



Vol 39

CLIMATOLOGICAL DATA FOR JULY, 1911.

DISTRICT No. 10, GREAT BASIN.

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GENERAL SUMMARY.

Typical of the summer climate of an arid, mountainous country, the weather during July in the Great Basin was generally fair and quiet, though much cooler weather than is usual in July occurred in the Wasatch Mountains and generally over the eastern portion of the basin; and in limited districts local rains were so heavy during thunderstorms as to produce some flooding. The record for cool weather was not exceeded, however, at any station so far as is known, neither was the record for excessive precipitation at the few stations receiving the large amounts.

The month was quite uniformly reported as being favorable for all agricultural and manufacturing interests. The comparatively light precipitation, and the few rainy days, permitted almost uninterrupted field work, and the harvesting of grain and the cutting of the second crop of alfalfa in most districts proceeded in safety. The cool weather also had the tendency to lessen evaporation on the arid farms, yet it was sufficiently warm to produce normal growth and proper maturing of practically all crops.

There was an average of 16 clear days, 10 partly cloudy days, and 5 cloudy days in the basin, though the number of clear days was somewhat greater in the middle and western portions. The wind movement was generally light.

TEMPERATURE.

The mean temperature for the basin, 69°, was 2.5° below the normal, considering departures only from the stations having the longer records. This mean value is 3° below the mean of July, 1910.

As a general rule, the temperature was slightly above normal in the northwestern part of the Great Basin, about normal in the middle portion, and considerably below normal in the eastern portion.

The first decade was the coolest part of the month in practically all parts of the district, the lowest temperatures for the month occurring quite uniformly within that period. At the time of coldest weather the minimum temperatures fell below freezing at a great many stations, especially the mountain stations of Utah, and scattered reports were received of slight damage to vegetation. Comparatively cool weather continued throughout the rest of the month, though not below freezing in any of the agricultural districts. The daytime temperatures were at no time excessive. A few days about the middle of the month were warmest in practically all parts of the basin.

PRECIPITATION.

The average precipitation of 0.62 inch was a departure of 0.17 inch below the normal of the long record stations, being considerably lighter than the average for last July. Most of this precipitation occurred in moderate showers, though at a few places local thunder showers produced excesses of rain which in portions of southern Utah and western Nevada ran through the fields and down the streams in damaging quantities. On the average the rainfall was heavier in the eastern and southeastern portions of the district than in the middle and northwestern portions.

The rainy period covered about two weeks' time, the greater portion of the rain falling within the middle two weeks of the month in the middle and western portions and during the last two weeks in the eastern portion of the basin. There was an average of 4 rainy days, ranging from none at several places to 10 or more at scattered places in Utah. Thunderstorms were numerous in the northern and western portions of the district, and in the western portion they were reported as being unusually severe in certain localities. Elsewhere the electrical storms were comparatively few and light. No snow fell during the month so far as is known, and that remaining in the mountains of Nevada was reported by the section director to have receded beyond the 7,000-foot contour during the month. Water continued plentiful in all parts of the basin for irrigation and other purposes, and the comparative dearth of rain was not seriously felt anywhere.

PRECIPITATION AVERAGES FOR LARGE AREAS.

ALFRED H. THIESSEN, Section Director.

The fact that precipitation varies considerably over not only large but also over quite limited areas is a matter of common observation. Many factors enter into the question as to why different amounts of precipitation are recorded at stations quite near one another, chief of which are the relation of stations to mountain ranges, their elevation, latitude, nearness to large bodies of water, and locations in relation to the average tracks of storms. Any one of these factors or any combination of them may cause a great difference between the rainfall in different sections of an area, as a State or large county.

In calculating the average amount of precipitation for an area it is a common practice to add together the amounts recorded at each station within the area and

TABLE 1.—Climatological data for July, 1911. District No. 10, Great Basin.

Table with columns: Stations, Counties, Elevation, Length of record, Temperature (Mean, Departure from normal, Highest, Date, Lowest, Date, Greatest daily range), Precipitation (Total, Departure from normal, Greatest in 24 hours, Total snowfall, Number of rainy days, Number of clear days, Number of partly cloudy days, Number of cloudy days), Sky, Prevailing wind direction, and Observers. Rows include stations like Border, Cokeville, Evanston in Wyoming; Geneva, Grace, Paris, Weston in Idaho; and Alpine, Beaver, Black Rock, etc. in Utah.

TABLE 1.—Climatological data for July, 1911. District No. 10—Continued.

