

CLIMATOLOGICAL DATA

WBO, Reno, 8-21-36-820.

22 NEVADA SECTION

G. V. SAGER

VOL. LI RENO, NEVADA, JULY, 1936 No. 7

GENERAL SUMMARY

July 1936 was the fourth warmest and third wettest July of record. It was third in average cloudiness and second in number of days with 0.01 inch or more of rain. The temperature mean, 76.0°, has been exceeded only by 76.1° in 1889, 78.2° in 1931 and 76.6° in 1933. The month opened warm. There was a cool spell from the 8th to 12th. Thereafter it was uniformly warm at all stations until the close of the month. The precipitation average, 0.79 inch, was more than double the normal average of 0.37 inch. It has been exceeded only by 1.30 inches in 1913 and 0.97 inch in 1925 and was equalled in 1896. There was an average of 6 cloudy days. This was equalled in 1891 and 1913 and exceeded by records of 7 days in 1912 and 8 days in 1896. The average of 5 days with measurable rain was equalled in 1894 and exceeded by a record of 6 in 1913. Stations in the Columbia and Colorado River basins had the greatest averages and all stations in the east and central portions of the State had more than normal rainfall. In the western counties from Washoe to Esmeralda including Churchill only 3 stations had more than normal. The water supply in the western valleys was favored, however, by fairly heavy rains in their Sierra watersheds in California. Showers were quite general over the State from the 6th to the 11th. After the 11th but little fell in the western counties but there were showers at one or more stations in the east and south on every day except the 12th.

Agricultural interests as a whole were favored. Crops progressed favorably in growth. Haying was carried on thruout the month with generally an excellent crop. The range continued generally good but the lower ranges deteriorated somewhat, they not having received as many of the showers as those of higher elevation. Livestock were generally in good to excellent condition at the close of the month.

TEMPERATURE

The average monthly temperature for the State based on the records of 39 stations was 76.0°, which is 3.6 above the mean for the past 48 years.

The highest recorded was 115° at Clay City on the 17th and at Logandale on the 18th.

The lowest was 34° at San Jacinto on the 11th.

The greatest daily range was 66° at Alamo on the 10th.

The highest monthly mean was 89.2° at Logandale.

The lowest was 66.2° at Marlette Lake.

PRECIPITATION

The average monthly precipitation for the State based on the records of 47 stations was 0.79 inch, which is 0.42 inch above the mean for the past 48 years.

The average amount at 2 stations in the Columbia basin was 1.08 inches; at 15 stations in the Humboldt basin 0.92 inch; at 6 stations in the Truckee basin 0.32 inch; at 5 stations in the Carson basin 0.18 inch; at 7 stations in the Walker basin 0.42 inch; at 4 stations in the Colorado basin 1.50 inches; at 13 stations in the minor basins 0.96 inch.

The greatest monthly fall was 2.97 inches at Searchlight.

There was no precipitation at Mina.

The average number of days with precipitation was 5.

MISCELLANEOUS PHENOMENA

(Dates of)

Solar Halos: Winnemucca, 9.

Thunderstorms: Elko, 7, 8, 14, 15, 16, 18, 19, 21, 22, 24; Hylton, 7, 18, 20, 30, 31; Kimberly, 22, 30; North Fork, 8, 20, 21, 22, 27; Orovada, 7, 8, 31; Reno, 9; Rye Patch Dam, 8, 21; Searchlight, 4, 6, 15, 16, 17, 18, 19, 21, 28, 29, 30, 31; Wells, 5, 23; Winnemucca, 8, 10, 21, 22, 23.

