.30	2.09	T.	...	...	...	9.30	...
	1914	...	...	0.03	2.10	2.35	0.75	4.87	2.11	0.93	2.24	0	3.80	19.48	12.11	...
	1915	1.13	1.01	2.28	2.26	0	0	4.79	1.30	...	...	...	...	...	...	...
	1916	0.63	1.74	0.27	0.53	0.97	T.	3.01	2.37	1.28	T.	T.	0.00	10.80	8.16	...
	1917	0.94	1.26	0.88	1.45	0.90	0.94	2.72	2.62	1.67	1.08	0.93	1.34	16.43	10.30	...
Average.....		4	4	5	4	2	4	8	11	6	4	2	4	58	31	12
Av. No. days with precipitation ...		4.5	11.8	6.3	3.0	0.7	0	0	0	0.2	1.5	4.9	12.8	45.7	14	14
Av. snowfall, in.																
Temperature—																
Mean		33.0	35.2	43.2	49.4	57.5	66.4	69.6	68.6	62.2	50.2	40.0	30.5	51.0	14	14
Mean Max.		46.5	48.9	58.5	65.9	75.2	84.2	86.9	84.2	78.0	66.7	54.5	43.6	66.3	14	14
Mean Min.		20.5	21.5	27.9	32.9	39.9	48.6	53.4	53.1	46.4	33.7	25.4	17.4	35.7	14	14
Highest		68	85	83	87	92	99	99	97	92	86	75	68	99	14	14
Lowest		-21	-12	0	13	23	32	40	40	24	7	-2	-14	-21	14	14
Prevailing wind..		SW	SW	SW	SW	SW	SW	SW	SW	SW	SW	SW	SW	SW	SW	12
Days clear		21	17	19	20	20	18	17	18	20	22	21	20	232	113	113
Days partly cldy.		7	6	8	6	8	10	10	10	7	6	5	6	39	15	15
Days cloudy		3	5	4	4	3	2	4	3	3	3	4	5	43	19	19

Frost—Average date of first killing frost in autumn, Oct. 3.

Average date of last killing frost in spring, May 7.

Earliest date of killing frost in autumn, Sept. 8.

Latest date of killing frost in spring, May 29.

Average length of growing season, 149 days.

This is a central county, with altitudes ranging from 5,800 to about 12,000 feet, and much of the county above 6,000 feet. The central part of the county is occupied by the Estancia Valley, and upland surrounded by great stretches of rolling mesa, foothills and mountains. The lowest portions of the valley have an annual precipitation of about 13 inches, which increases over the mesas to 14, 16 and possibly 18 inches, and to 25 or 30 inches in the highest mountains. Winds are prevailing south to southwest and fresh in the open valley and over the mesas. Much clear weather occurs.

Average annual precipitation, 13 to 16 inches, and to 25 or more in mountains.

Average seasonal precipitation, 9 to 12 inches.

Average seasonal snowfall, 30 to 45 inches, to 75 and more in mountains.

Mean annual temperature, 50 degrees.

Mean summer temperature, 68 degrees.

Mean winter temperature, 33 degrees.

Practically all of the farming done in this county is under dry land methods; and the larger per cent of it is done in the Estancia Valley, particularly between the Manzano Mountains on the west and the New Mexico Central railway on the east. The New Mexico Pinto bean is the principal commercial crop raised in the county. Large areas are planted to this bean, and the yield depends upon the amount of rainfall; but it will run from two to five hundred pounds on an average, with occasional large yields of one thousand to fifteen hundred pounds to the acre. Wheat, short season corn, some Sudan grass, some of the feed sorghums, and cowpeas may be grown in a small way. Potatoes are also grown in the county; and the best crops are raised up in the Manzano Mountains at the higher altitudes. If the land had sufficient water for irrigation it could raise immense crops of a large variety of plants; but because of the high altitude and the necessity of depending on the natural rainfall, the number and variety of crops is comparatively small. In the small irrigated valleys next to the Manzano Mountains a larger variety of crops is being grown, such as beans, peas, carrots, turnips, cabbage, celery, wheat, oats and barley. There is very lit-

