U. S. DEPARTMENT OF COMMERCE, WEATHER BUREAU
IN COOPERATION WITH NEWPORT CHAMBER OF COMMERCE
CLIMATOGRAPHY OF THE UNITED STATES NO. 20 — 35

CLIMATOLOGICAL SUMMARY

LATITUDE 44° 38' N
LONGITUDE 124 04' W
ELEV. (GROUND) 136 Feet

STATION: NEWPORT, OREGON

MEANS AND EXTREMES FOR PERIOD # 1926 - 1961

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		30	30		30		30	30	30	30	30	
Jan.	49.8	38.5	44.2	68	1931	11	1957	645	9.02	3.70	1953	1.1	12.5	1930	10.0	1943	16	0	*	6	0	Jan.
Feb.	51.4	39.1	45.3	70	1938	18	1956	552	8.26	3.21	1949	0.1	1.5	1939	1.0	1949	15	0	0	4	0	Feb.
Mar.	53.2	39.7	46.5	77	1947	22	1955	574	8.13	4.36	1931	T	T	1955+	T	1942+	15	0	0	2	0	Mar.
Apr.	56.1	42.0	49.1	88	1947	29	1955	477	4.41	1.82	1937	T	1.0	1936	1.0	1936	11	*	0	1	0	Apr.
May	59.3	45.5	52.4	91	1947	30	1954	391	2.73	1.85	1936	T	T	1955+	T	1955+	7	0	0	*	0	May
June	62.1	49.0	55.6	85	1950	33	1933	282	2.42	2.21	1933	0.0	0.0				7	0	0	0	0	June
July	64.3	50.8	57.6	100	1961	39	1960	229	0.74	0.84	1939	0.0	0.0				3	*	0	0	0	July
Aug.	64.6	50.9	57.8	97	1944	38	1959	223	0.89	1.12	1960	0.0	0.0				2	*	0	0	0	Aug.
Sep.	64.5	49.0	56.8	95	1928	35	1960	246	2.11	2.60	1935	0.0	0.0				5	*	0	0	0	Sep.
Oct.	61.0	46.4	53.7	87	1936	30	1949	350	5.63	3.28	1955	T	T	1955+	T	1955+	10	0	0	*	0	Oct.
Nov.	55.5	42.4	49.0	76	1949	21	1955	480	8.45	3.70	1928	T	T	1955	T	1955	14	0	*	1	0	Nov.
Dec.	51.1	39.8	45.5	66	1939	22	1927	605	10.33	3.83	1937	T	T	1955+	T	1955+	17	0	0	3	0	Dec.
Year	57.7	44.4	51.1	100	July 1961	11	Jan. 1957	5054	63.12	4.36	Mar. 1931	1.2	12.5	Jan. 1930	10.0	Jan. 1943	122	*	*	17	0	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.

CLIMATE OF NEWPORT, OREGON

Newport is directly on the Pacific Coast with a marine climate typical of Oregon's coastal area. Within the eastern city limits the foothills of the Coast Range begin their comparatively steep ascent to the crest ridge of these mountains which, in this area, generally range between 2,000 and 3,000 feet in elevation and at the nearest point is about twelve miles east of the city. Though the city begins at the water's edge a considerable portion of it is built on a fairly level bench land largely between 125 and 175 feet above sea level. The weather station has been located at this latter area during most of its existence. This bench land, seldom more than two or three miles wide and frequently broken by steep, timbered promontories, extends north and south of Newport for the full length of Oregon's 429 mile coast line.

With the prevailing airflow from the west, most air masses arrive on the coast after being conditioned by several days' travel over the ocean. In their lower levels temperatures are often very near that of the ocean and moisture content is near the saturation point. In the wintertime when the land is much cooler than the ocean these moist air masses are cooled as they move onshore. This cooling is the result of both contact with the colder land surface and the forced lifting of this air as it moves up the slopes of the Coast Range. The net result is that in late fall, winter and early spring considerable cloudiness and frequent rains occur. Approximately 70% of the 63 inch average annual total precipitation is measured during the five months of November through March. Weather is often stormy and winds of gale force are occasionally experienced at Newport this time of year. This heavy winter precipitation is almost always in the form of rain. Most years no snow at all is recorded. When it does occasionally occur it is very light, melting within a matter of hours. The total fall for an entire season will very seldom total more than 2 or 3 inches with the greatest seasonal total of record only 13 inches.

In the warmer months as the land temperature increases a monsoon type circulation is initiated as the air over land is heated and forced upward being replaced by the cooler air moving in from the ocean, often bringing with it some fog and low stratus clouds. This fog persists only a short distance inland until further heating reduces the relative humidity of the air below the point of fog formation. This time of year few storms move across this part of the Pacific Ocean and thunderstorms seldom form locally. Consequently, precipitation during July and August and often in June and September is very light. In contrast to the heavy November to March total that for the three summer months is only 8% of the annual average.