Stations.	Counties.	Elevation, feet.	Length of record, years.	Temperature, in degrees Fahrenheit.							Precipitation, in inches.				Sky.				Prevailing wind direction.	Observers.
				Mean.	Departure from the normal.	Highest.	Date.	Lowest.	Date.	Greatest daily range.	Total.	Departure from the normal.	Greatest in 24 hours.	Total snowfall, unmelted.	Number of rainy days, 0.01 inch or more.	Number of clear days.	Number of partly cloudy days.	Number of cloudy days.		
<i>Oregon.</i>																				
Burns.....	Harney.....	4,157	20	67.6	+ 1.8	97	17	29	7	51	0.13	- 0.08	0.13	0	1	27	4	1	w.	J. C. Welcome, jr.
Cliff.....	Lake.....	4,300	4																	John C. Green.
Falsley.....	do.....	4,500	8	71.5		95 ^a	16	39 ^b	1	39 ^a	T.		T.	0	0	26 ^a	4 ^a	0 ^a	w.	E. C. Woodward.
Silver Lake.....	do.....	4,700	14	66.4	- 0.2	99	16	28	8	56	0.16	- 0.34	0.10	0	3	9	22	0	w.	L. W. Charles.
<i>California.</i>																				
Tahoe.....	Placer.....		1	58.8		84	15	32	1	41	0.00		0.00	0	0	30	1	0	w.	R. M. Watson.
Truckee.....	Nevada.....	5,819	40	67.9	+ 2.5	90	15 [†]	44	1	34	0.00	- 0.19	0.00	0	0	6	25	0		Southern Pacific Co.
<i>Nevada.</i>																				
Austin.....	Lander.....	6,594	22																	F. O. Booe.
Battle Mountain.....	do.....	4,843	40	70.4	- 4.8	106	18	36	2	62	0.47	+ 0.34	0.25	0	2	23	7	1	w.	Southern Pacific Co.
Beowawe.....	Eureka.....	4,905	40	67.6	- 9.6	103	14	35	8	58				0	0	31	0	0		Do.
Carlin.....	Elko.....	5,232	40	72.0	+ 1.4	109	16	30	9	68	0.00	- 0.11	0.00	0	0	31	0	0		U. S. Reclamation Service.
Carson Dam.....	Churchill.....	4,032	4	76.1		98	17	55	25 [†]	34	0.33		0.18	0	3					J. H. Leishman.
Cherry Creek.....	White Pine.....	6,450	3	69.4		94	14	41	9	46	0.61		3.24	0	6	15	11	3	w.	I. F. Wiseman.
Clover Valley.....	Elko.....	6,000	11	67.9 ^a	+ 1.2	92 ^b	6	43 ^a	3	41 ^b	0.34	- 0.01	0.32	0	1	12	19	0		Southern Pacific Co.
Cobre.....	do.....		2			26	9				1.24		0.50	0	4	19	12	0	sw.	A. Booth.
Columbia.....	Esmeralda.....	5,750	4	74.0		97	15	44	1	42	1.39		0.90	0	9	17	13	1	nw.	Golconda Cattle Co.
Dutton.....	Elko.....	5,100	3	75.7		95	16	52	8 [†]	34	0.00		0.00	0	0	9	15	7	w.	E. J. Clark.
Elko.....	do.....	5,342	40	68.1	- 2.8	96	16	32	9	54				0		11	17	3	w.	G. C. Hunting.
Ely.....	White Pine.....	6,421	20																	Clay Simms.
Eureka.....	Eureka.....	6,500	8	68.4		93	14 [†]	36	1	48	0.50		0.12	0	9	12	12	7	n.	U. S. Experiment Station
Fallon.....	Churchill.....	3,965	6	74.2		100	6 [†]	43	3	50	0.09		0.09	0	1	22	6	3	w.	Mrs. G. A. Steele.
Fernley.....	Lyon.....	4,200	38	74.2	- 3.7	100	16	38	9	55	0.07	- 0.24	0.07	0	1	20	9	2		Wm. Dangberg.
Gardnerville.....	Douglas.....	4,830	11																	C. C. Henningsen.
Glenbrook.....	do.....		2																	Southern Pacific Co.
Golconda.....	Humboldt.....	4,697	32	71.8	- 4.5	97	16	40	2 [†]	46	T.	- 0.07	T.	0	0	23	6	2	sw.	Do.
Halleck.....	Elko.....	5,631	18	67.4	- 2.3	96	14 [†]	30	8	54	0.26	- 0.14	0.23	0	2	15	16	0		Salt Lake Route.
Jean.....	Clark.....	2,074	3								T.			0	0					Ross Lewers.
Lewers' Ranch.....	Washoe.....	5,500	23	67.8		91	15	38	1	44	0.00		0.00	0	0	15	16	0		C. H. Allender.
Lovelocks.....	Humboldt.....	3,977	17	70.0	- 6.5	96	6	40	1 [†]	46	0.06	- 0.07	0.05	0	2	21	9	1	s.	Fred J. Jones.
Millett.....	Nye.....		3	68.2		92	5 [†]	37	1	52	0.22		0.12	0	2	19	6	6	w.	Southern Pacific Co.
Mina.....	Mineral.....	4,600	4	77.2		99	5	50	1	40	0.07		0.07	0	2	12	6	13	s.	Miss Mamie Potts.
Potts.....	Nye.....	6,990	18	68.2	- 2.4	94	5 [†]	33	1	56	0.12	- 0.54	0.06	0	3	7	3	21	s.	F. M. Payne.
Quinn River Ranch.....	Humboldt.....	4,850	9	69.1		96	29	34	9	55	0.22		0.15	0	2					U. S. Weather Bureau.
Reno.....	Washoe.....	4,532	40	71.4	+ 3.9	95	14	42	1	44	1.59	+ 1.45	0.74	0	5	22	6	3	w.	U. S. Reclamation Service.
Soda Lake.....	Churchill.....	4,534	4																	Southern Pacific Co.
Tecoma.....	Elko.....	4,812	33	65.8	- 8.4	95	23	33	7	54	0.01	- 0.15	0.01	0	1					U. S. Weather Bureau.
Tonopah.....	Nye.....	6,090	4	73.2		93	15	49	1	31	0.99		0.48	0	7	8	22	1	w.	Vic Bernard.
Wabuska.....	Lyon.....	4,347	8																	Southern Pacific Co.
Wells.....	Elko.....	5,631	39	69.0	- 2.1	97	13	31	9	57	0.12	- 0.14	0.06	0	3	10	17	4		U. S. Weather Bureau.
Winnemucca.....	Humboldt.....	4,432	32	71.6	0	99	17	41	1	45	0.12	- 0.05	0.10	0	3	22	7	2	sw.	U. S. Weather Bureau.