the fruit raised in this county, on account of the small amount of irrigated land, although the county claims to have the oldest apple orchard in the state, which is located near the town of Manzano, and is irrigated from a spring. These apple trees are claimed to be something like 200 years old. A number of small orchards, principally apples, have been planted at the foot of the mountains, where water may be had for irrigation. A few orchards have also been started under dry farming conditions, and fairly good results have been obtained. However, the dry farmers have specialized in the growing of the New Mexico Pinto bean, which is a great cash crop in this county; having produced approximately seven million pounds in 1916 and four million five hundred thousand pounds in 1917, although these have been two of the driest years that the weather bureau office has on record.

Many of the high mesas and mountain districts afford excellent grazing for both cattle and sheep. Dry farming and stock raising are the principal industries.

UNION COUNTY

STATION—ALBERT. APPROX. LATITUDE—35° 58'. LONGITUDE—103° 50'. ELEVATION—4,700 FEET.

Precipitation . . .	Year	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual	Seasonal	Record, Yrs.
1890	0.46	0.17	0.17	0.22	0.11	0.43	1.22	2.23	3.06	0.29	0.43	0.28	0.74	19.03	11.01	1893
1891	0.28	0.15	0.15	0.20	0.11	0.29	4.07	0.85	0.96	2.66	0.16	0.24	2.98	10.44	14.04	1894
1892	0.00	0.20	0.15	0.07	0.13	0.37	1.84	0.32	0.96	0.32	1.96	0.34	0.89	10.44	14.04	1895
1893	0.00	0.65	0.00	0.52	0.41	3.57	2.35	1.58	2.91	3.71	0.16	0.00	0.91	12.53	12.01	1896
1894	0.00	0.08	0.10	0.08	0.37	3.75	2.35	1.51	2.24	0.40	1.19	0.00	0.00	15.33	14.68	1897
1895	0.22	0.93	0.08	0.10	0.37	3.75	2.35	1.51	2.24	0.40	1.19	0.00	0.00	23.69	19.99	1898
1896	0.35	0.11	0.08	0.10	0.37	3.75	2.35	1.51	2.24	0.40	1.19	0.00	0.00	18.18	10.59	1899
1897	0.45	0.65	0.55	0.32	3.00	4.21	1.56	2.66	0.51	4.40	3.37	0.43	3.25	23.69	19.99	1900
1898	0.22	0.00	0.07	1.04	1.30	2.35	4.52	1.58	2.66	0.51	4.40	0.60	2.18	18.18	10.59	1901
1899	0.05	0.72	0.05	0.90	0.69	0.72	3.56	0.38	2.66	0.51	4.40	0.60	2.18	18.18	10.59	1902
1900	0.84	0.37	0.45	0.98	4.15	1.83	2.32	0.38	2.66	0.51	4.40	0.60	2.18	18.18	10.59	1903
1901	0.23	0.44	0.25	2.84	5.14	0.79	3.21	0.38	2.66	0.51	4.40	0.60	2.18	18.18	10.59	1904
1902	0.08	0.00	0.24	0.58	3.76	0.47	1.19	0.38	2.66	0.51	4.40	0.60	2.18	18.18	10.59	1905
1903	T.	1.58	T.	0.81	0.37	5.90	1.39	0.38	2.66	0.51	4.40	0.60	2.18	18.18	10.59	1906
1904	T.	1.58	T.	0.81	0.37	5.90	1.39	0.38	2.66	0.51	4.40	0.60	2.18	18.18	10.59	1907
1905	0.70	1.12	2.30	4.23	3.33	0.81	4.16	0.38	2.66	0.51	4.40	0.60	2.18	18.18	10.59	1908
1906	0.20	0.11	0.08	1.55	0.41	1.00	4.56	0.88	0.88	0.88	0.88	0.88	0.88	13.61	11.16	1909
1907	0.31	0.04	0.00	2.12	1.30	1.50	2.07	0.88	0.88	0.88	0.88	0.88	0.88	13.61	11.16	1910
1908	0.13	1.45	0.00	2.56	0.32	0.40	0.88	0.88	0.88	0.88	0.88	0.88	0.88	13.61	11.16	1911
1909	0.00	0.00	1.44	0.75	2.30	1.51	0.64	0.88	0.88	0.88	0.88	0.88	0.88	13.61	11.16	1912
1910	T.	0.36	0.00	0.22	0.20	2.01	1.71	0.64	0.88	0.88	0.88	0.88	0.88	13.61	11.16	1913
1911	0.20	0.85	0.00	0.32	0.30	0.95	2.49	1.71	0.64	0.88	0.88	0.88	0.88	13.61	11.16	1914
1912	0.00	0.95	0.38	1.36	3.65	3.53	0.32	0.84	1.49	T.	0.00	0.08	0.80	13.10	10.69	1915
1913	0.22	0.48	0.03	2.84	0.53	6.57	0.73	1.11	2.33	0.00	0.74	3.63	19.21	14.11	11.61	1916
1914	0.00	T.	T.	2.68	4.75	1.97	4.74	0.88	0.88	0.88	0.88	0.88	0.88	13.10	10.69	1917
1915	0.70	1.03	0.92	5.67	2.16	0.03	2.46	3.77	0.87	0.74	T.	0.18	0.18	18.53	14.96	1918
1916	0.28	0.00	0.14	0.34	T.	0.12	0.56	1.06	0.71	1.82	0.09	0.43	6.15	3.39	2.22	1919
1917	0.85	0.41	0.37	0.62	2.88	1.01	1.80	3.78	0.70	0.41	0.45	0.06	13.22	10.67	11.61	1920
Mean	0.27	0.47	0.46	1.45	2.07	1.91	2.60	2.29	1.75	0.86	0.62	0.71	14.97	11.61	11.61	1921
Av. No. days with precipitation . . .	1	2	1	3	5	7	6	3	3	3	1	1	38	29	24	1922
Av. snowfall, in..	1.4	2.8	1.4	0.8	T.	0	0	0	0	0	T.	1.6	2.9	11.9	11.9	1923

