

U. S. DEPARTMENT OF AGRICULTURE, WEATHER BUREAU.

CALIFORNIA SECTION.

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GENERAL SUMMARY.

The mean temperature and the average precipitation for July, 1917, were both above the normal in California. For the State as a whole, it was the hottest month in nine years. Along the coast it was generally pleasant, with more than the usual amount of sunshine, while in the interior valleys and desert regions it was an extremely hot month. Thunderstorms were of frequent occurrence in the mountains. Copious showers fell in the extreme south portion of the State on several days. However, as is usual during July, the average rainfall for the State as a whole was light, a total of 178 stations reporting no measurable precipitation. The total wind movement and the cloudiness were both about normal. Streams showed a rapid decline, and in some sections a shortage of water was keenly felt as early as the middle of the month.

The first decade of the month was moderately warm and almost entirely rainless. The second decade was one of excessive heat, particularly in the interior valleys and in the desert regions to the south. High humidity accompanied this hot wave. In the Imperial Valley alone, nine deaths were caused by the extreme heat and humidity of the 10th-16th. Thunderstorms accompanied by destructive lightning occurred almost daily in the high Sierra and in the mountains of southern California, and light showers frequently accompanied these. The last decade of the month, though somewhat cooler, was still hot in the interior, and moderately warm along the coast. Thunderstorms, generally accompanied by showers, continued to occur frequently in the elevated regions.

From an agricultural viewpoint, the weather during July was generally favorable. All irrigated fruit crops made good progress, except in a few restricted regions where the water supply was deficient. Corn, barley, rice, and sugar-beets showed a rapid growth. Truck crops, garden vegetables and pastures suffered, however, because of the excessive heat and the deficient rainfall, and there were more forest fires than usually occur during July. The weather was favorable for the harvesting of grain and the curing of hay and alfalfa. The walnut and citrus fruit crops will be large, though reduced somewhat by the hot spells of this and the preceding months. The calm, dry and hot weather which characterized the greater part of the month in the citrus fruit regions of the State was well adapted for the fumigation of the trees. The weather of the month was favorable for farm work generally. As far as personal comfort was concerned, it was a pleasant month, for while midday temperatures were high, the nights were cool and comfortable. At the close of the month the agricultural situation was satisfactory, and the outlook for the immediate future was favorable.

A. H. P.

PRESSURE.

The monthly mean atmospheric pressure for the State, reduced to sea level, was 29.88 inches.

The highest was 30.19 inches at Eureka on the 9th.

The lowest was 29.61 inches at Fresno on the 4th, and at Red Bluff on the 12th.

The range for the State was 0.58 inch.

TEMPERATURE.

The monthly mean temperature for the State was 75.8 degrees, which is 1.8 degrees above the normal.

The highest monthly mean was 95.6 degrees, at Wasco; and the lowest was 52.8 degrees, at Point Reyes.

The highest temperature, 119 degrees, occurred at Delta on the 18th; and the lowest, 23 degrees, occurred at Madeline on the 6th.

The range for the State was 96 degrees.

PRECIPITATION.

The average precipitation for the State was 0.08 inch, or 0.04 inch above the normal.

The greatest monthly amount was 2.60 inches, at Sierraville. A total of 105 stations reported no precipitation.

The greatest amount in 24 hours was 2.00 inches at Elsinore on the 27th.

RELATIVE HUMIDITY.—(Per Cent.)

Stations.	5 a. m.	5 p. m.	Mean.
Eureka.....	94	79	86
Fresno.....	41	13	27
Los Angeles.....	89	64	77
Mount Tamalpais.....	34	30	32
Red Bluff.....	42	12	27
Sacramento.....	73	24	48
San Diego.....	89	75	82
San Francisco.....	90	71	80
San Jose.....	81	47	64
San Luis Obispo.....	89	49	69

SUNSHINE AND CLOUDINESS.