PRESSURE, WIND, HUMIDITY AND SUNSHINE

Stations	Atmospheric pressure (reduced to sea level)				Wind				Relative humidity			Percentage of sunshine	
	Mean	Highest	Date	Lowest	Date	Average hourly velocity	Maximum velocity	Direction	Date	5 a. m.	12 noon		5 p. m.
Reno.....	29.84	29.99	29	29.66	8	7.2	27	sw.	8	52	21	22	89
Winnemucca	29.86	30.02	18	29.53	8	7.0	30	sw.	8	53	21	20	81
Tonopah....	29.83	30.05	31	29.52	8					43		30	

COMPARATIVE DATA FOR JULY

Year	Temperature			Precipitation		Number of days			
	Mean	Highest	Lowest	Average	Average Snowfall	Precip., 0.1 inch, or more	Clear	Partly cloudy	Cloudy
1889.....	76.1	119	36	0.17	0	1	29	1	1
1890.....	74.0	118	28	0.15	0	1	22	7	2
1891.....	70.4	102	26	0.53	0	3	17	8	6
1892.....	70.6	115	30	0.67	0	1	23	5	3
1893.....	70.3	110	24	0.40	0	0	26	4	1
1894.....	71.7	108	32	0.75	0	5	17	9	5
1895.....	70.2	112	28	0.05	0	1	25	4	2
1896.....	72.7	112	33	0.79	0	2	14	9	8
1897.....	69.4	116	25	0.28	0	1	20	7	4
1898.....	73.5	114	30	0.12	0	1	23	6	2
1899.....	72.6	106	34	0.14	0	2	22	6	4
1900.....	70.9	113	33	0.37	0	0	23	4	4
1901.....	70.8	109	31	0.31	0	5	21	6	4
1902.....	67.9	116	25	0.44	0.5	2	21	5	5
1903.....	65.4	111	26	0.01	0	1	27	3	1
1904.....	68.7	110	30	0.51	0	3	19	8	4
1905.....	72.1	109	31	0.08	0	1	24	5	2
1906.....	74.7	114	32	0.63	0	4	17	9	5
1907.....	69.2	113	27	0.06	0	1	22	6	3
1908.....	74.3	116	32	0.42	0	3	18	10	3
1909.....	69.5	112	23	0.14	0	2	23	6	2
1910.....	72.9	110	28	0.65	0	3	18	8	5
1911.....	70.9	109	30	0.31	0	3	17	10	4
1912.....	68.6	113	25	0.67	0	4	17	7	7
1913.....	69.1	113	18	1.30	0	6	16	9	6
1914.....	72.4	118	32	0.52	0	3	16	10	5
1915.....	70.8	110	31	0.38	0	2	19	8	4
1916.....	71.0	113	30	0.31	0	2	25	4	2
1917.....	74.5	111	31	0.46	0	2	21	7	3
1918.....	72.9	112	21	0.33	0	2	21	7	3
1919.....	75.2	113	35	0.28	0	1	23	7	1
1920.....	72.7	113	33	0.14	0	1	24	5	2
1921.....	74.2	114	27	0.19	0	1	24	4	3
1922.....	74.1	116	32	0.54	0	3	20	4	4
1923.....	73.9	116	24	0.42	0	2	22	6	3
1924.....	73.0	117	31	0.16	0	1	22	7	2
1925.....	74.6	117	40	0.97	0	4	19	7	5
1926.....	74.1	116	33	0.43	0	3	20	7	4
1927.....	74.5	118	27	0.26	0	2	21	7	3
1928.....	73.6	114	32	0.16	0	1	23	6	2
1929.....	74.1	115	30	0.14	0	1	23	5	3
1930.....	73.1	115	30	0.16	0	1	21	6	4
1931.....	78.2	119	33	0.14	0	1	22	7	2
1932.....	72.7	116	30	0.43	0	2	23	5	3
1933.....	76.6	118	32	0.34	0	2	21	7	3
1934.....	74.5	118	27	0.20	0	1	24	5	2
1935.....	72.3	116	28	0.18	0	1	21	7	3
1936.....	76.0	115	34	0.79	0	5	14	11	6
Period.....	72.4	119	18	0.37	T.	2	21	7	3

