

U. S. DEPARTMENT OF AGRICULTURE, WEATHER BUREAU

CLIMATOLOGICAL DATA

CALIFORNIA SECTION
E. H. BOWIE

Vol. XXXVIII SAN FRANCISCO, JULY, 1934 No. 7

GENERAL SUMMARY

The mean temperature for the State as a whole was 0.8° below the July average, largely due to cool weather in the interior valleys and in northern mountain districts, as there was a temperature excess in the coastal area, desert regions, mountains of southern California, and extreme northeastern portion of the State. The mean daily temperature range and extremes of temperature were near normal. Daily means averaged above normal from the 1st to 3rd, 9th to 13th, 16th to 18th, and 26th to 30th, with well defined intervening cool periods. The highest temperature reported was 125° at Greenland Ranch on the 12th and 27th and the lowest was 26° at Portola on the 5th and 8th. Monthly means ranged from 102.1° at Greenland Ranch to 54.0° at Ellery Lake.

The July precipitation was 71 per cent of the normal and its distribution was unusual. Heavy local showers occurred over the desert regions, the mountains of southern California, and Siskiyou County, while elsewhere there was little or no precipitation. The showers in extreme northern districts occurred on the 2nd or 3rd and elsewhere around the 2nd, 22nd, and 28th. The greatest monthly total was 1.43 inches at Kingston and the heaviest fall in 24 hours was 1.13 inches at Palm Springs on the 22nd. Sunshine averaged slightly above and the relative humidity somewhat below normal. Strong winds did some damage locally in Siskiyou County. Brush and forest fires were numerous and did more than the usual amount of damage.

Harvesting of crops made excellent progress in July under nearly ideal weather conditions, and growing crops made good progress, except locally in the southern San Joaquin Valley and generally in the Imperial Valley where a shortage of irrigation water caused some deterioration. High temperatures sunburned grapes and walnuts in a few localities. The yield of deciduous fruits was somewhat lighter than usual, but the quality of the fruits was excellent. Rice, sugar beets, beans, and hops made favorable progress and avocado and citrus groves continued in good condition, with no more than the usual dropping of new fruit. Feed for livestock was ample in most of the northern half, but was deficient in the drier portions of the southern half of the State.

M. S.

PRESSURE, WIND, HUMIDITY, AND SUNSHINE

Stations	Atmospheric pressure (reduced to sea level)				Wind				Relative humidity				
	Mean	Highest	Date	Lowest	Date	Average hourly velocity	Maximum velocity	Direction	Date	5 a. m.	12 noon	5 p. m.	Percentage of sunshine
Eureka	30.07	30.19	29	29.91	19	6.9	17	nw.	7	95	78	76	61
Fresno	29.87	30.05	29	29.69	18	7.9	18	nw.	1	49	21	15	39
Los Angeles	29.91	30.06	21	29.67	27	5.5	16	se.	27	84	58	55	77
Red Bluff	29.86	30.06	29	29.63	13	6.1	18	se.	6	53	25	17	96
Redding	29.86	30.06	29	29.64	13	7.8	.....	.....	43	21	15	.....	.....
Sacramento	29.88	30.05	29	29.72	13	9.4	21	sw.	6	74	34	27	99
San Diego	29.91	30.04	29	29.68	27	7.1	17	s.	27	88	72	74	72
San Francisco	29.97	30.10	29	29.84	12	8.9	25	w.	31	89	67	71	66