Stations.	Actual hours of sunshine.	Per cent of the possible.
Eureka.....	247	54
Fresno.....	421	94
Los Angeles.....	354	81
Mount Tamalpais.....	422	94
Red Bluff.....	425	93
Sacramento.....	420	93
San Diego.....	286	65
San Francisco.....	361	80
San Jose.....	394	88
San Luis Obispo.....	348	79

WIND MOVEMENT.—(Miles.)

Stations.	Total movement for month.	Average hourly velocity.	Maximum velocity.	Direction.	Date.
Eureka.....	4,827	6.5	25	sw.	26
Fresno.....	6,397	8.6	27	nw.	20
Los Angeles.....	4,240	5.7	17	sw.	30
Mount Tamalpais.....	11,615	15.6	64	nw.	20
Point Reyes.....	14,944	20.1	50	nw.	27
Red Bluff.....	3,089	4.2	15	se.	7
Sacramento.....	5,989	8.0	20	sw.	31
San Diego.....	4,342	5.8	21	nw.	8
San Francisco.....	9,307	12.5	37	sw.	11
San Jose.....	4,275	5.7	21	se.	8
San Luis Obispo.....	2,273	3.1	12	w.	12

The prevailing direction of the wind for the State was west.

Climatological Data for July, 1917.

Table with columns: Stations, Counties, Elevation, Length of record, Temperature (Mean, Departure from normal, Highest, Date, Lowest, Date, Greatest daily range, Total, Departure from normal, Greatest in 24 hours, Snowfall, Precipitation, Number of days (Clear, Partly cloudy, Cloudy), Prevailing direction of wind, Observers.

Climatological Data for July, 1917.—Continued.

Table with 15 columns: Stations, Counties, Elevation, Length of record, Mean, Departure from normal, Highest, Date, Lowest, Date, Greatest daily range, Total, Departure from normal, Greatest in 24 hours, Snowfall, Precipitation (inches), Number of days (Clear, Partly cloudy, Cloudy), Prevailing direction of wind, and Observers.

Daily Precipitation for July, 1917.—Continued.

Table with columns: Stations, Watersheds, Day of Month (1-31), Total. Rows include locations such as Hanford, Hansen's Ranch, Happy Camp, Hayfork, Head Dam, Healdsburg, Helen Mine, Hetch Hetchy, Hollister, Hot Springs, Hulyville, Huntington Lake, Independence, Indio, Inskip, Jacksonville, Jenny Lind, Jolon, Julian, Kennedy Mine, Kennett, Kentfield, Kernville, Knights Landing, La Jolla, Lake Eleanor, Lake Spaulding, Lancaster, La Porte, Las Plumas, Lathrop, Le Grand, Lemon Cove, Lick Observatory, Lindsay, Live Oak Canon, Livermore, Lone Pine, Lordsburg, Los Alamos, Los Angeles, Los Gatos, McCloud, McKinney, Madeline, Magalia, Maricopa, Mariposa, Markleeville, Marysville, Meadow Valley, Mecca, Melones, Merced, Merced Falls, Mesa Grande, Middlewater, Mill Creek-1, Mill Creek-2, Mills College, Milo, Milton, Mokelumne Hill, Montague, Montgomery Creek, Mt. TAMALPAIS, Mount Wilson, Napa, Needles, Nellie, Neenach, Nevada City, Newnan, North Bloomfield, North Fork, North Lakeport, Oak Grove, Oakland, Oceanside, Ojai Valley, Orland, Orleans, Oroville, Ozena, Pacoima, Parkfield, Pasadena, Paso Robles, Pattitway, Peachland, Petaluma, Piedra, Placerville, Point Loma, Point Reyes, Pomona, Porterville, Portola, Priest Valley, Quincy, Red Bluff, Redding, Redlands, Reedley, Represa, Rialto.

Daily Temperature for July, 1917.

Table with columns for Stations, days 1-31, and Mean. Rows list various California locations such as Alturas, Bakersfield, Barstow, etc., with their respective temperature data.