Climatological Data for July, 1936

Stations	Counties	Elevation, feet	Length of record, years	Temperature, in degrees Fahr.						Precipitation, in inches				Number of days			Prevailing direction of the wind	Observer					
				Mean	*Departure from the normal	Highest	Date	Lowest	Date	Greatest daily range	Length of rec-ord, years	Total	*Departure from the normal	Greatest in 24 hours	Total snowfall (unmelted)	With precipita-tion (0.01 inch or more)			Clear	Partly cloudy	Cloudy		
Columbia Basin																							
Gold Creek (near)**	Elko	6,600											19	1.07	+0.43	0.27	0	8	14	9	8		U. S. Forest Service.
Mahoney Ran. Sta.**	do	6,200											15										Do.
Owyhee	do	4,513	14										14										U. S. Indian Agency.
San Jacinto	do	5,400											31	1.10	+0.62	0.32	0	6	18	7	6	nw.	Utah Construction Co.
Tuscarora (near)	do	5,200	31	69.1 [†]	+3.3	104	17	34	11	62	31		26										D. B. Williams.
Humboldt Basin																							
Arthur	Elko	6,500											31	1.69	+0.96	0.61	0	8	14	14	3		Isaac Woodhouse.
Austin	Lander	6,594	44	72.2	+2.3	98	14 [†]	45	9 [†]	44	44		15	0.81	+0.28	0.22	0	7	15	15	1	sw.	Miss Phil. Borrego.
Battle Mountain	do	4,513	57	77.0	+1.6	107	18	45	11	49	66		14	0.70	+0.56	0.30	0	3	18	7	11	s.	Southern Pacific Co.
Beowawe	Eureka	4,695	58	71.6	-2.6	102	18 [†]	38	12 [†]	57	66		1	0.56	+0.29	0.22	0	5	5	12	14		Do.
Canyon Creek Ranch	Elko		1										1										Oren F. Boies.
Elko	do	5,077	58	71.3	+0.8	101	19	39	12	54	66		6	0.82	+0.41	0.22	0	9	7	14	10	sw.	U. S. Weather Bureau
Golconda	Humboldt	4,392	44	75.9	+1.1	103	19	45	12	48	58		58	0.33	+0.11	0.15	0	3	15	6	10	w.	Southern Pacific Co.
Hylton**	Elko	7,081											26	1.42	+0.84	0.37	0	7	10	20	1		Thomas Toyn.
Inlay	Pershing	4,209	54	73.8	-0.3	104	19	45	7	54	65		26	0.26	+0.13	0.22	0	2	15	9	7	w.	Southern Pacific Co.
Lamoille (near)	Elko	6,100	24	70.4	+2.4	93	17 [†]	46	9 [†]	39	31		42	2.65	+1.90	1.05	0	15	8	16	7	s.	Elko-Lamoille Power Co.
Lovelock	Pershing	3,977	38										42										Joe Bush.
Montello	Elko	4,877	47	75.5	+3.1	103	18	43	12	48	58		26	1.34	+1.08	0.30	0	9	5	12	14	sw.	Southern Pacific Co.
North Fork	do	6,500											27	0.38	-0.10	0.19	0	3	3	12	16	sw.	R. C. Bellinger.
Paradise Valley	Humboldt	4,650											27	0.46	+0.11	0.13	0	4					U. S. Forest Service.
Rye Patch Dam	Pershing		1	75.6		104	19 [†]	46	26	54	1		48	1.60	+0.63	0.35	0	8	16	11	4	s.	U. S. Reclamation Ser.
Wells	Elko	5,623											48	1.05	+0.63	0.26	0	8	16	11	4		Wells Power Co.
Winnemucca	Humboldt	4,287	57	75.3	+4.6	104	19	47	12	53	67		67	0.71	+0.50	0.31	0	4	13	16	2	sw.	U. S. Weather Bureau.
Truckee Basin																							
Lewers Ranch	Washoe	5,200											83	0.60	+0.44	0.40	0	2					Katherine Lewers.
Marlette Lake	Washoe	8,000	12	62.2	+1.8	82	18 [†]	38	11	30	15		14	0.24	+0.19	0.22	0	2	12	17	2	w.	H. E. Wise.
Nixon	do	3,910	9	72.5		101	19	42	9	49	9		14	0.60		0.37	0	3	12	15	4	w.	Louis McCloud.
Reno	do	4,493	49	74.3	+4.2	102	19	47	11	44	49		27	0.10	-0.15	0.09	0	2	22	6	3	sw.	U. S. Weather Bureau
Tahoe, Calif.	Placer	6,230	26	63.0	+1.3	88	18	35	11	48	26		24	0.21	+0.03	0.11	0	3	26	2	3	w.	Wm. A. Simmonds.
Truckee, Calif.	Nevada	5,819		65.0	+1.3	96	19 [†]	36	11	56	54		24	0.15	+0.05	0.13	0	2					U. S. Forest Service.
Carson Basin																							
Carson City	Ormsby	4,675	39	71.6	+4.1	103	19	40	11	52	42		42	0.09	-0.11	0.09	0	1	24	3	4	w.	N. C. Brown.
