U. S. DEPARTMENT OF COMMERCE, WEATHER BUREAU
IN COOPERATION WITH GRANVILLE COUNTY CHAMBER OF COMMERCE

CLIMATOGRAPHY OF THE UNITED STATES NO. 20 — 31

LATITUDE 36° 17' N
LONGITUDE 78° 37' W
ELEV. (GROUND) 500 Ft.

CLIMATOLOGICAL SUMMARY

STATION OXFORD, N. C.

MEANS AND EXTREMES FOR PERIOD 1930-1959

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.	51.5	32.3	41.9	78	1932	- 2	1942	716	3.44	2.18	1948	2.8	14.9	1942	10.0	1940	6	0	1	17	*	Jan.
Feb.	54.0	32.6	43.3	82	1948	5	1958+	608	3.20	2.00	1942	1.6	15.5	1948	10.0	1948	7	0	*	15	0	Feb.
Mar.	61.2	38.2	49.7	91	1945	10	1943	493	3.63	2.50	1932	0.8	8.0	1934	6.0	1947	8	*	*	9	0	Mar.
Apr.	71.7	46.9	59.3	93	1941+	25	1943	189	3.73	3.20	1934	0	0		0		6	*	0	1	0	Apr.
May	79.8	56.0	67.9	96	1938	32	1939	43	3.91	3.18	1944	T	1.5	1939	1.5	1939	7	3	0	*	0	May
June	86.4	64.1	75.3	101	1959+	44	1945+	0	4.52	3.90	1954	0	0		0		7	10	0	0	0	June
July	88.5	67.6	78.1	105	1952	51	1933	0	5.43	5.72	1959	0	0		0		8	14	0	0	0	July
Aug.	86.9	66.4	76.7	106	1932	46	1946	0	4.54	5.05	1937	0	0		0		7	12	0	0	0	Aug.
Sep.	82.1	60.6	71.4	104	1932	37	1942	33	3.49	3.25	1945	0	0		0		5	6	0	0	0	Sep.
Oct.	74.0	47.0	60.5	99	1951	24	1952	177	2.75	3.43	1959	0	0		0		5	*	0	1	0	Oct.
Nov.	61.4	39.2	50.3	90	1950	14	1950+	441	3.09	6.90	1934	0.1	2.5	1938	2.0	1938	5	*	0	8	0	Nov.
Dec.	51.9	32.1	42.0	77	1956	6	1958+	713	3.22	3.21	1958	2.2	16.0	1930	16.0	1930	6	0	1	18	0	Dec.
Year	70.8	48.6	59.7	106	1932	- 2	1942	3413	44.94	6.90	1934	7.5	16.0	1930	16.0	1930	77	45	2	69	*	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 OXFORD, NORTH CAROLINA

OXFORD is located in the east-central portion of Granville County, of which it is the county seat. Granville County is bounded on the north by the North Carolina-Virginia border, at approximately half way between the Blue Ridge Mountains and the Atlantic Ocean and around 100 miles distant from each. Projecting into the northern end of the County are portions of Buggs Island Lake, the entire area of which lies within ten to thirty miles of Oxford. Gently rolling and well-drained land comprises most of the County; the elevation above mean sea level ranges from around 300 feet near the Lake and at the southern end of the County up to 600 feet at the highest points in the vicinity of Oxford.

The climate of Granville County, mainly determined by its position in temperate latitudes, is distinctly modified by the Appalachian Mountain Range on the northwest and by the Atlantic Ocean on the east and south. The mountain barrier, at a distance of about 100 miles, affords protection from cold winter outbreaks from the northwest; minor outbreaks of cold air moving southeastward from the Great Plains tend to be turned aside by this barrier, while the stronger movements of cold air are modified in crossing the mountains. Thus the coldest weather is most likely to move toward the Orford area on north-northeast winds; cold air from more easterly directions is tempered in passing over the extensive waters of the Atlantic Ocean. Finally, the inland waters of the Buggs Island Lake tend to limit to some extent extremes of temperature which occur under conditions of light winds from the north and northeast. There has been only one occurrence of zero weather at the Oxford weather station in the past thirty years, and none since the Lake has existed. The temperature drops below freezing on an average of more than half the days of winter, but rarely fails to rise above the freezing point in the afternoon.

The average length of freeze-free growing season at Oxford is around 200 days. The average date of last occurrence in the spring of a temperature as low as 32 degrees is April 9; of 28 degrees, March 23; of 20 degrees, February 23. The average date of first occurrence in autumn of 32 degrees is October 28; of 28 degrees, November 15; of 20 degrees, December 8. The chance of having a freeze after the third week in April or before the second week in October is only about one in ten.

Summer days are warm in Oxford, but nights cool rapidly, so that early morning temperatures average below 68 degrees even at the hottest time of the year. Daytime heat is rarely extreme; while 100 degree temperatures have been recorded at one time or another in June, July, August and September, such occurrences are rare. Thus, several years may pass without any 100 degree weather.