	Year	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual	Seasonal	Record, Yrs.
Temperature—																
Mean		38.4	38.5	47.8	55.6	64.4	73.1	77.0	76.7	72.6	57.8	46.9	38.1	57.2	57.2	24
Mean Max.		52.9	53.1	63.8	71.4	79.2	88.6	91.3	91.0	84.3	72.9	61.1	52.2	71.8	71.8	21
Mean Min.		24.5	24.3	32.7	40.0	49.5	58.1	62.7	61.8	55.3	43.9	31.8	23.9	42.3	42.3	21
Highest		78	85	92	92	104	108	104	103	100	91	83	77	108	108	21
Lowest		-10	-10	2	20	25	41	49	46	31	24	8	2	-10	-10	21
Prevailing wind		W	W	W	SW	W	W	SW	SW	SW	W	W	SW	W	W	13
Days clear		22	17	19	17	17	15	15	17	21	23	20	20	223	102	
Days partly cl'dy.		5	6	8	11	11	11	13	11	6	4	6	7	96	60	
Days cloudy		4	5	4	5	3	4	3	3	3	4	4	4	46	21	

Frost—Average date of first killing frost in autumn, Oct. 25.

Average date of last killing frost in spring, April 18.

Earliest date of killing frost in autumn, Sept. 27.

Latest date of killing frost in spring, May 14.

Average length of growing season, 190 days.

(Data for the years 1915, 1916 and 1917 obtained at Roy, N. M.)

Years recorded, 17.

*Estimated from nearby stations

UNION COUNTY

STATION—CLAYTON. APPROX. LATITUDE—36° 23'. LONGITUDE—103° 07'. ELEVATION—5,178 FEET.