Fallon	Churchill	3,965	40	75.2	+3.1	100	18 [†]	47	12	49	40		40	0.09	-0.08	0.09	0	1	23	3	5	sw.	U. S. Experiment Station
Lahontan**	do	4,200	27	78.6	+0.4	104	18	49	9 [†]	45	29		29	0.13	-0.02	0.08	0	2	11	16	4	e.	Truckee-Carson Irrig. Dist
Minden	Douglas	4,730	44	74.7	+6.0	104	19	46	17	55	44		21	0.14	-0.13	0.09	0	3	15	13	3	sw.	U. S. Forest Service.
Markleville, Calif.	Alpine	5,525	6	63.8		96	20 [†]	34	30 [†]	50	23		23	0.44	+0.11	0.15	0	5	9	16	6	s.	Mrs. F. Kanig.
Walker Basin																							
Mina	Mineral	4,350	41	79.0	+0.7	104	17	49	12	46	41		41	0.00	-0.23	0.00	0	0	16	12	3	sw.	Southern Pacific Co.
Schurz	do	4,124	17	75.0	+1.9	101	18 [†]	46	12	52	17		17	0.22	-0.20	0.08	0	6	17	10	4	w.	Susan R. Kronquist.
Smith	Lyon	4,800											27	0.16	-0.33	0.10	0	2	7	4	20		H. A. Schreck.
Thorne	Mineral	4,200	41	80.8	+3.9	107	23	54	12	43	44		44	0.14	-0.22	0.07	0	2	23	7	1	nw.	Southern Pacific Co.
Yerington	Lyon	4,375	35	71.4	+0.9	101	18	38	11	56	36		36	0.17	+0.03	0.17	0	1	23	5	3	sw.	Mrs W. H. Churchyard.
Bridgeport, Calif.	Mono	6,440	5	66.0		94	18	37	11	44	14		14	1.25	+0.79	0.50	0	5	15	9	7	sw.	I. T. Whistler.
Shields Ranch, Calif.**	Mono	5,300											22	0.98	+0.56	0.75	0	1	23	8	2		Bruce H. Chichester.
Colorado Basin																							
Boulder City	Clark	2,525	5	89.1		109	17 [†]	65	11	28	5		5	2.12		1.89	0	6	19	7	5	s.	U. S. Reclamation Ser.
Callente	Lincoln	4,407	6	78.2		102	5	45	11	51	13		13	2.04	+1.40	0.46	0	13	5	19	7	s.	Philip J. Dolan.
Las Vegas	Clark	2,033	25	87.9	+1.7	114	21	59	12	47	31		31	1.35	+0.81	0.60	0	8	11	14	6	s.	C. P. Squires.
Logsdale	do	1,400	35	89.2	+1.8	115	18	58	1	50	34		34	0.51	+0.06	0.24	0	4	21	10	0		Bert Mills.
Minor Basins																							
Alamo**	Lincoln	4,130	16	81.2	+2.8	111	18	44	10 [†]	66	16		16	2.31	+1.75	0.65	0	8	10	21	0	s.	G. W. Thirtot.
Beatty	Nye	3,310	20										20										C. W. Thomas.
Clay City**	Nye	2,185	9	89.7		115	17	52	10	48	8		8	0.08		0.04	0	2					General Clay Co.
Gerlach (near)	Washoe	3,980	22	77.6	+5.0	106	20 [†]	49	9	43	22		22	0.13	+0.03	0.13	0	1	22	4	5	s.	Pac. Portland C'm't Co.
Goldfield	Esmeralda	5,700	30	75.2	+1.5	102	19 [†]	47	12	43	30		30	0.06	-0.39	0.06	0	1	16	9	6	se.	Nevada-Calif. Power Co.
Kimberly	White Pine	7,250	9	70.7		93	2 [†]	41	11	41	9		9	1.78		0.53	0	13	9	9	13	sw.	Cons. Copper Mines Co.
McGill	do	6,340	45	72.0	+4.4	95	18	46	10 [†]	37	45		45	1.77	+1.14	0.43	0	12	5	17	9	s.	W. E. Sands.
Millett**	Nye	5,040	26										28										W. J. Farrington.
Orovada	Humboldt	4,300	23	74.8	+3.8	108	19	48	12	54	24		24	0.57	+0.37	0.36	0	4	21	7	3	sw.	I. J. Studebaker.
Sand Pass** (near)	Washoe	4,198	22	76.8	+1.1	106	19 [†]	50	8 [†]	50	22		22	0.01	-0.32	0.01	0	1	25	3	3	sw.	R. R. Mott.
Searchlight	Clark	3,445	22	84.7	+0.9	107	17	56	11	33	22		22	2.97	+1.96	1.02	0	10	17	12	2	sw.	Bernice M. Fenlon.
Sharp	do	6,250	20	68.2	-2.7	94	18	35	11	45	20		20	2.07	+1.14	1.03	0	6	26	8	2	se.	Pauline F. Youngs.
Sheldon	Washoe	6,500	3	65.0		94	19	39	10	44	3		3	0.11		0.05	0	3	25	6	0	sw.	Ernest J. Greenwalt.
Sulphur	Humboldt	4,044	21	78.6	+4.1	107	19	48	12	50	21		21	T.	-0.16	T.	0	0					Western Pacific Co.
Tonopah	Nye	6,087	29	75.2	+1.3	95	18	48	11	29	29		29	0.59	+0.26	0.22	0	4					U. S. Weather Bureau.
For the State				76.0	+3.6	115	17 [†]	34	11	66				0.79	+0.42	1.89	0	5	14	11	6	sw.	

