

U. S. DEPARTMENT OF AGRICULTURE, WEATHER BUREAU.

CALIFORNIA SECTION.

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GENERAL SUMMARY.

Seasonable weather prevailed in California during August. Hot weather occurred in the interior valleys, while winds and fogs from off the ocean kept the weather relatively cool along the coast. The mean temperature for the State as a whole was somewhat below the normal, while the average precipitation was slightly above the normal. The weather during August was much like that of July. In Death Valley the temperature reached or exceeded 100° on 29 days of the month, culminating with a maximum of 125° on the 3d. Thunderstorms were of frequent occurrence in the elevated portions of the State. In the vicinity of Campo, San Diego County, 22 sheep and 6 head of cattle were killed by lightning on the 2d and 3d. The usual summer drought prevailed everywhere except in the extreme south portion of the State, where showers of the sonora type occurred frequently. In the dairy region of the northwest portion of the State the drought became the most severe on record. Streams which never before have been known to cease to flow became dry, and a serious shortage of water on the cattle ranges caused inconvenience and loss. On account of the abnormally low stages of streams and the deficiency in the amount of stored water, power companies continued to curtail service in order that more water might be made available for irrigation.

Light showers fell at many stations on the 1st. A hot wave accompanied by northerly, desiccating winds persisted from the 2d to the 7th. In the San Bernardino Mountains the hottest weather ever recorded there occurred during this period. Moderately heavy showers fell in the desert plateaus of southern California between the 8th and 10th. The second decade of the month was cool and showery. In the interior valleys overcast skies kept the midday temperatures relatively low, while in the high Sierra Nevada Mountains freezing temperatures occurred almost every night. Hot and dry weather prevailed during the remainder of the month. The highest temperatures of the month occurred at most stations between the 28th and 30th.

Agriculturally, the weather during August was satisfactory. Favorable weather prevailed during the gathering of a great variety of fruits and grains. The harvesting of grain was largely completed during the month. The curing of fruit, grain and alfalfa was accelerated by the warm and dry weather. The destructive effect of the continued drought became apparent on the ranges, however, and cattle were marketed in large numbers in order to prevent loss. All irrigated fruit crops made normal progress. No rain fell to injure the raisin and grape crops. Rice began to head during the month, and the largest crop on record is anticipated. Apricots, sugar beets and potatoes showed marked improvement, while pastures and garden crops showed marked deterioration during the month. At the close of the month the composite condition of all California crops, according to the U. S. Bureau of Crop Estimates, was 8.8 per cent below their 10-year average on that date, and 1.5 per cent lower than at the close of the preceding month. The condition of apricots, grapes, lemons and pears was above, while that of most other growing crops was below their respective 10-year averages. It appeared at the close of the month that most crops still in the field would reach maturity before the present supply of irrigation water would be exhausted. As a whole, the agricultural situation continued to remain generally good.

A. H. P.

PRESSURE.

The mean sea level pressure, determined from the records of twelve regular Weather Bureau stations, was 29.93 inches. The highest was 30.21 inches at Eureka on the 18th; the lowest was 29.66 inches at Independence on the 4th; the range for the State was 0.55 inch.

TEMPERATURE.

The monthly mean temperature for the State, as shown by the records of 99 stations, was 71.4°, which is 1.4° below the normal.

The highest monthly mean was 92.2°, at Greenland Ranch; and the lowest was 55.1°, at Point Reyes.

The highest temperature, 125°, occurred at Greenland Ranch on the 3d; and the lowest, 26°, occurred at Portola on the 11th and 13th.

The range for the State was 99°.

PRECIPITATION.

The average precipitation for the State, as shown by the records of 216 stations, was 0.14 inch, or 0.06 inch above the normal.

The greatest monthly amount was 2.85 inches, at Needles. Eighty-five stations reported no precipitation.

The greatest amount in 24 hours was 2.20 inches at Needles on the 10th.

RELATIVE HUMIDITY, SUNSHINE AND CLOUDINESS.

Stations.	Relative humidity. (Per cent.)			Sunshine.	
	5 a. m.	5 p. m.	Mean.	Actual No. of hours	Per cent of possible.
Eureka.....	94	86	87	261	61
Fresno.....	50	18	34	402	96
Los Angeles.....	86	61	73	316	76
Mount Tamalpais.....	45	40	42	356	84
Red Bluff.....	48	15	32	335	90
Sacramento.....	72	27	50	338	92
San Diego.....	88	73	81	303	73
San Francisco.....	89	74	82	341	81
San Jose.....	48	48	48	362	86
San Luis Obispo.....	90	57	74	311	75

WIND MOVEMENT.—(Miles.)