	Year	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual	Seasonal	Record, Yrs.
Precipitation . .	1896	0.24	0.25	0.23	0.68	0.12	1.51	2.63	0.45	2.23	2.00	0.90	0.22	*13.46	9.82	9
	1897	0.38	1.10	0.00	1.05	4.45	3.29	1.26	1.79	0.35	1.67	0.00	1.15	16.49	12.19	12
	1898	0.40	0.95	T.	1.27	2.07	3.15	2.44	2.30	0.90	0.07	0.55	0.85	14.05	12.13	12
	1899	0.40	*0.59	*0.42	0.00	0.53	1.35	10.51	0.00	*3.63	0.40	2.90	0.40	*20.23	15.02	12
	1900	...	...	...	...	...	...	...	...	7.24	1.85	0.17	...	...	...	...
	1901	T.	T.	1.85	1.33	3.52	2.62	1.90	1.92	2.06	1.11	2.04	0.70	19.05	13.35	12
	1902	0.10	0.27	0.00	0.92	1.80	1.48	2.88	1.98	0.45	T.	0.27	T.	10.15	19.51	12
	1903	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	1904	T.	0.91	T.	0.78	3.66	T.	5.81	3.03	1.52	...	...	...	...	14.80	12
	1905	0.26	*0.96	0.10	2.94	1.24	3.48	1.20	1.86	3.41	1.50	1.43	2.06	*20.44	19.38	12
	1906	0.36	0.25	0.16	7.04	6.74	1.40	3.25	0.85	0.20	2.28	0.00	0.32	22.85	18.30	12
	1907	0.29	1.52	0.72	6.36	3.29	1.39	4.01	1.98	1.27	0.65	0.00	0.16	21.64	14.49	12
	1908	0.29	0.29	0.27	1.26	0.54	3.39	1.48	2.42	0.11	0.71	0.11	0.13	11.13	9.34	12
	1909	0.67	0.00	0.27	1.26	0.54	3.39	1.48	2.42	0.11	0.71	0.11	0.13	11.13	9.34	12
	1910	0.35	0.59	0.57	0.70	1.96	0.77	1.82	4.23	1.06	0.28	1.42	0.93	13.78	10.54	12
	1911	0.28	0.54	0.36	2.19	2.49	1.99	3.27	2.51	1.47	0.90	5.79	0.56	17.15	13.72	12
Mean																
Av. No. days with precipitation . .		2	2	2	4	6	6	7	6	4	3	3	3	47	33	10
Av. snowfall, in. .		2.6	5.7	2.4	2.6	0.4	0.0	0.0	0.0	0.2	0.3	3.4	6.4	24.0	9	9
Temperature—																
Mean		36.3	37.0	43.2	53.2	60.9	64.3	73.3	73.3	69.9	53.2	45.3	34.1	53.4	9	9
Mean Max.		49.2	52.8	58.4	69.0	76.2	84.7	86.5	87.9	81.7	70.2	60.8	43.3	68.4	9	9
Mean Min.		23.4	21.3	27.2	37.3	45.4	55.6	59.8	58.7	47.4	41.6	26.8	20.0	38.7	9	9
Highest		73	79	80	89	99	100	102	100	97	89	83	75	102	9	9
Lowest		-2	-18	0	13	22	34	41	42	32	16	2	-5	-18	9	9
Prevailing wind . .		W	W	W	SW	SW	SW	SW	SW	SW	W	W	SW	SW	9	9
Days clear		20	19	18	17	18	18	17	17	21	23	22	19	229	198	10
Days partly cldy. .		9	6	10	9	10	11	12	13	7	4	5	8	104	62	10
Days cloudy		2	3	3	4	3	1	2	1	2	4	3	4	32	13	10

Frost—Average date of first killing frost in autumn, Oct. 18.

Average date of last killing frost in spring, Apr. 21.

Earliest date of killing frost in autumn, Oct. 7.

Latest date of killing frost in spring, May 7.

Average length of growing season, 180 days.

Years recorded, 10.

*Estimated from nearby stations.

This is a northeast border county, largely a rolling, somewhat broken prairie of moderate altitude (5,000 feet), but increasing in the northwestern part to 6,000 and 8,000 feet in the mountains. There are a number of canyons and creeks which supply shelter and water to livestock. There is, however, no very large variation in precipitation, which averages 16 to 18 inches. Winds are prevailing southwest to west and fresh; high at times because of the open character of the southern and eastern portions of the county. Much clear weather occurs. The growing season is fairly long.

Average annual precipitation, 16 to 18 inches.

