U.S. DEPARTMENT OF COMMERCE, WEATHER BUREAU IN COOPERATION WITH
THE WASHINGTON STATE DEPARTMENT OF COMMERCE AND ECONOMIC DEVELOPMENT
CLIMATOGRAPHY OF THE UNITED STATES 20-45

LATITUDE 47° 57'
LONGITUDE 117° 26'
ELEV. (GROUND) 2114 ft.

CLIMATOLOGICAL SUMMARY

STATION DEER PARK, WASH.

MEANS AND EXTREMES FOR PERIOD 1931-1960

Month	Temperature (°F) Means: Daily maximum	Daily minimum	Monthly	Extremes: Record highest	Year	Record lowest	Year	** Mean degree days	Precipitation Totals (Inches): Mean	Greatest daily	Year	Snow, Sleet: Mean	Maximum monthly	Year	Greatest daily	Year	Mean number of days: Precip. .10 inch or more	Temperatures: Max. 90° and above	Max. 32° and below	Min. 32° and below	Min. 0° and below	Month
(a)	30	30	30	30		30		30	30	30		16	18		16		30	30	30	30	30	
JAN	32.1	15.6	23.8	53	1935	-42	1937	1277	2.90	1.49	1932	15.7	38.1	1937	8.5	1935	8	0	13	28	5	JAN
FEB	38.5	18.2	28.4	58	1958+	-40	1933	1025	2.11	1.34	1940	12.7	30.0	1937	8.0	1943	6	0	5	25	2	FEB
MAR	47.5	25.2	36.3	71	1960	-8	1943	890	1.86	.87	1945	2.3	13.4	1932	5.0	1932	6	0	1	25	*	MAR
APR	60.3	31.5	45.9	87	1946	9	1936	573	1.53	1.39	1958	.3	2.5	1948	1.5	1933	5	0	0	16	0	APR
MAY	69.5	38.2	53.8	95	1934	19	1954+	353	1.67	1.24	1941						5	*	0	7	0	MAY
JUN	75.2	43.7	59.4	96	1939+	25	1939	183	1.52	1.10	1936						5	1	0	1	0	JUN
JUL	86.2	45.7	65.9	107	1934	28	1936	59	.47	.83	1940						2	9	0	*	0	JUL
AUG	84.5	42.9	63.7	100	1949+	23	1937	87	.58	.94	1956						2	7	0	1	0	AUG
SEP	74.4	38.6	56.5	99	1938	18	1934	270	1.18	1.15	1936						3	1	0	16	0	SEP
OCT	59.8	32.3	46.1	89	1943+	3	1935	586	2.22	1.42	1938	.6	5.0	1939	5.0	1939	6	0	*	15	0	OCT
NOV	42.3	25.4	33.8	63	1949+	-19	1955	936	2.75	1.50	1960	4.5	14.0	1942	6.0	1943	7	0	2	21	*	NOV
DEC	35.1	21.6	28.4	56	1933	-21	1951	1135	3.24	1.54	1932	14.1	30.5	1931	10.5	1932	8	0	9	27	1	DEC
Year	58.8	31.6	45.2	107	JUL 1934	-42	JAN 1937	7374	22.03	1.54	DEC 1932	50.2	38.1	JAN 1937	10.5	DEC 1932	63	18	30	172	8	Year

(a) Average length of record, years.

T Trace, an amount too small to measure.

** Base 65°F

+ Also on earlier dates, months, or years.

* Less than one half.

NARRATIVE CLIMATOLOGICAL SUMMARY

Deer Park, located in the northern section of Spokane County, is approximately 20 miles west of the Idaho border and 25 miles north of Spokane. This area is a rather level plateau with foothills of the higher mountains beginning within 10 to 15 miles east and north of the city. In an easterly direction, and within 20 miles, Mt. Spokane rises to an elevation of 5,878 feet. Mt. Spokane State Park is a summer recreational and a winter ski area. The plateau is devoted primarily to the growing of small grain crops, hay, pasture and the raising of livestock.