COMPARATIVE DATA FOR JULY

Year	Temperature				Precipitation				Number of days			
	Mean	Departure	Highest	Lowest	Average	Departure	Greatest monthly	Least monthly	Precip. 0.1 in. or more	Clear	Partly cloudy	Cloudy
1897	74.5	+ 0.8	124	21	0.01	- 0.06	0.62	0	+	24	6	1
1898	81.4	+ 7.7	124	27	T.	- 0.07	0.33	0	+	26	3	1
1899	77.9	+ 4.2	123	25	T.	- 0.07	1.00	0	+	26	3	1
1900	75.9	+ 2.2	126	30	0.03	- 0.04	1.10	0	+	26	3	1
1901	76.0	+ 2.3	121	28	0.01	- 0.06	1.01	0	+	26	3	1
1902	72.8	+ 0.9	122	17	0.07	0	2.32	0	+	25	4	1
1903	72.2	+ 0.3	121	15	T.	- 0.07	0.25	0	+	27	3	1
1904	72.2	+ 1.5	117	23	0.09	+ 0.02	0.25	0	+	27	3	1
1905	74.8	+ 1.1	128	18	0.01	- 0.06	2.33	0	+	27	3	1
1906	76.8	+ 3.1	120	27	0.04	- 0.03	1.27	0	+	27	3	1
1907	78.1	+ 0.6	123	25	0.03	- 0.04	2.40	0	+	26	3	1
1908	76.4	+ 2.7	119	34	0.04	- 0.03	1.50	0	+	27	3	1
1909	71.2	+ 2.5	117	26	0.05	- 0.02	1.60	0	+	28	2	1
1910	75.5	+ 1.8	119	22	0.10	+ 0.03	3.44	0	+	25	4	2
1911	74.1	+ 0.4	117	28	0.10	+ 0.03	2.50	0	+	24	5	2
1912	71.0	- 2.7	118	23	0.06	+ 0.01	1.94	0	+	23	6	2
1913	73.1	+ 0.6	134	22	0.46	+ 0.39	4.48	0	+	21	5	5
1914	72.4	+ 1.3	122	28	0.06	+ 0.01	3.75	0	+	25	5	1
1915	72.7	+ 1.0	120	29	0.06	+ 0.01	1.80	0	+	27	3	1
1916	70.3	+ 2.4	127	24	0.31	+ 0.24	4.17	0	+	28	2	1
1917	75.8	+ 2.1	121	28	0.08	+ 0.01	2.60	0	+	25	5	1
1918	71.5	- 3.2	120	29	0.07	+ 0.01	1.58	0	+	24	6	2
1919	72.4	+ 1.3	122	23	0.09	+ 0.02	1.47	0	+	25	5	1
1920	71.7	- 2.0	125	26	0.06	+ 0.01	1.42	0	+	25	4	2
1921	74.0	+ 0.3	123	24	0.05	- 0.02	5.30	0	+	26	4	1
1922	73.4	+ 0.3	126	28	0.15	+ 0.08	7.10	0	+	24	5	2
1923	71.4	- 2.3	123	29	0.05	- 0.02	1.85	0	+	26	4	1
1924	71.3	- 2.4	124	26	0.01	- 0.06	1.34	0	+	27	3	1
1925	73.9	+ 0.2	125	27	0.16	+ 0.08	2.45	0	+	23	6	2
1926	74.0	+ 0.3	125	26	0.07	0	1.93	0	+	26	4	1
1927	73.5	+ 0.2	125	22	0.05	- 0.02	1.41	0	+	27	3	1
1928	72.1	- 1.6	125	26	0.01	- 0.06	0.67	0	+	26	4	1
1929	72.8	+ 0.8	123	30	0.01	- 0.06	0.56	0	+	27	3	1
1930	72.6	+ 1.1	122	32	0.02	- 0.05	1.12	0	+	25	4	2
1931	72.2	+ 3.5	126	29	0.04	+ 0.03	1.48	0	+	26	4	1
1932	71.3	- 2.4	121	22	0.04	+ 0.03	0.69	0	+	27	3	1
1933	74.8	+ 1.1	127	31	0.04	- 0.03	2.20	0	+	27	3	1
1934	72.9	- 0.8	125	26	0.05	- 0.02	1.43	0	+	27	3	1
Period	73.7	.....	134	15	0.07	.....	7.10	0	+	26	4	1

†Less than one-half.