Average seasonal precipitation, 12.5 to 15 inches.

Average seasonal snowfall, 12 to 24 and 30 inches.

Mean annual temperature, 52 to 57 degrees.

Mean summer temperature, 70 to 76 degrees.

Mean winter temperature, 35 to 38 degrees.

Practically all of the farming is done under dry land methods, the principal crops being corn, kafir, milo, feterita, Sudan grass and broom corn, which are grown mostly in the southern and eastern parts of the county; and wheat, rye, barley and oats, which are grown more in the northern and western parts. Melons, squash and pumpkins may be satisfactorily grown under dry farming methods. The New Mexico Pinto bean is one of the principal cash crops; and in 1917 Union County planted a larger acreage of beans than any other county in the state. Wherever water for irrigation can be had large yields are obtained of alfalfa and other crops. Irish potatoes do well in many districts and are considered to be one of the coming crops of the county. In the higher elevations in the northwest corner of the county the potato has done well for the past eight or nine years. Since then it has been tried with more or less success in all parts and at all elevations. However, it is not recommended to be grown on a large scale.

Stock raising is extensively carried on, and many cattle, horses and sheep are raised on the natural grass of the plains and mountains.

This is a western border county, extending, however, far into the central part of the state, with the Rio Grande crossing its eastern end from north to south; while the Rio Puerco and San Jose Rivers cross the northeast corner of the county. The altitude along the Rio Grande is comparatively low, but most of the county averages above 6,000 feet, rising in the Zuni Mountains in the northwest portion to 8,000 and 10,000 feet. There is in the central and western portions much broken, rough, lava strewn country. The precipitation is small along the Rio Grande, averaging about 10 inches, but increasing somewhat over the northern, central and western upland, mesa and mountain districts. Winds of the county are prevailing southwest to west and light. Much clear weather occurs, and a fairly long growing season. The precipitation, temperature, and other weather data given for Albuquerque, Bernalillo County, can be applied to the Rio Grande Valley conditions in this county.

Average annual precipitation, 9.1 to 14 inches.

Average seasonal precipitation, 7.5 to 12 inches.

Average seasonal snowfall, 8 to 15 or 20 inches.

Mean annual temperature, 52 to 55 degrees.

Mean summer temperature, 70 to 75 degrees.

Mean winter temperature, 34 to 35 degrees.

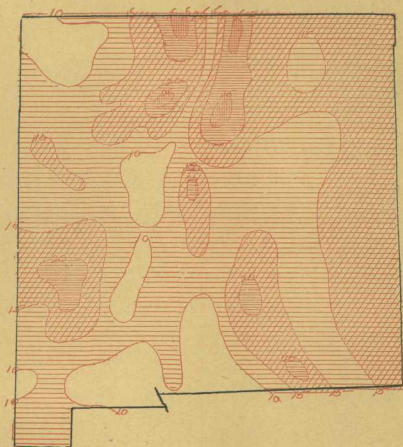
Practically all of the irrigation agriculture is being carried on in the Rio Grande Valley, and to a lesser degree in the San Jose and Rio Puerco Valleys, where alfalfa, wheat, corn, beans, chile, and onions are among the principal commercial crops; although oats, barley, sorghums, cabbage, tomatoes, beets, melons, carrots and many other crops can be successfully grown if desired. European and American plums, peaches, grapes (mostly the European varieties), apples and pears are among the principal fruits. In the western part of the county, wherever sufficient water can be had for irrigation, practically the same crops can be grown as in the Rio Grande Valley. In the high mountain districts, particularly the Zuni Mountains, where there is sufficient rainfall, the beans, short season corn, potatoes and oats are raised successfully. At altitudes of 7,500 feet and above the potato may be expected to do its best. In

the extremely high places such warm season crops as tomatoes, melons and chile should not be expected to produce good crops.

The large mesas, plateaus and mountain ranges afford good pasture for the grazing of livestock. Valencia County ranks second in the number of sheep grazed on its ranges.