Some of the factors influencing the climate are terrain, location in the belt of the prevailing westerly winds, distance and direction from the ocean. The Rocky Mountains protect this area from the more severe winter storms moving southward across Canada and the Cascade Range obstructs the easterly movement of moist air from over the ocean. However, some of the air from each of these source regions reaches this section of the State. The summers are warm, sunny and dry, and the winters are rather cold with considerable cloudiness. The average afternoon temperatures in the summer are in the mid-80's, and the nighttime readings are in the mid-40's. In one of the cooler summers, maximum temperatures did not reach 90°, while in one of the warmest, 90° or higher was observed on 37 days. Maximum temperatures can be expected to reach 96° or higher on at least 4 days in 2 out of ten years. The growing season is rather short for tender crops, and it is not unusual to have a light frost in midsummer. Minimum temperatures in July can be expected to drop to 35° or lower on at least 4 nights in two out of ten years. The average number of days between the last occurrence of 32° in the spring and the first in the fall is 78 days, and the occurrence of 28° is 124 days.

Afternoon temperatures in the winter are in the 30's and the nighttime readings range from 12° to 20°. The number of days with maximum temperatures below freezing has ranged from 5 to 10 in the warmer winters increasing to 60 in the coldest. The coldest weather generally occurs when very cold air from east of the Rocky Mountains reaches this area. Under these conditions, the sky is frequently clear and the ground is covered with snow, thus additional heat is lost by radiation at night. Minimum temperatures may range from zero to -25° or lower and maximum temperatures fail to rise above 10° to 15° for a few days. In one of the colder winters in recent years, 1949-50, the average January maximum and minimum temperatures were 18.7° and -5.0°. During the winter, minimum temperatures dropped to -10° on 18 nights; -20° on 10 nights; and -30° or lower on 7 nights. In one of the warmer winters, 1952-53, the average January maximum and minimum temperatures were 42.3° and 31.0°. During the winter, minimum temperatures only dropped to 10° above zero on 6 nights.

Precipitation is light in the summer, increasing in the fall, reaching a peak in December, then gradually decreasing in the spring, with a slight increase in May and a sharp drop in July. Past records indicate that less than 16 inches, or more than 27 inches of annual precipitation can be expected in one out of ten years. Most of the precipitation falls as snow from the first of December until the last of February. In an average winter, snow accumulates to a depth of 10 to 20 inches and remains on the ground most of the time from mid-December until the first of March. In a few of the heavier snowfall winters, 30 inches or more of snow has accumulated on the ground.

The number of clear or only partly cloudy days each month increases from less than 10 in midwinter, to 15 or more in the spring and fall, and to approximately 25 in midsummer. Sunshine and relative humidity data recorded at Spokane are representative of this area. The percent of possible sunshine received each month ranges from approximately 25% in the winter to 60% in the spring and fall, and 80% or more in the summer. The number of hours of possible sunshine on a clear day ranges from 8 in December to 16 in June. The average relative humidity during the colder months ranges from 70% to 90%, decreasing in the spring to 45% to 75% and in midsummer to between 20% in the afternoon to 50% at night.

Earl L. Phillips
State Climatologist
U.S. Weather Bureau
Seattle, Washington

Total Precipitation (Inches)