The air conditioning effect of the Pacific Ocean produces very mild year around temperatures. There is only 14° difference between the mean temperature of January, the coldest month, and August, the warmest. Only twice in the nearly seventy years of record has a temperature as high as 100° been recorded and never has it gone as low as 0°. The graph on the reverse side shows in some detail the annual extremes that have occurred during Newport's period of record.

Despite the many cloudy days, rather frequent rains and seasonal foggy periods common to all coastal areas the Newport climate has much to recommend it. In addition to the mild, fairly uniform year around temperatures there are many clear, sunny days particularly during the spring and fall months. No sunshine data has ever been obtained here, but a long period record at North Head, Washington, a fairly comparable coastal station approximately 120 miles to the north, shows on an average year around basis the sun shines 41% of the time possible. Also, at that location heavy fog occurs on average of 44 days and thunderstorms on 3 days per year.

Precipitation increases rapidly with elevation in the Coast Range, and average annual totals of well over 100 inches are very common near the crest. As a result, they offer one of the most rapid tree growing areas in the United States. The cutting and processing of Lincoln County's vast forests of Douglas fir, hemlock and spruce is the number one industry of the Newport area. This combined with the excellent deep water port of Yaquina Bay along the city's edge makes this one of the major lumber shipping ports of the Pacific Coast. There is too little level land for extensive farming through most of this coastal area. Fruit and vegetable crops grown are largely confined to home gardens. Most flowering bulbs do well and several are grown on a limited commercial scale. The major portion of local agriculture, however, is related to the raising of livestock with dairy products the leading source of farm income.

The climate of Newport combined with the exceptional beauty of the entire Oregon coastline is one of its more important economic resources. Hundreds of thousands of people, including both tourists from other states and vacationers from the inland areas of Oregon, visit there each year to take advantage of the cool summers and the great number of recreational opportunities to be found on the beaches, in the inflowing coastal streams and in the many wooded state parks that abound throughout this area.

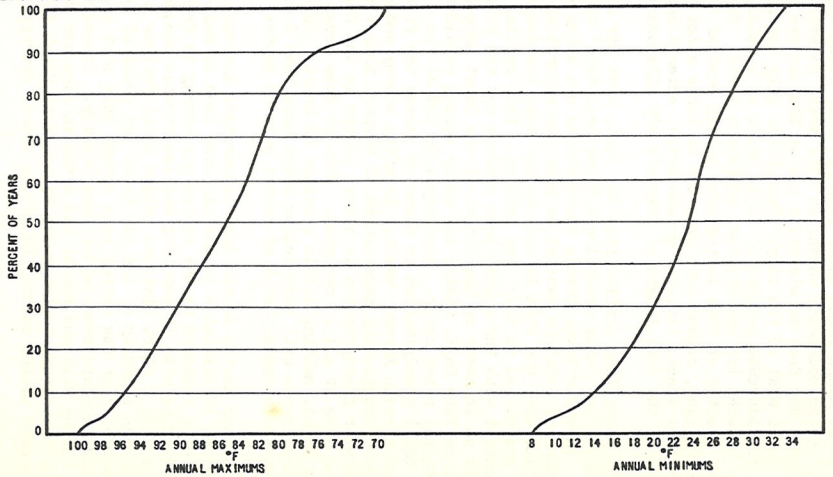
Gilbert L. Sternes, State Climatologist
Weather Bureau Office, Portland, Oregon

Average Temperature (°F)

