

U. S. DEPARTMENT OF AGRICULTURE, WEATHER BUREAU.

CALIFORNIA SECTION.

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GENERAL SUMMARY.

May was an abnormally dry month in California. The first half of the month was moderately cool, but a hot spell arrived on the 17th, and warm weather continued during the remainder of the month. As a result of this abrupt rise in temperature, snow in the Sierra Nevada Mountains melted rapidly, causing the smaller streams to maintain high stages for a few days. However, the larger streams continued to maintain abnormally low stages. Practically no rain fell in northern California. At Eureka it was the driest and coldest May in 34 years of record. The only rain of consequence in the State was that which fell in the elevated portions of southern California between the 20th and 22d. It was a windy month. Velocities of 40 miles per hour or higher were recorded on 23 days at Mount Tamalpais, and on 22 days at Point Reyes. Fog was of frequent occurrence along the coast. At the close of the month, only the highest peaks of the Sierras remained snow-covered.

Agriculturally, the weather was partly favorable, partly unfavorable. The fine, dry weather was well adapted for farm work generally, and for haying in particular. Citrus fruit maintained a good condition, but deciduous fruit in certain restricted districts suffered damage from late spring frosts. Grapes made excellent progress, and a large crop was indicated. However, grain suffered from cold nights and desiccating, northerly winds which offset the beneficial effects of April showers. In some places grain headed prematurely, because of deficient moisture. In other regions most of the grain was cut for hay. While grass was short, stock were generally in good condition. The germination and growth of truck crops, beans, corn and potatoes were slow, owing to the deficient sunshine and moisture, and because of the cold nights of the first half of the month. Due to injury from frost, the condition of the almond crop was spotted. Rice and cotton started well. Irrigation was necessary earlier than usual. At the close of the month the agricultural situation continued satisfactory, with the exception of the prospect of a serious shortage of water for summer irrigation in northern California, and particularly in the Sacramento Valley.

A. H. P.

PRESSURE.

The mean sea level pressure, determined from the records of twelve regular Weather Bureau stations, was 29.92 inches. The highest was 30.27 inches at Eureka on the 27th; the lowest was 29.50 inches at San Francisco on the 20th; the range for the State was 0.77 inch.

TEMPERATURE.

The monthly mean temperature for the State, as shown by the records of 99 stations, was 61.7°, which is 0.4° below the normal. The highest monthly mean was 83.6°, at Greenland Ranch; and the lowest was 41.6°, at Summit. The highest temperature, 114°, occurred at Greenland Ranch on the 19th; and the lowest, 16°, occurred at Portola on the 1st. The range for the State was 18°.

PRECIPITATION.

The average precipitation for the State, as shown by the records of 240 stations, was 0.20 inches, or 1.02 inch below the normal. The greatest monthly amount was 2.34 inches, at Squirrel Inn. No rain fell at 133 stations. The greatest amount in 24 hours was 1.18 inches at Squirrel Inn on the 14th.

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.....	88	75	82	304	68
Fresno.....	58	17	38	424	97
Independence.....	42	17	30	374	85
Los Angeles.....	90	64	77	264	61
Mount Tamalpais.....	51	50	50	382	86
Red Bluff.....	54	20	37	373	88
Sacramento.....	76	30	53	368	83
San Diego.....	86	73	80	217	50
San Francisco.....	83	63	72	375	85
San Jose.....	49	.....	.....	363	83
San Luis Obispo.....	81	60	70	321	74

WIND MOVEMENT.—(Miles.)

Stations.	Total mov. for month.	Ave. hr. velocity.	Maximum velocity.	Direction.	Date.	Prev. dir.
Eureka.....	5,601	7.5	36	n.	31	n.
Fresno.....	7,477	10.0	26	nw.	24	nw.
Independence.....	5,233	7.0	30	se.	8	nw.
Los Angeles.....	3,995	5.4	17	w.	16	sw.
Mount Tamalpais.....	11,301	21.9	88	nw.	21	nw.
Point Reyes.....	24,838	33.4	72	nw.	21	nw.
Red Bluff.....	5,166	6.9	27	nw.	31	nw.
Sacramento.....	6,522	8.8	28	nw.	31	s.
San Diego.....	4,971	6.7	21	s.	20	s.
San Francisco.....	9,515	12.8	35	sw.	6	sw.
San Jose.....	4,480	6.0	23	nw.	26	nw.
San Luis Obispo.....	3,464	4.7	16	w.	10	nw.

COMPARATIVE DATA FOR MAY.