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Ann'l
1931	2.67	1.62	2.12	.75	.27	1.08	.08	.00	1.58	1.22	3.11	5.56	20.06
1932	2.99	1.78	3.53	3.29	2.29	.48	.29	.11	.32	1.67	3.53	3.80	24.08
1933	2.57	.99	2.47	.51	1.13	1.26	.19	.25	2.67	3.23	1.01	6.83	23.11
1934	4.12	.84	2.18	.81	.76	.70	T	.26	1.27	3.68	4.08	3.03	21.73
1935	3.49	1.10	1.15	.95	.17	1.08	.72	.53	.14	1.12	1.83	3.22	15.50
1936	4.63	1.36	.69	.39	.94	3.02	.16	.03	1.80	.29	.24	3.12	16.67
1937	2.31	2.64	1.98	3.36	.38	3.68	.37	.70	.87	1.04	5.87	4.21	27.41
1938	2.63	2.17	2.73	.71	.55	.62	.31	.30	.22	2.51	1.45	2.03	16.23
1939	2.95	1.55	.95	.68	.47	1.23	.50	.00	.37	2.03	.66	5.85	17.24
1940	.99	5.94	2.65	2.15	.96	.34	1.54	.03	2.63	3.78	2.93	2.60	26.54
1941	3.51	1.32	.99	.94	4.59	2.07	.33	2.01	2.71	.84	2.65	5.42	27.38
1942	1.07	2.40	.62	1.40	3.52	1.76	.66	.05	.69	1.87	5.05	2.89	21.98
1943	1.60	2.39	2.38	2.07	1.11	1.80	.21	.56	.03	4.06	1.50	1.92	19.63
1944	1.61	1.24	.71	2.44	1.00	.55	.24	.22	1.18	.72	1.83	1.39	13.13
1945	2.55	2.48	4.91	1.44	2.92	1.20	T	.36	2.72	1.36	4.18	2.82	26.94
1946	3.10	2.68	2.86	1.28	1.07	1.56	.11	.23	1.34	1.76	2.70	1.33	20.02
1947	1.48	1.09	1.39	1.47	.55	2.11	.64	1.27	2.40	5.41	2.01	2.68	22.48
1948	3.13	2.64	.37	4.12	5.94	3.97	1.15	.29	.86	.96	3.03	3.49	29.95
1949	.58	5.48	2.13	.56	1.10	.51	.12	.26	.94	2.27	3.66	-	-
1950	-	3.19	4.05	-	.65	2.41	1.13	.67	.09	5.14	1.80	3.86	-
1951	3.42	1.69	1.79	.58	.60	1.20	.29	1.14	.78	6.37	-	-	-
1952	2.15	1.66	1.37	.46	.46	2.44	.12	.67	.35	.35	.92	3.49	14.44
1953	5.35	1.56	2.48	1.95	2.02	2.04	T	1.44	.52	.57	2.54	2.57	23.04
1954	4.11	1.32	1.01	1.39	.73	1.62	1.24	1.78	1.09	.70	2.44	2.52	19.95
1955	3.01	.97	.61	3.12	1.25	1.18	1.41	.00	1.62	4.01	4.07	4.99	26.24
1956	4.30	2.00	1.53	.39	1.21	1.48	.65	2.01	.41	1.75	.43	2.16	18.32
1957	1.40	1.52	2.05	1.01	5.14	1.60	.48	.74	.72	2.35	1.31	1.97	20.29
1958	4.45	4.03	1.06	3.72	.72	1.48	1.04	.21	.78	1.72	3.91	3.18	26.30
1959	5.02	1.28	1.05	.86	3.41	.70	.00	.67	3.35	2.02	3.50	2.07	23.93
1960	8.73	2.30	1.88	2.09	4.35	.29	.03	.69	.99	1.67	7.25	1.20	24.47

Average Temperature (°F)

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Ann'l
1931	31.1	30.2	39.6	46.8	56.4	59.8	66.8	65.0	56.0	45.0	31.2	25.8	46.1
1932	23.0	25.2	35.1	47.2	53.0	61.8	62.9	64.6	56.3	45.0	38.4	23.7	44.7
1933	26.6	18.7	36.3	45.6	50.2	60.2	65.8	66.4	53.4	47.4	37.0	34.6	45.2
1934	34.3	37.2	44.0	54.0	57.4	61.3	65.9	66.1	53.6	48.1	41.6	29.4	49.4
1935	26.6	31.1	36.0	43.0	52.4	59.0	65.3	64.0	60.2	44.6	30.7	29.3	45.2
1936	28.3	14.1	37.0	49.4	58.6	61.6	64.0	61.5	54.2	49.0	28.8	29.7	44.7
1937	2.3	23.4	36.8	43.2	52.8	59.5	66.2	58.2	56.6	47.8	36.7	30.4	42.8
1938	27.6	29.8	35.6	44.5	50.7	60.0	66.0	60.2	62.2	47.4	31.6	28.4	45.3
1939	29.0	22.8	36.4	47.2	53.6	55.4	65.0	64.6	55.9	44.4	36.6	34.0	45.4
1940	27.2	32.4	40.1	47.0	55.6	61.1	65.3	62.8	59.6	48.4	29.6	29.2	46.5
1941	28.0	34.0	42.0	48.2	52.3	58.8	67.4	63.0	51.6	43.4	37.6	30.8	46.4
1942	21.2	29.5	37.2	46.4	50.6	56.4	65.2	65.0	57.0	45.8	31.6	28.2	44.5
1943	19.8	29.5	29.4	47.0	48.4	58.8	66.4	63.8	59.8	49.2	36.1	27.7	44.7
1944	26.1	29.5	36.4	47.0	55.8	60.1	67.2	63.9	57.4	51.6	34.5	26.9	46.4
1945	28.6	33.0	36.3	42.2	54.4	59.2	68.4	67.2	53.4	48.3	33.2	27.6	46.0
1946	25.7	30.0	39.4	46.8	56.4	58.6	66.2	65.0	55.8	42.4	32.5	28.6	45.6
1947	21.2	34.0	40.2	46.2	57.6	58.4	66.2	63.2	56.0	48.2	32.2	29.3	46.1
1948	25.4	26.2	36.0	44.0	53.6	63.8	-	63.8	55.8	44.1	33.0	20.3	-.
1949	5.6	22.9	35.0	48.5	57.9	60.0	67.7	-	59.7	42.1	40.0	27.8	-
1950	6.9	27.5	33.5	42.4	51.4	58.4	66.0	65.3	58.5	46.1	-	30.7	-
1951	24.3	29.0	31.0	45.5	53.7	-	67.0	-	-	44.1	-	18.1	-
1952	22.1	27.6	33.9	48.5	53.9	58.1	-	-	58.1	48.7	30.9	29.0	-
1953	36.7	33.7	39.1	45.4	52.2	55.4	64.6	64.2	57.9	48.0	37.9	32.8	47.3
1954	23.6	33.1	34.9	42.8	53.8	55.1	63.7	61.5	55.0	42.5	39.5	27.7	44.4
1955	25.9	24.6	27.9	39.4	49.3	60.5	64.6	63.5	55.1	45.5	26.8	23.1	42.2
1956	26.9	18.8	32.0	47.5	54.8	57.7	65.5	-	-	-	30.6	29.4	-
1957	12.3	26.1	37.2	46.4	57.7	59.8	63.1	60.8	58.0	-	32.2	33.1	-
1958	30.3	39.1	37.4	44.0	59.8	63.6	67.9	67.1	54.1	45.3	31.4	29.3	47.4
1959	26.9	27.9	36.4	45.7	49.9	-	66.0	60.8	53.5	43.9	30.0	29.0	-
1960	20.9	31.0	36.8	45.3	50.8	60.2	70.1	62.1	57.6	47.2	35.0	27.8	45.4