NORMAL PRECIPITATION CHART FOR NEW MEXICO

FROM ALL DATA TO THE CLOSE OF 1917



SCALE OF SHADES—IN INCHES



SUMMARY

A large variety of crops can be raised in New Mexico. Practically all of the temperate zone crops and fruits are now being grown. Oftentimes, however, it is thought by people not familiar with the New Mexico climate that tropical fruits are raised in the state. This is not so; for although New Mexico lies pretty well to the south, the climate is not a tropical one, no doubt due to the high altitudes. Even the fig, which is a semi-tropical fruit and which is grown as far north as latitude 33°, principally in the lower Rio Grande and the Pecos Valleys and in the Tularosa basin, is not grown in the open. The best trees are to be found, as a rule, either on the east or south side of a building, or enclosed in some patio or corral; and from time to time these trees are winter killed clear down to the ground. The date palm has been planted at the Experiment Station; and while it has grown quite well during the summer, invariably it has been winter killed. Even such trees as the eucalyptus and the California pepper tree are not hardy enough to withstand our winter temperatures.

The moisture and temperature factors are undoubtedly the principal ones in the range of adaptability of a large number of vegetables, fruits and field crops. Most of the cool season as well as a large number of the warm season crops, including corn, beans, wheat, barley, sorghums such as milo, kafir and feterita, broom corn, apples, pears and peaches, as well as the different kinds of vegetables, may be grown, provided there is sufficient moisture to develop the crop. All of these crops, including alfalfa, are successfully grown under irrigation in the lower and warmer districts.

In the higher and cooler parts of the state the number of varieties of these different crops is materially reduced, and the short season varieties are more dependable. For example, tomatoes, chile, melons, long season corn and some of the sorghums are not grown successfully in the higher altitudes. The native beans, short season corn, oats, wheat, barley, potatoes and apples are among the principal crops raised in these altitudes, both by irrigation and dry farming methods.

In the lower dry farming districts beans, corn, sorghums, broom corn and wheat are among the principal crops.

According to the 1917 Crop Report, from the Department of Agriculture, beans were grown, both under dry farming and irrigation, in every county in New Mexico. Union County reported the largest acreage, with Mora a close second. Thirteen counties, mostly the eastern and southern counties, had over a thousand acres each of kafir, milo, feterita and sorghums; Curry reporting the largest acreage, with Roosevelt second. Every county produced large yields of corn, Union County reporting the largest acreage, while Mora was second. Nine counties produced a crop of broom corn, Union County reporting the largest acreage, with Roosevelt and Quay second. Twenty-five, or all but three counties, grew spring wheat, San Miguel reporting the largest acreage, with Doña Ana second. Twenty-two counties grew winter wheat, Mora reporting the largest acreage, with Curry second. Ten counties produced oats, San Miguel reporting the largest acreage, with Rio Arriba and Otero second. Twenty counties grew Irish potatoes, McKinley County reporting the largest acreage, with San Juan second. Alfalfa is raised almost altogether under irrigation. Fourteen counties are the alfalfa producers, Doña Ana and Chaves reporting the largest acreage. Apples are produced in twenty-two counties, Chaves reporting the largest acreage, with San Juan second.

Such crops as alfalfa, fruits and vegetables are not very dependable under dry farming conditions; and caution should be used in planning to grow these crops under such conditions. The Irish potato is a crop that is not dependable in most of the lower and warmer agricultural parts of the state. Consequently it is not advisable at the present time to attempt to grow this crop, at least on a large scale, in these localities. While the vines grow large enough, the yield, as a rule, is not satisfactory. The best potatoes are generally to be found at altitudes from 7,500 feet up, though occasionally in a few restricted districts lower than this, as in the Manzano Mountains, in Torrance County; in and around Dedman and a few other places in Union County; at Farmington and Aztec in San Juan County; and at Hope, in Eddy County, they are giving fairly satisfactory results. Before planting potatoes, however,

study carefully the climatic and soil conditions in the locality, so as to avoid making a mistake in growing this crop.