Daily Precipitation for July, 1936

Stations	Day of month																															Total	
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31		
<i>Columbia Basin</i>																																	
Gold Creek (near)						T.	T.	.18	.05	.02				.05		.05									.20	.25						.27	
Mahoney Ranger Station																																	
Owyhee																																	
San Jacinto						T.	.20	.05	T.						.10										.25	.32						.18	
Tuscarora (near)																																	
<i>Humboldt Basin</i>																																	
Arthur							T.	.54	.05	.05					.12	.05				.05			.22	.08							.61		
Austin						10	10	T.	.05	.05			T.																			.21	
Battle Mountain								T.	.22																								
Beowawe						.05	.02																									.09	
Canyon Creek Ranch																																	
Eiko						T.	.05	.20			.17			T.	.01	.08	.04					.04	.22	T.				T.			.01		
Goiconda								.03			.15																						
Hylon							.13	.08			.30														.14	.20				T.	.20		
Inlay							.22																	.04									
Lamolle (near)						.01	.01	.13	.11	.13	.47			.04	.01	.28						T.	.12	1.05	.02		.01	T.			.07		
Lovelock								.14	.10	.04	.25			T.	T.		.30																
Montello								.06																									
North Fork						T.	.18							T.	T.		T.																
Paradise Valley							.18																										
Rye Patch Dam							.18	.06			.85																						
Wells						T.	.17	T.	.26	.10					.05	T.	T.																
Winnemucca***						T.	.05	T.	T.	.06																							
<i>Truckee Basin</i>																																	
Lewers Ranch																	.40	.20															
Marlette Lake							T.		.02	.22																							
Nixon								.04	.37	.19																							
RENO***							T.	T.	.07	.03																							
Tahoe, Calif.								.02	.11	.08																							
Truckee, Calif.								.13		.02																							
<i>Carson Basin</i>																																	
Carson City						T.	T.			T.	.09																						
Fallon						.09	T.																										
Lahontan								.05		.08																							
Minden							.03		.02	.09																							
Markleville, Calif.								.01	.10	.08																							
<i>Walker Basin</i>																																	
Mina																																	
Schurz							.04	.04	.01	.04																							
Smith									.06	.10																							
Thorne							.07			.07																							
Yerington									T.																								
Bridgeport, Calif.						.11	.08		.20	.36																							
Shields Ranch, Calif.								T.	T.	.15																							
<i>Colorado Basin</i>																																	
Boulder City					.06										.01																		
Caliente						T.				.13					.01	.01	.40	.13	.19		.01			.46	.08	.13	.01	.06	.28	.15	.01		
Las Vegas					.03		.02	.01							T.	.08		.20															
Logandale							.07			.24																							
<i>Minor Basins</i>																																	
Alamo					.01	T.	T.	T.	.15																								
Beatty									.04																								
Clay City																																	
Garlach (near)								.13								.04																	
Goldfield																																	
Kimberly					.10	.05	.05			.12	.11																						
McGill							.09			.43	.11				.02	T.	.11		.13	.35	T.	.18		.11			.06	.05	.08	.01	.34		
Millett																																	
Orovada						.31	.12	.02	T.	.01																							
Sand Pass							T.	T.	.01																								
Searchlight								T.								T.	.04	.18															
Sharp								.16																									
Sheldon								.02	.05																								
Sulphur								T.																									
Tonopah					T.	T.			T.																								