Precipitation is usually adequate and well-distributed throughout the year at Oxford. The driest months of the year are October and November, the time when fair weather favors the harvesting of farm crops. The heaviest rainfall occurs in June, July and August, the season when plant growth requires the most moisture and when man, animal and industry consume the most water. The winter months each average between three and four inches of rain or melted snow.

The average annual snowfall at Oxford is 7.5 inches. No single month of the year averages as much as three inches of snow and sleet combined. Individual snows are usually of small quantity, and a typical winter brings two or three snows of one to two inches or less. Snow rarely remains on the ground more than a day or two. Only once in the thirty years covered by this record has the snow accumulated on the ground as much as a foot deep.

Most winter precipitation comes as a result of moving low pressure storms, while summer rainfall is mainly the result of thundershowers. Occasionally these thunderstorms produce strong winds and hail, but neither is likely to cover more than a few square miles, and the likelihood of a given point in Granville County being struck by hail or damaging winds is very small. Autumn rainfall is sometimes increased by the movement of a tropical storm through the eastern part of the State or the offshore waters, but the passage of such a storm near enough to Oxford to cause damaging winds is rare.

Prevailing winds at Oxford are from southwest in spring and summer, northeast in autumn, and west to northwest in winter. The average speed of the wind at the earth's surface is about eight miles per hour.

The sun shines about sixty percent of the daylight hours in Granville County, ranging from about half the time in winter to more than two-thirds of the time in late spring and early summer. Relative humidity averages about seventy percent around the year, with the highest humidities occurring in the late summer and the lowest in spring.

CHARLES B. CARNEY
Meteorologist in Charge

ALBERT V. HARDY
State Climatologist

Weather Bureau Airport Station
Raleigh-Durham Airport
North Carolina

Average Temperature (°F)

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Ann'l
1930	42.0	47.2	47.4	57.7	68.8	72.5	79.6	75.2	75.7	56.0	46.4	36.3	58.7
1931	40.0	43.4	43.8	55.8	64.6	73.9	79.8	74.6	74.4	61.4	54.8	49.0	59.6
1932	49.2	48.2	45.3	56.8	65.6	74.7	79.4	77.6	70.6	59.6	46.4	44.8	59.8
1933	47.6	43.8	50.0	58.8	71.4	76.8	77.6	76.2	76.0	60.5	49.1	46.8	61.2
1934	44.0	33.7	46.4	59.6	67.0	77.6	80.6	77.4	72.6	58.7	51.9	41.3	59.2
1935	39.8	42.7	55.5	56.4	65.6	76.8	77.6	77.0	70.1	59.8	52.0	34.2	59.0
1936	35.3	37.4	52.6	56.2	70.0	74.4	78.8	78.2	73.0	61.0	48.6	42.8	59.0
1937	48.6	42.0	47.4	58.0	66.4	76.6	77.4	77.6	67.6	57.0	47.5	40.4	58.9
1938	40.4	47.6	54.9	59.8	67.5	71.8	75.9	79.6	70.4	58.5	52.8	41.6	60.1
1939	43.6	48.0	52.8	58.4	67.2	77.6	76.2	77.0	73.1	60.8	46.2	41.9	60.2
1940	29.4	42.0	46.5	56.0	65.2	74.9	75.6	74.2	66.3	57.2	48.4	44.8	56.7
1941	38.3	35.7	41.8	61.8	68.3	73.0	78.2	76.2	73.1	66.4	50.4	43.4	58.9
1942	37.6	38.3	52.0	60.7	68.0	74.8	77.3	74.8	70.9	60.5	51.7	38.4	58.8
1943	41.6	44.7	47.4	57.4	68.8	77.7	76.8	76.9	68.0	57.3	47.8	40.3	58.8
1944	41.6	44.8	49.0	59.0	72.6	77.9	78.2	75.9	72.6	60.3	49.7	37.4	59.9
1945	39.4	44.0	61.6	63.6	64.0	75.6	77.6	76.0	74.2	59.6	52.3	36.0	60.4
1946	41.4	44.8	56.2	59.8	66.4	74.1	76.4	73.9	72.2	61.6	55.7	46.9	60.8
1947	46.2	35.2	41.2	60.8	69.3	75.1	77.2	78.6	72.0	66.0	48.4	41.4	59.3
1948	35.6	41.8	54.2	61.6	67.6	75.0	78.7	76.4	70.0	57.8	56.8	45.1	60.1
1949	50.0	50.1	50.8	57.4	67.6	75.7	80.4	76.7	68.9	64.2	49.6	45.2	61.3
1950	51.8	44.9	47.1	57.2	68.0	75.1	75.9	75.2	69.8	63.5	49.9	38.4	59.7
1951	43.1	44.9	50.2	58.4	66.8	75.6	78.3	76.9	70.4	63.3	46.5	43.9	59.8
1952	46.8	43.8	48.7	59.4	67.4	78.9	78.9	75.2	68.6	56.1	50.6	41.0	59.6
1953	45.0	45.7	50.0	59.2	73.4	75.0	79.1	78.4	71.6	61.9	51.5	43.8	61.2
1954	41.8	47.6	49.7	64.3	63.7	75.9	79.0	78.0	75.5	63.8	48.0	40.0	60.6
1955	39.7	44.6	53.4	62.5	69.5	69.7	80.0	77.6	71.0	59.8	48.8	37.4	59.5
1956	38.6	46.0	49.7	57.8	68.2	75.5	78.1	77.4	69.7	62.5	49.9	51.5	60.4
1957	40.8	46.8	49.7	62.7	69.4	76.7	78.7	76.0	72.7	56.8	52.9	45.6	60.7
1958	36.6	35.9	45.4	59.3	67.6	73.5	79.2	76.2	70.5	59.1	54.8	37.2	57.9
1959	40.3	44.3	49.6	61.2	70.7	75.9	77.5	79.1	71.5	62.8	50.8	44.0	60.6