Since moisture is probably the principal factor in crop production in New Mexico, farmers intending to grow any crop under dry land conditions should study thoroughly the precipitation table* given in this bulletin for the different localities; and if these results do not apply to the particular locality in question, it is desirable to find out, as nearly as possible, whether the rainfall for that locality is greater or less than for the nearest station in that neighborhood. If in doubt it is suggested that you consult with the County Agricultural Agent, the Experiment Station, or the Weather Bureau. In a general way, however, it can be kept in mind that the lower valleys are dry (averaging from six to ten inches annually), and that agriculture is precarious without irrigation. Precipitation increases with altitude, and also somewhat from west to east; especially is the latter true east of the Rio Grande. The mountain areas, of which there are many, have much greater precipitation than the lowlands and valleys, and are thus the great natural reservoirs, or storehouses, of rain and snow, from which flow the streams that afford irrigation for the valleys. In the mountains the precipitation increases rapidly with altitude, amounting to 18, 20, 25 and even 30 inches annually over the highest peaks. It should also be kept in mind that over the northern mountains, especially, heavy snows and long, cold winters occur.

As a further limiting factor, temperature is probably second only in importance; and since, as a rule, it is lower with increasing altitude, the farmer or ranchman should be careful to adapt his cultural methods and varieties to the temperatures which prevail. Herein will the information given throughout the bulletin be of especial value. Again the very great diversity of contour should cause the prospective farmer or ranchman (and especially the orchardist) to consider carefully his location.

The cool season plants, such as cabbage, peas, onions, beets, and crops of that nature, will stand considerable cold; while the warm

*The "T." in the table stands for "trace," that is, not sufficient precipitation to be measured.

season crops, such as tomatoes, corn, sorghums, beans and melons, are very susceptible to frost injury.

In the case of the fruits, on the whole the apples and pears seem to be more resistant than the peaches and apricots. At the Station it has been found that the peach is least resistant to cold when it is about the size of a pea, when the calyxes are falling off. In a number of cases a temperature of 26 degrees, lasting only a short time, did little or no injury to the opening buds, newly opened flowers or newly set fruit of the peach, native plum, pear and apple.

The amount of injury done by the spring frosts to any crop will depend largely upon the stage of development of the plant, the degree of killing temperature, the time of day at which it occurs, and the length of time the temperature remains below the danger point. The longer the time the killing temperature remains and the nearer it is to sunrise the greater the amount of damage that should be expected.

The weather Bureau instructions give the following in regard to frosts:—

"Frosts will be designated as light, heavy, or killing. The term light signifies no destructive effect, except possibly to tender plants and vines; heavy, a copious deposit of frost, but which does not kill the staple products of the locality, and killing, frost that is destructive to vegetation and the staple products. The character of the frost, whether light, heavy or killing, must sometimes be determined by the phenomenon itself, rather than by its effect on vegetation and the staple crops, since the latter may have passed the stage where injury was possible."

Particular care should be taken in the selection of varieties of the different kinds of fruits, since many of them are susceptible to frost injury in the spring. This is true especially in regard to peaches, Japanese plums and apricots, which are among the earlier blooming fruits. Even the late blooming fruits, such as pears, apples, European and American plums and cherries, in many districts, are frequently partially or totally destroyed by the late spring frosts. Too much promiscuous planting has been done in the past with the different kinds of fruits; and on account of it many of the planters have been disappointed. The selection of the proper variety suited to the local conditions, particularly as regards the *blooming period*, is one of the most important considerations in the planting of fruit trees.

Closely allied with the temperature is the length of the growing season, or the period between the last killing frost in the spring and the first killing frost in the autumn. Data have been given for each county, and these may be taken to indicate this limiting factor. In a general way, however, it may be said that frosts will cease in the spring about April 1 below 4,000 feet; about May 1 below 6,000 feet; and by June 1 below 8,000 feet. The San Juan Basin, however, will be found to be somewhat later; and, on the other hand, many of the mountain valleys will be earlier than their altitude would indicate.

ACKNOWLEDGMENTS.

Acknowledgment is due the County Agricultural Agents in each county, for valuable suggestions, and for reading the write-up for the respective counties; and to Dr. R. F. Hare, Field Agent, Bureau of Crop Estimates, for valuable suggestions regarding the acreage of the different crops reported from the counties in 1917.