Except as otherwise indicated, observations are generally made late in the afternoon, near sunset, and precipitation recorded is for the 24 hours ending at the time of observation. *** Regular Weather Bureau stations; precipitation is for the 24-hour period, midnight to midnight. T. Trace, or less than 0.01 inch. ||| Precipitation measured in the morning; amount then recorded is for the preceding 24 hours. * Precipitation included in next following measurement. † Separate dates of falls not recorded. Interpolated data in bold face type.

Daily Evaporation (inches) and Wind Movement (miles) for July, 1936
(See temperature and precipitation data in climatological tables, pages 26 to 28)

Stations	Data	Day of month																															Monthly
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	
Boulder City***§	Evaporation	640	730	614	738	503	712	524	766	824	599	527	443	601	638	585	586	603	647	574	599	674	720	713	815	771	495	261	238	231	404		
	Wind movement	78	118	102	154	95	120	114	259	222	203	95	54	66	95	112	77	87	121	85	90	30	104	127	204	212	194	122	64	76	49		
Clay City * §	Evaporation	613	694	789	†	921	521	482	946	506	438	540	418	578	723	555	630	658	554	578	511	606	632	646	959	871	637	449	399	437	583		
	Wind movement	47	57	41	43	45	43	41	36	42	52	26	48	48	44	58	65	44	47	38	42	34	24	34	40	40	45	51	37	38	35		
Lamolle *** §	Evaporation	402	440	391	373	369	372	193	267	183	160	108	198	334	294	406	288	352	356	384	267	213	068	402	340	296	340	294	126	176			
	Wind movement	47	57	41	43	45	43	41	36	42	52	26	48	48	44	58	65	44	47	38	42	34	24	34	40	40	45	51	37	38			
Lahontan * §	Evaporation	150	160	190	200	200	170	190	140	120	040	040	100	140	150	160	170	200	180	180	160	160	190	190	160	210	230	180	200	160			
	Wind movement	24	21	39	42	36	36	39	32	39	21	18	14	25	26	25	27	28	26	23	22	22	21	26	28	33	35	30	26	23			
Tahoe, Calif. ** §	Evaporation	150	160	190	200	200	170	190	140	120	0																						

Daily Temperatures for July, 1936

Table with columns for Stations, days 1-31, and Mean. Rows are grouped by basin: Columbia Basin, Humboldt Basin, Truckee Basin, Carson Basin, Walker Basin, Colorado Basin, and Minor Basins. Each station entry includes Maximum and Minimum temperature values.

§§ Instruments are read in the morning, the maximum temperature then read is charged to the preceding day, on which it almost always occurs.