Year.	Mean temp.	Ave. precip.	Year.	Mean temp.	Ave. precip.	Year.	Mean temp.	Ave. precip.	Year.	Mean temp.	Ave. precip.
1897.....	66.9	0.18	1903.....	63.5	0.14	1909.....	60.4	0.23	1915.....	57.6	4.13
1898.....	61.3	1.56	1904.....	64.9	0.22	1910.....	65.5	0.18	1916.....	58.1	0.61
1899.....	59.9	0.73	1905.....	59.6	2.18	1911.....	58.3	0.17	1917.....	57.2	0.75
1900.....	64.0	1.39	1906.....	59.8	3.19	1912.....	60.7	1.82	1918.....	59.0	0.37
1901.....	62.0	1.03	1907.....	61.5	0.57	1913.....	62.3	1.04	1919.....	63.3	0.32
1902.....	60.8	0.84	1908.....	58.0	1.63	1914.....	62.3	0.69	1920.....	61.7	0.20

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. a, b, c, etc., indicate respectively, 1, 2, 3, etc., days missing from the record.

Daily evaporation (inches) and wind movement (miles) for May, 1920.

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	
Chula Vista**1..	{ Evaporation.....	.292	.160	.169	.189	.224	.205	.120	.133	.190	.153	.231	.242	.133	.151	.197	.190	.200	.219	.222	.216	.111	.200	.244	.217	.239	.238	.226	.279	.269	.277	.208	6.354
	{ Wind movement.....	149	123	102	122	123	107	87	93	139	112	128	194	120	105	114	106	105	137	148	165	116	116	102	93	90	117	77	128	176	185	125	3.805
Dodgeland** ..	{ Evaporation.....	.356	.195	.226	.161	.567	.324	.026	.022	.041	.065	.291	.290	.729	.108	.508	.225	.393	.371	.355	.529	.638	.511	.311	.273	.292	.241	.379	.230	.430	.441	9.240	
	{ Wind movement.....	65	132	173	25	73	13	25	19	92	47	38	45	46	56	34	14	40	27	83	77	122	111	66	33	83	74	56	32	82	119	205	2.096
Oakdale (near)*3	{ Evaporation.....	.240	.269	.224	.272	.240	.243	.260	.250	.257	.258	.233	.265	.162	.287	.354	.349	.422	.352	.505	.505	.531	.511	.350	.351	.343	.457	.416	.500	.475	.388	.498	10.947
	{ Wind movement.....	70	110	60	50	140	60	70	100	100	90	80	140	80	80	160	80	100	70	110	120	140	150	100	120	110	130	80	120	110	175	145	3.170
Tahoe**4 .....	{ Evaporation.....	.120	.120	.130	.170	.130	.180	.170	.170	.170	.150	.080	.150	.090	.130	.120	.130	.100	.170	.090	.130	.160	.110	.190	.320	.280	.080	.190	.190	.210	.240	.280	4.880
	{ Wind movement.....	41	66	22	26	30	38	45	49	48	88	89	62	66	78	89	89	66	82	16	35	68	41	47	173	125	83	56	84	89	126	106	2.118

\* Observation taken at 7 a. m.; \*\* at 8 a. m. † Included in next following entry. 1 Ele. 9 ft.; 10 miles SE of San Diego. 2 Ele. 125 ft.; 16 miles SW of Chico. 3 Ele. 215 ft.; Woodward Reservoir, 8 miles N of Oakdale. 4 Ele. 6230 feet; float in Lake Tahoe

Climatological Data for May, 1920.

Table with columns for 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, Precipitation of inch or more, Clear, Partly cloudy, Cloudy), Prevailing direction of wind, and Observers. The table lists 100 stations across California with their respective climatological data for May 1920.



Daily Temperature for May, 1920.

Table with columns for Stations, 31 days (1-31), and Mean. Rows list various California cities 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 Abbot's, Anguanga, Angiola, Antelope Valley, Arrowhead Springs, Auberry, Auburn, Avalon, Azusa, Bagdad, Barrett Dam, Beaumont, Beaumont (near), Bellota, Benson's Ferry, Betteravia, Big Bar, Big Sur, Bishop Creek, Calaveras R. S., Campbell, Campo, Camptonville, Canon Dam, Cascada, Cedarriver, Centerville Pwr. H., Chester, China Flat, Churn Creek, Clovis, Coalinga, Cokrate, Crockett, Cuyamaca, Deer Creek, Del Monte, DeNair, DeSaba, and Dinuba.

\* Data obtained from 3-inch rain gage.