Daily evaporation (inches) and wind movement (miles) for July
(See temperature and precipitation data on the following pages)

Stations	Data	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	
Alvarado (nr) †	Evaporation	260	249	321	366	200	210	211	210	289	250	261	294	281	257	240	222	230	236	293	256	286	298	237	267	235	249	260	255	225	280	280	7,988
	Wind movement	180	140	160	150	140	110	130	70	120	200	70	50	100	180	140	50	110	120	140	130	120	70	180	120	110	110	100	120	130	180	110	8,820
Chula Vista **	Evaporation	247	229	221	208	258	236	244	258	258	258	281	279	244	233	234	268	271	236	220	240	238	212	270	268	261	219	268	289	305	282	259	7,814
	Wind movement	330	100	93	84	90	84	89	75	91	104	109	161	118	97	87	117	52	142	93	118	87	94	102	111	81	119	71	93	84	91	3,084	
Davis †	Evaporation	390	351	603	395	340	363	323	297	331	322	314	415	392	393	349	329	335	310	363	329	341	275	373	347	314	346	289	362	495	449	397	11,052
	Wind movement	50	33	97	99	72	87	94	54	36	49	17	34	51	107	69	47	44	65	114	117	131	66	82	111	45	56	28	23	102	73	71	2,124
Fall River Mill**	Evaporation	363	467	487	432	410	445	499	388	404	432	453	442	403	417	365	451	389	443	425	442	281	366	379	356	370	412	430	622	454	447	449	13,025
	Wind movement	43	56	70	93	31	85	72	38	54	46	41	46	61	78	76	55	45	68	77	86	76	51	53	52	55	40	35	67	67	62	55	1,834
Lodi**	Evaporation	460	480	510	430	360	390	330	320	370	440	440	460	460	440	350	430	510	410	410	330	380	340	410	380	330	350	430	450	440	410	460	12,720
	Wind movement	†	121	86	65	60	65	88	44	48	48	40	26	39	77	52	79	64	46	61	38	57	39	66	70	68	.....	.....	.....	.....	.....	.....	.....
Oakdale (near) †	Evaporation	557	522	585	568	454	561	436	299	412	465	616	536	580	497	457	433	594	419	463	429	273	509	470	446	339	430	532	575	608	482	613	15,155
	Wind movement	110	165	150	155	120	150	140	100	65	65	100	80	120	150	155	150	65	100	170	100	140	130	150	165	155	125	145	130	110	95	135	8,380
Tahoe***	Evaporation	170	140	200	280	250	180	240	180	170	180	160	190	260	210	230	180	180	190	200	210	210	200	180	190	180	170	180	200	240	190	220	6,160
	Wind movement	24	24	34	59	57	38	54	40	35	36	15	46	50	42	50	36	32	32	42	51	53	62	33	40	33	24	27	27	35	28	44	1,193

*Observations taken at 7:00 a. m.; **7:30 a. m.; ***8:00 a. m.; †9:00 a. m.; ‡12:00 noon. †Included in the next following entry. Wind movement by 4-cup anemometer.