STATION HISTORY

The cooperative weather station has been relocated several times since it was established in 1911. The station has remained within 4 miles of the Post Office and the elevation has ranged from 2050 to 2165 feet. The following have served as cooperative weather observers:

Name	Date	Elevation	Distance & Direction from PO
James Mills	5/16/1911-5/3/1912	2050 ft.	4 miles S
Robert Allison, Jr.	5/4/1912-1/31/1914		
Ernest Massie	2/1/1914-4/30/1918	2138	1/2 mile SE
Henry Skalicky	5/1/1918-3/31/1922	2138	
H.H. Slater	4/1/1922-4/30/1936	2121	
Herbert Mason	5/1/1936-8/31/1937	2090	3 miles SW
W.J. Aldrich	9/1/1937-5/31/1943	2150	3 miles NW
O.L. Lundale	6/7/1943-12/31/1943	2150	1 mile E
W.A. Wiese	1/1/1944-6/4/1944	2140	1/2 mile E
Ernest W. Wiese	6/5/1944-8/31/1944	2118	3/4 mile NW
Mrs. Jack Wainwright	9/26/1944-present	2165	2 miles E

PROBABILITY OF 32°, 28°, 24°, 20° AND 16° OCCURRING AS LATE IN THE SPRING OR AS EARLY IN THE FALL AS THE DATES LISTED IN THE FOLLOWING TABLE:

	PROBABILITY - SPRING				PROBABILITY - FALL			
	75%	50%	25%	10%	10%	25%	50%	75%
32°	May 23	Jun 5	Jun 19	Jun 30	Jul 30	Aug 10	Aug 22	Sep 3
28°	May 5	May 19	May 31	Jun 13	Aug 28	Sep 8	Sep 20	Oct 2
24°	Apr 7	Apr 20	May 3	May 16	Sep 15	Sep 26	Oct 8	Oct 20
20°	Mar 16	Mar 29	Apr 11	Apr 23	Oct 2	Oct 13	Oct 25	Nov 6
16°	Feb 28	Mar 13	Mar 27	Apr 7	Oct 24	Nov 4	Nov 16	Nov 28

In the above table, the 50% point is the same as the average for each freeze category.

From a statistical viewpoint based on past data, the probabilities could be considered as follows when converted into the number of occurrences to expect in a 40-year period:

75% - 30 years in 40

50% - 25 years in 40

25% - 10 years in 40

10% - 4 years in 40