Stations.	Total mov. for month.	Ave. hr. velocity.	Maximum velocity.	Direction.	Date.	Prev. dir.
Eureka.....	4,738	6.4	36	n.	19	sw.
Fresno.....	6,060	8.1	26	nw.	16	nw.
Los Angeles.....	4,075	5.5	17	se.	4	sw.
Mount Tamalpais.....	11,354	15.3	56	sw.	14	nw.
Point Reyes.....	13,140	17.7	59	nw.	4	nw.
Red Bluff.....	3,974	5.3	23	n.	21	se.
Sacramento.....	9,080	8.1	26	s.	13	s.
San Diego.....	4,901	6.6	20	s.	4	nw.
San Francisco.....	9,039	12.1	34	sw.	10	sw.
San Jose.....	4,591	6.2	30	sw.	13	nw.
San Luis Obispo.....	2,611	3.5	17	w.	17	nw.

COMPARATIVE DATA FOR AUGUST.

Year.	Mean temp.	Ave. precip.	Year.	Mean temp.	Ave. precip.	Year.	Mean temp.	Ave. precip.	Year.	Mean temp.	Ave. precip.
1897.....	73.9	0.03	1903.....	72.6	0.02	1909.....	72.1	0.19	1915.....	74.2	0.06
1898.....	74.5	0.02	1904.....	73.9	0.17	1910.....	72.5	0.01	1916.....	73.2	0.20
1899.....	70.8	0.11	1905.....	73.4	0.03	1911.....	70.1	0.00	1917.....	72.5	0.04
1900.....	71.0	0.02	1906.....	73.6	0.13	1912.....	70.2	0.06	1918.....	71.4	0.14
1901.....	75.6	0.12	1907.....	71.0	0.11	1913.....	74.8	0.30
1902.....	71.8	0.06	1908.....	73.3	0.12	1914.....	72.1	0.02

Explanation of Reference Marks Used in This Publication.

The departures from the normal temperature and precipitation are computed only for such stations as have ten or more years of record, but all complete reports are used in determining section or division means.
 † Also on other dates. T., Precipitation is less than 0.01 inch rain or melted snow.
 a, b, c, etc., indicate respectively, 1, 2, 3, etc., days missing from the record.
 Station at Llano formerly known as Valermo; station at Lytle Creek formerly known as Rialto (near).

Daily Temperature for August, 1918.

Table with columns for Stations, 1-31, and Mean. Rows list various California locations like Bakersfield, Calexico, Chico, Escondido, Eureka, Fresno, Independence, Los Angeles, Merced, Mount Tamalpais, Oakland, Orland, Oroville, Paso Robles, Point Reyes, Pomona, Porterville, Red Bluff, Redlands, Sacramento, San Bernardino, San Diego, San Francisco, San Jose, San Luis Obispo, Santa Barbara, Santa Rosa, and Stockton.

SUPPLEMENTAL PRECIPITATION TABLE.

Table with columns for Stations, Watersheds, and Precip. inches. Rows list various locations and watersheds such as Abbots, Apuanga, Alder Creek, Angiola, Antelope Valley, Arroyo Seco, Auberry, Auburn, Bagdad, Barrett Dam, Beaumont, Beaumont (near), Big Bar, Bishop, Bishop Creek, Bridgeport, Cahulla, Campbell, Camp Baldy, Camp Bonita, Campo, Camp Rincon, Canon Dam, Cascada, Centerville, Chester, China Flat, Churn Creek, Clovis, Clyde Ranch, Colby Springs, Coldbrook, Colusa, Covelo, Crockett, Cuyamaca, Deer Creek, Del Monte, Denair, De Sable, Dillon Ranch, Dinuba, Dobbins (near), East Park, Echo Mountain, Edison, Electra, Emigrant Gap, Fairmount, Fish Canyon, Fordyce Dam, Foresters Sanitar, Fort Bragg, Gullville, Gray Mountain, Gridley, Haines Canyon, Hansen's Ranch, Happy Camp, Hayfork, Head Dam, Helen Mine, Hetch Hetchy, Hullville (near), Huntington Lake, India, Iron Forks, Julian, Kennedy Mine, Kentfield, La Crescenta, La Jolla, Lake Eleanor, Lake Spaulding, Lancaster (near), Las Plumas, Le Grand, Live Oak Canyon, Livermore, Llano, Los Gatos, Lower Haines Canyon, Lytle Creek, Magalia, Maricopa, Mariposa, May Canyon, Mesa Grande, Middewater, Mill Creek, Milton (near), Mokelumne Hill, Monrovia Canyon, Montague, Montgomery Creek, Mountain Springs, Mouth S. Anton C, Nellie, Niles, North Bloomfield, North Fork, North Lakeport, Oak Grove, Oceanside, Ojai Valley, O'Melveny Camp, Orlenas, Ozena, Pacoima, Parkfield, Peachland, Point Loma, Quincy, Reedley, Represa, Roherville, Ruth, and San Antonio Canyon.