Climatological Data for July, 1934

Stations	Counties	Elevation, feet	Length of record, years	Temperature, in degrees Fahr.					Precipitation, in inches					Number of days					Prevailing direction of wind	Observers		
				Mean	Departure from the normal	Highest	Date	Lowest	Date	Greatest daily range	Total	Departure from the normal	Greatest in 24 hours	Snowfall (unmelted)	With precip. 0.01 in. or more	Clear	Partly cloudy	Cloudy				
Alturas	Modoc	4,460	19	65.4	.....	87	1	50	9	29	0	.....	0	0	0	0	31	0	0	nw.	L. J. Austin
Alvarado (near)	Alameda	3	9	65.4	.....	87	1	50	9	29	0	.....	0	0	0	0	31	0	0	nw.	Leslie California Salt Co.
Amago	San Diego	2,715	22	78.4	.....	110	27	52	5	47	0	-0.17	0	0	0	0	30	0	1	w.	Ben Amago
Angiola	Tulare	208	35	79.6	-1.0	113	28	52	14	47	0	0	0	0	0	0	31	0	0	nw.	Santa Fe Co.	
Antioch	Contra Costa	46	55	78.4	-3.4	104	11	44	6	43	0	-0.01	0	0	0	0	31	0	0	w.	G. W. Vanderbunt	
Ash Mountain	Tulare	1,600	9	83.6	.....	112	28	59	17	38	0	0	0	0	0	0	24	7	0	sw.	Supt. National Park
Auberry	Fresno	2,050	19	84.0	+4.9	114	12	54	16	52	0	-0.03	0	0	0	0	31	0	0	sw.	San Joaquin & Eastern Ry.	
Auburn	Placer	1,860	63	75.9	+1.3	104	1	48	6	40	0	-0.01	0	0	0	0	31	0	0	n.	Southern Pacific Co.	
Avalon	Los Angeles	30	23	69.0	+2.4	87	28	54	18	25	T.	0	0	0	0	0	27	4	0	sw.	T. M. Polhamus	
Bakersfield	Kern	494	45	84.2	+0.2	113	28	61	16	43	0	-0.01	0	0	0	0	22	9	0	nw.	Santa Fe Co.	
Barrett Dam	San Diego	1,600	19	76.8	+0.8	109	28	50	17	33	0	-0.08	0	0	0	0	29	2	2	w.	Supt. Barrett Dam	
Berkeley	Alameda	299	47	60.8	-0.6	78	126	50	7	24	0	-0.02	0	0	0	0	20	9	2	sw.	State University	
Betteravia	Santa Barbara	155	21	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	28	1	2	w.	Union Sugar Co.
Big Creek	Fresno	4,900	19	72.3	-0.7	96	27	49	8	29	0	-0.06	0	0	0	0	25	6	0	sw.	San Joaquin & Eastern Ry.	
Bishop Creek	Inyo	8,390	24	61.6	+1.0	83	27	39	4	36	0.76	+0.40	0.60	0	0	0	2	24	5	2	s.	H. F. Stowe
Blue Canyon	Placer	4,695	35	66.8	+1.2	94	128	40	7	40	0	-0.06	0	0	0	0	30	0	1	s.	Mrs. K. M. Bartlett	
Blythe	Riverside	258	25	92.8	+2.0	121	11	67	25	52	0.08	-0.17	0.08	0	0	0	1	24	5	2	sw.	Palo Verde Water Co.
Bonita	San Diego	110	19	70.6	+0.2	94	27	54	26	34	T.	0	0	0	0	0	31	8	2	w.	R. M. Allen	
Bowman Dam	Nevada	5,347	50	67.6	.....	88	11	48	17	35	0	-0.17	0	0	0	0	20	1	0	sw.	Victor Henry
Brawley	Imperial	-119	25	93.9	+3.5	120	11	68	2	42	0	-0.07	0	0	0	0	31	0	0	se.	E. P. Crane	
Brooks	Yolo	350	13	78.8	+2.1	110	27	48	6	50	0	0	0	0	0	0	31	0	0	w.	Earl Smith	