^a, ^b, etc., indicate, respectively, 1, 2, 3, etc., days missing from the record.
 ** Temperature extremes are from observed readings of the dry bulk; means are computed from observed readings.
[†] Also on other dates.
 T. Precipitation is less than 0.01 inch rain or melted snow.

TABLE 2.—Daily precipitation for July, 1911. District No. 10, Great Basin.

Table with columns for Stations, Watershed, Day of month (1-31), and Total. Rows are categorized by state: Wyoming, Idaho, Utah, and Oregon.

TABLE 2.—Daily precipitation for July, 1911. District No. 10—Continued.

Stations.	Watershed.	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>Oregon—Continued.</i>																																				
Embody	SE. Drainage																																			
Fort Rock	do												T.	T.	T.		T.	T.	T.	T.	T.															
Paisley	do																																			
Seneca	do																																			
Silver Lake	do																																			
Valley Falls	do																																			
<i>California.</i>																																				
Bijou	Truckee																																			
Boca	do																																			
Deer Park	do																																			
Glen Alpine	do																																			
Hobart Mills	do																																			
Lundy	East Walker																																			
Markleeville	East Carson																																			
Shields' Ranch	East Walker																																			
Silver Creek	East Carson																																			
Tahoe	Truckee																																			
Talac	do																																			
Truckee	do																																			
Woodfords	West Carson																																			
<i>Nevada.</i>																																				
Arthur	Humboldt																																			
Austin	Reese																																			
Battle Mountain	Humboldt																																			
Beowawe	do																																			
Bishop	do																																			
Carlin	do																																			
Carson Dam	Carson																																			
Cherry Creek	Humboldt																																			
Clover Valley	do																																			
Cobre	do																																			
Columbia	Desert																																			
Dry Farm	Humboldt																																			
Dutton	do																																			
Elko	do																																			
Ely	do																																			
Eureka	do																																			
Fallon	Carson																																			
Fernley	Truckee																																			
Gardnerville	Carson																																			
Glenbrook	Truckee																																			
Golconda	Humboldt																																			
Halleck	do																																			
Jean	Desert																																			
Lewers' Ranch	Truckee																																			
Lovelock	Humboldt																																			
Massacre Lakes	Desert																																			
Mill City	Humboldt																																			
Millett	Reese																																			
Mina	Desert																																			
North Fork	Humboldt																																			
Potts	Reese																																			
Quinn River Ranch	Humboldt																																			
Reno	Truckee																																			
Rose Creek	Humboldt																																			
do	do																																			
Smith	West Walker																																			
Spooner's Ranch	Truckee																																			
Soda Lake	Carson																																			
Tecoma	Humboldt																																			
Tonapah	Desert																																			
Wabuska	Walker																																			
Wells	Humboldt																																			
Willow Point	L. Humboldt																																			
Winnemucca	Humboldt																																			

* Precipitation included in that of the next measurement.
 † Separate dates of falls not recorded.
 ‡ Precipitation for the 24 hours ending on the morning when it is measured.
 T. Precipitation is less than 0.01 inch rain or melted snow.

TABLE 3.—Maximum and minimum temperatures at selected stations for July, 1911. District No. 10, Great Basin.

Table for Nevada stations: Burns, Oreg., Elko, Ely, Eureka, Fallon, Jean, Lovelocks, Millett, Mina, Quinn River Ranch, Reno, Tecoma, Tonopah, Winnemucca. Columns show Max and Min temperatures for each day from 1 to 31, and monthly means.

Table for Wyoming and Utah stations: Wyoming (Border, Evanston, Corinne, Deseret, Government Creek) and Utah (Ibapah, Marysville, Meadowville, Modena, Ogden, Parowan, Provo, Salt Lake City). Columns show Max and Min temperatures for each day from 1 to 31, and monthly means.

a, b, c, etc., indicate respectively 1, 2, 3, etc., days missing from the record. Data are from standard instruments not supplied by the U. S. Weather Bureau. Instruments are read in the morning; the maximum temperature then read is charged to the preceding day, on which it almost always occurs.