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Ann'l
1926	46.0	47.4	48.2	51.8	52.0	54.1	55.4	56.8	54.0	54.2	50.2	44.0	51.2
1927	42.6	43.8	42.2	45.8	47.9	50.3	55.6	55.0	55.0	52.0	48.1	41.1	48.3
1928	44.6	43.0	47.6	46.8	50.4	55.2	58.8	57.8	56.6	52.8	49.9	44.4	50.7
1929	40.4	41.6	46.4	45.9	49.8	54.5	58.4	57.8	56.3	55.7	50.3	47.2	50.4
1931	48.4	48.1	49.0	52.4	55.8	57.9	59.5	59.7	58.4	52.8	46.3	41.8	52.5
1934	48.0	51.0	52.6	52.8	56.4	56.5	58.5	59.1	57.2	54.4	51.4	46.6	53.7
1936	46.6	41.6	44.8	50.7	54.0	59.2	59.6	60.0	56.6	55.0	49.8	45.3	51.9
1937	35.0	43.4	48.3	48.4	51.6	56.4	56.8	58.3	57.2	57.5	51.4	48.2	51.0
1938	46.2	46.6	46.8	51.0	52.0	55.0	56.0	56.9	58.4	55.8	47.9	46.4	51.6
1939	45.6	42.9	46.2	50.3	54.1	55.4	58.0	57.0	58.4	54.6	51.4	49.1	51.9
1940	45.9	48.4	49.8	52.0	54.2	55.1	59.0	58.7	60.4	57.4	47.8	46.8	53.0
1941	48.1	50.3	51.8	50.8	54.6	58.5	59.8	58.7	57.5	54.3	50.8	44.8	53.3
1942	44.2	45.2	45.6	50.5	53.6	56.2	61.8	60.0	56.4	54.4	48.5	47.1	52.0
1943	41.4	48.2	47.2	50.6	51.3	55.3	56.2	57.9	58.4	54.5	51.5	45.9	51.5
1944	45.0	44.8	45.5	49.6	52.5	55.8	57.2	59.3	57.0	56.6	49.7	45.4	51.5
1945	46.8	46.3	45.2	47.8	53.4	55.1	56.0	56.0	56.2	52.2	47.6	46.0	50.7
1946	44.7	44.7	46.0	48.2	54.1	56.9	59.1	57.2	57.2	50.4	46.0	45.0	50.8
1947	41.7	47.6	49.0	53.0	53.6	57.1	61.0	58.8	57.9	54.4	49.4	46.4	52.5
1948	45.2	42.4	45.4	46.6	52.9	57.6	58.4	60.2	58.4	52.6	46.3	40.3	50.6
1949	35.6	42.4	46.8	51.7	55.2	54.7	55.3	58.9	56.9	49.4	53.5	43.9	50.3
1952	41.9	43.6	43.9	47.7	51.0	53.9	56.5	57.8	56.2	54.9	48.0	45.7	50.1
1953	49.0	45.0	45.7	48.1	52.1	54.9	57.7	58.6	57.3	54.3	50.8	46.8	51.7
1954	42.9	46.8	43.0	46.0	50.4	53.6	55.1	57.2	56.4	53.4	52.3	46.3	50.3
1955	43.2	42.2	42.6	43.8	48.2	52.9	55.4	53.8	54.0	52.5	45.1	43.9	48.1
1956	44.1	40.2	43.2	46.8	51.5	54.1	56.9	57.3	55.0	50.7	46.8	45.1	49.3
1957	37.2	45.0	46.3	48.2	52.6	56.6	57.5	58.1	59.8	53.4	47.6	47.2	50.8
1958	47.9	50.5	45.3	49.3	53.3	58.7	58.8	56.7	57.0	54.2	47.7	48.9	52.4
1959	47.1	43.7	46.1	48.6	51.3	55.4	56.2	54.7	54.8	53.0	47.6	43.9	50.2
1960	41.8	44.0	45.8	48.4	50.8	53.5	54.1	55.7	53.5	52.5	47.8	45.7	49.5
1961	48.2	47.1	46.2	46.9	51.1	54.9	58.4	56.9	53.2	50.8	45.0	43.8	50.2

BELOW IS SHOWN GRAPHICALLY THE PERCENT OF YEARS MAXIMUM TEMPERATURES WITHIN RANGES OF TWO DEGREES AND MINIMUMS WITHIN RANGES OF TWO DEGREES HAVE BEEN REACHED DURING THE PERIOD 1892-1961

(FIGURES ACROSS THE BOTTOM OF THE GRAPH INDICATE THE RANGE OF VALUES INTO WHICH THE HIGHEST AND LOWEST ANNUAL TEMPERATURES HAVE BEEN GROUPED. THE VERTICAL VALUES INDICATE THE PERCENT OF YEARS TEMPERATURES AT LEAST THAT HIGH OR THAT LOW HAVE BEEN REACHED.)



Total Precipitation (Inches)