Camptonville (near)	Yuba	3,500	27	71.0	-2.8	98	27	46	16	44	0	-0.04	0	0	0	0	30	0	1	s.	Pacific Gas & Electric Co.	
Canyon Dam	Plumas	4,570	20	65.4	+2.3	97	27	38	7	51	0	-0.10	0	0	0	0	29	1	1	s.	Great Western Power Co.	
Cedarville	Modoc	4,675	40	73.6	+2.5	104	127	43	6	48	0	-0.22	0	0	0	0	31	0	0	se.	T. H. Johnstone Co.	
Chico	Butte	189	64	78.8	-2.6	108	11	50	7	46	0	-0.03	0	0	0	0	31	0	0	se.	U. S. Bureau Plant Ind.	
China Flat	San Diego	600	25	69.2	+3.9	100	2	45	120	6	0	-0.10	0	0	0	0	31	0	0	s.	O. I. Westbury	
Chula Vista	San Diego	9	15	68.1	+1.1	84	29	59	111	17	0	0	0	0	0	0	20	5	6	nw.	Western Salt Works	
Claremont	Los Angeles	1,196	43	75.0	+1.7	113	27	49	24	46	T.	-0.02	0	0	0	0	21	8	2	sw.	Prof. F. P. Brackett	
Clear Lake (near)	Lake	1,350	20	73.8	-1.3	103	2	43	6	49	0	-0.03	0	0	0	0	29	1	1	w.	Chas. L. Austin	
Cloverdale	Sonoma	315	37	72.6	+1.2	107	11	44	15	53	0	-0.03	0	0	0	0	30	1	0	s.	L. W. Oltmann	
Coalinga	Fresno	663	22	82.0	-0.3	114	28	51	5	49	0	-0.06	0	0	0	0	29	1	1	ne.	Union Oil Co.	
Colfax	Placer	2,421	64	76.8	+0.6	103	28	47	7	37	0	-0.04	0	0	0	0	31	0	0	sw.	Southern Pacific Co.	
Colusa	Colusa	60	55	78.2	+0.9	109	12	52	7	47	0	-0.01	0	0	0	0	30	0	1	se.	F. W. Farnsworth	
Corona	Riverside	850	25	74.2	-1.3	116	27	49	8	54	T.	-0.02	0	0	0	0	31	0	0	nw.	Edward Davis	
Crescent City (near)	Del Norte	125	44	60.2	+1.6	80	1	45	13	34	T.	-0.37	0	0	0	0	23	1	7	n.	Thos. E. Peacock	
Crockett	Contra Costa	12	16	67.0	+0.7	97	11	54	12	38	0	-0.01	0	0	0	0	31	0	0	n.	Calif.-Hawaiian Sugar Co.	
Cuyamaca	San Diego	4,677	47	69.9	+0.4	96	11	47	7	40	0.92	+0.52	0.92	0	0	0	1	29	2	0	w.	A. M. Lewis
Davis	Yolo	51	62	74.4	-2.0	109	-2	47	15	54	0	-0.01	0	0	0	0	30	1	0	s.	University Farm	
Deer Creek	Nevada	3,700	27	65.8	-0.2	98	27	36	15	50	0	-0.04	0	0	0	0	30	1	0	w.	Pacific Gas & Electric Co.	
Del Monte	Monterey	40	23	60.2	+1.5	79	1	44	15	26	0	0	0	0	0	0	16	14	4	sw.	Del Monte Properties Co.	
Denair	Stanislaus	126	35	76.6	+0.1	106	12	50	15	46	0	-0.02	0	0	0	0	31	0	0	n.	Santa Fe Co.	
De Sable	Yuba	2,700	30	71.0	-1.1	102	27	44	8	51	0	-0.01	0	0	0	0	30	1	0	s.	Pacific Gas & Electric Co.	
Dobbins (near)	Yuba	1,650	30	76.6	+2.2	108	1	49	8	42	0	-0.02	0	0	0	0	30	1	0	nw.	Pacific Gas & Electric Co.	
Doyle	Lassen	4,300	11	70.6	-1.0	106	28	52	7	56	0	-0.15	0	0	0	0	30	0	1	sw.	A. E. Pattau	
Dudley	Kings	585	22	84.0	-1.5	110	12	65	7	41	0	-0.01	0	0	0	0	30	0	1	s.	Union Oil Co.	
Dudley's	Mariposa	3,000	25	67.5	-0.3	102	28	35	17	53	0	-0.02	0	0	0	0	30	0	1	nw.	Mrs. A. D. McLean	