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Ann'l
1928	9.47	3.42	13.65	7.13	1.06	0.68	0.75	0.36	2.20	4.81	9.39	10.60	63.52
1929	5.14	1.53	5.01	6.80	1.32	3.53	0.33	0.22	1.14	2.02	0.86	10.55	38.45
1930	2.93	10.72	2.29	2.36	2.60	2.05	0.06	0.06	1.22	1.53	6.47	5.14	37.43
1931	8.21	4.10	15.03	4.70	1.06	4.80	0.00	0.00	3.90	5.85	11.20	14.42	73.27
1934	9.90	3.10	7.78	0.86	3.38	0.38	1.02	0.73	0.30	8.36	14.85	9.58	60.24
1935	6.60	5.09	8.32	3.59	0.36	2.18	0.93	0.41	2.78	3.58	3.54	6.08	43.46
1936	12.38	6.32	4.76	1.75	5.76	2.69	1.58	0.03	1.11	0.53	1.14	9.25	47.30
1937	6.39	9.95	7.31	8.04	2.42	6.92	0.20	1.27	1.21	5.19	18.66	15.74	83.30
1938	9.90	8.87	12.63	4.31	1.32	0.89	0.49	0.34	2.23	5.65	7.24	6.01	59.88
1939	8.46	10.34	4.71	1.30	0.94	2.75	1.31	2.08	0.51	6.10	1.99	13.50	53.99
1940	4.76	15.91	6.85	2.72	1.41	0.14	1.18	0.15	1.84	5.35	7.51	6.55	54.37
1941	7.84	2.66	2.10	3.29	4.17	1.76	0.16	1.63	7.25	3.50	8.71	14.53	57.60
1942	5.46	5.49	5.52	3.59	3.57	2.87	2.08	0.24	0.24	3.22	14.73	12.97	59.98
1943	5.59	6.72	10.22	3.46	2.39	3.64	0.67	2.29	0.33	9.32	3.40	5.34	53.37
1944	5.57	6.64	4.45	5.15	2.46	0.72	0.20	0.12	1.66	4.35	7.64	3.69	42.65
1945	6.62	8.45	8.16	6.16	4.20	0.46	0.71	0.23	3.65	2.30	14.52	9.49	64.95
1946	8.67	8.61	7.63	2.95	0.91	2.62	1.43	0.09	2.52	7.54	9.61	10.85	63.43
1947	5.77	4.21	4.91	4.56	0.61	6.88	1.12	0.50	1.68	14.10	7.61	9.49	61.44
1948	6.26	6.92	6.50	8.08	4.12	2.29	1.12	1.29	1.74	4.72	6.48	14.91	64.43
1949	1.79	15.86	5.01	1.12	4.10	1.54	0.87	0.75	2.82	3.12	8.29	10.57	55.84
1952	15.20	9.14	12.46	2.37	0.75	1.27	0.07	0.74	0.67	1.26	3.82	12.23	59.98
1953	24.24	7.97	9.14	4.60	5.66	3.09	0.54	2.91	2.48	5.84	14.22	13.45	94.14
1954	15.01	9.98	7.47	5.54	1.40	3.66	1.05	2.93	2.44	6.42	6.98	12.75	75.63
1955	5.97	6.62	7.91	10.17	1.56	1.55	1.98	0.08	3.20	11.72	11.55	16.90	79.21
1956	20.64	9.53	12.66	1.49	1.84	2.46	0.24	0.66	2.17	10.86	2.01	9.76	74.32
1957	5.71	7.48	13.60	3.90	4.09	1.63	0.36	1.37	1.15	6.80	4.91	15.34	66.34
1958	11.85	13.76	5.78	8.77	1.78	1.99	0.13	0.74	3.55	3.89	15.55	8.49	76.28
1959	15.51	10.11	8.83	2.76	3.68	4.86	1.18	0.68	5.78	5.95	4.86	6.73	70.93
1960	9.52	11.54	8.68	5.71	7.13	1.18	0.20	2.52	0.50	7.46	15.72	4.73	74.89
1961	9.22	16.64	14.47	5.08	5.77	1.04	0.27	1.21	1.12	7.61	10.10	10.20	82.73

Station History

The first weather station in Newport for which the U. S. Weather Bureau has official record was begun in September 1887 with John H. Jessup the observer. After a short period of service he was succeeded by A. E. Acklom. There are a number of periods with one or several months missing, however, until August 1892 when J. E. Mathews, a sea captain, took over the station. In September 1912 he was succeeded by his son, William Mathews, who continued with the station until April 30, 1932. During the nearly forty years that father and son maintained Newport's weather records they are well kept, both as to completeness and accuracy. The station's location at that time is given atop a hill separating Yaquina Bay from the Pacific Ocean and about one-half mile from each, at an elevation of 155 feet. Any moves that may have been made during that time were only a matter of a few feet. The station was inactive after William Mathews gave it up in April 1932 until reactivated on May 16, 1933 with Loren S. Culberston the observer. An airway station taking several synoptic observations each day was established in Newport in September 1935 with Jack J. Fogarty in charge of this work. In January 1936 the climatological work being handled by Mr. Culberston was combined with the airways program and has remained so since that time.

The synoptic program of eight observations a day was temporarily replaced in July 1949 by a regular CAA station taking hourly observations. This lasted only until November 15, 1950, and then the program of airway observers taking eight synoptic observations per day was resumed. This was under the supervision of Helen L. Schell from January 15, 1951 until July 21, 1953 at her residence, 152 SE Third, and carried on by Mrs. Teddy P. White since that time at her home, 301 NE Boundary Street.

In preparing these summaries the last thirty complete years were used in determining averages or means. For temperature values the period 1926-1961 was used with the exception of the years 1930, 1932, 1933, 1935, 1950 and 1951; for precipitation the period 1928-1961 with the exception of 1932, 1933, 1950 and 1951. While these excepted years are not to be used in computing means, any extreme values such as highest or lowest temperatures, greatest precipitation, etc., that might occur during them are acceptable.