East Park	Colusa	1,205	23	73.6	-3.4	108	28	44	7	55	0	-0.01	0	0	0	0	31	0	0	s.	U. S. Reclamation Bureau	
El Cajon	San Diego	560	37	73.4	+0.6	110	27	48	8	50	0	-0.07	0	0	0	0	23	8	0	w.	E. V. Clark	
Electra	Amador	699	30	76.6	+1.6	108	11	47	15	51	0	0	0	0	0	0	31	0	0	w.	Pacific Gas & Electric Co.	
Ellery Lake	Mono	9,600	9	54.0	.....	76	27	36	18	34	0	.....	0	0	0	0	31	0	0	w.	Southern Sierra Power Co.
Elsinore	Riverside	1,300	37	79.8	+1.2	117	27	51	3	51	T.	-0.07	0	0	0	0	29	2	0	sw.	D. R. Crane	
Escondido - 1	San Diego	750	40	72.4	+0.3	106	28	49	8	42	0	-0.03	0	0	0	0	28	2	1	w.	A. F. Hubbard	
EUREKA	Humboldt	62	45	57.3	+1.8	68	16	48	11	15	T.	-0.11	0	0	0	0	5	19	7	nw.	U. S. Weather Bureau	
Fairmont	Los Angeles	3,036	25	79.5	+1.4	105	26	57	19	30	0	-0.02	0	0	0	0	30	1	0	w.	G. Kelsey	
Fall River Mills (near)	Shasta	3,340	11	67.0	+2.9	101	28	49	15	54	0	-0.02	0	0	0	0	29	1	1	sw.	Mt. Shasta Power Co.	
Folsom	Sacramento	252	83	77.0	+0.1	106	12	50	15	46	0	-0.02	0	0	0	0	31	0	0	n.	Pacific Gas & Electric Co.	
Fontana	San Bernardino	1,825	19	75.6	+0.8	119	27	46	8	62	0.01	0	0.01	0	0	0	1	28	2	1	sw.	Lloyd Martin
Fort Bidwell	Modoc	4,735	47	70.8	+0.1	106	28	44	22	50	0.04	-0.21	0.04	0	0	0	1	27	3	1	C. R. Dicius
Fresno	Fresno	327	62	81.8	-0.3	109	28	55	7	37	0	-0.01	0	0	0	0	29	1	1	nw.	U. S. Weather Bureau	
Gem Lake	Mono	9,120	9	50.4	.....	81	27	41	7	30	0	.....	0	0	0	0	28	3	0	sw.	Southern Sierra Power Co.
Giant Forest	Tulare	6,860	13	65.8	0	92	27	41	22	36	0	-0.09	0	0	0	0	27	2	2	sw.	Supt. National Park	
Glennville (near)	Kern	3,800	25	74.3	+2.1	99	28	52	17	35	T.	-0.06	0	0	0	0	28	2	1	.....	C. H. Likely
Grass Valley	Nevada	2,690	61	78.8	+2.8	104	13	50	7	37	0	-0.04	0	0	0	0	30	1	0	sw.	E. J. Barnard	
Graton	Sonoma	190	38	65.6	+0.5	100	27	41	16	55	0	-0.03	0	0	0	0	27	4	0	sw.	I. H. Parnell	
Greenland Ranch	Inyo	-178	23	102.1	+0.2	125	112	66														

Climatological Data for July, 1934-Continued

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, Snowfall, With precip., Clear, Partly cloudy, Cloudy), Prevailing direction of wind, Observers.

Reference letters, a, b, c, appearing in table, indicate number of days missing; for example: b represents two days, etc. †Also on other dates.

Daily Temperatures for July, 1934

Table with columns for Stations, Day of Month (1-31), and Mean. Rows list various California locations such as Auburn, Bakersfield, Chico, etc., with their respective temperature data for each day of the month.

Mean Annual Maximum Temperature

(Degrees Fahrenheit)