Total Precipitation (Inches)

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Ann'l
1930	3.09	1.76	1.57	2.32	3.70	4.90	3.99	0.39	1.56	2.24	1.66	3.58	30.76
1931	1.64	1.15	3.17	4.26	6.13	3.26	6.25	7.63	0.92	1.21	0.23	4.59	40.44
1932	5.78	2.24	4.76	2.20	2.53	4.45	0.97	1.97	1.02	6.18	3.64	4.46	40.20
1933	3.53	3.51	2.03	4.78	6.65	3.65	2.26	4.56	1.20	0.45	1.00	1.92	35.54
1934	1.54	5.12	6.07	5.41	5.01	4.52	5.92	2.62	5.70	0.91	8.52	2.15	53.49
1935	3.02	2.11	5.25	5.35	2.57	0.76	6.30	3.72	6.01	1.85	2.89	3.53	43.36
1936	7.55	3.42	4.26	6.06	0.34	4.84	5.81	3.85	2.56	2.79	1.97	5.46	48.91
1937	7.59	3.11	2.11	6.14	1.04	4.31	4.86	11.20	2.40	5.27	1.46	1.32	50.81
1938	3.73	1.07	2.86	2.57	4.44	9.71	11.32	0.54	4.09	1.46	3.43	3.21	48.43
1939	2.83	5.65	4.76	3.58	3.99	4.87	6.84	10.09	0.59	4.39	1.91	2.28	51.78
1940	2.70	3.49	2.37	5.52	5.99	4.00	2.98	7.99	1.91	0.67	6.37	2.71	46.70
1941	1.57	1.06	3.13	3.00	0.90	5.84	5.73	2.57	1.60	0.64	0.33	3.60	29.97
1942	2.27	2.87	4.20	0.75	3.76	6.17	7.70	7.91	4.85	6.15	2.32	4.40	53.35
1943	3.48	2.01	5.19	2.68	1.76	5.22	2.83	1.55	2.56	1.26	0.69	3.60	32.83
1944	4.17	5.46	6.68	4.20	5.33	2.01	4.82	4.06	11.11	3.32	3.40	2.53	57.09
1945	2.45	5.03	1.49	3.90	4.10	3.24	15.00	2.54	10.70	1.45	2.19	6.75	58.84
1946	3.59	3.05	2.10	3.88	4.79	3.77	5.83	1.69	4.46	3.99	2.54	1.53	41.22
1947	5.07	1.80	2.59	2.64	3.59	5.11	3.40	5.83	4.73	2.47	6.10	1.11	44.44
1948	3.92	2.92	4.00	4.38	4.89	3.65	5.69	5.15	4.23	2.19	6.67	4.17	51.86
1949	3.10	3.36	2.10	3.12	4.63	5.71	3.55	6.23	2.49	3.94	2.55	0.41	41.19
1950	2.45	1.48	2.98	1.23	5.49	4.49	6.82	3.01	4.08	2.29	1.65	3.01	38.98
1951	1.46	1.65	2.60	3.96	2.25	6.07	3.33	2.69	2.26	1.96	3.20	4.34	35.77
1952	4.72	4.11	5.00	3.69	5.32	3.84	5.72	10.01	1.68	1.45	6.50	2.78	54.82
1953	3.71	3.97	5.28	4.60	3.33	9.56	1.20	0.52	3.21	0.36	1.24	4.55	41.53
1954	5.89	1.69	6.75	1.78	4.99	5.19	2.49	3.35	1.66	4.13	2.78	2.10	42.80
1955	1.40	4.77	3.86	3.51	3.45	2.11	7.11	9.04	2.98	3.59	2.11	0.91	44.84
1956	1.01	4.83	3.20	3.31	3.78	4.23	5.64	1.95	3.12	3.26	1.83	3.53	39.69
1957	3.91	5.93	1.83	1.73	3.16	3.06	1.96	4.92	4.55	2.21	6.07	4.26	43.59
1958	3.99	4.28	3.70	5.79	6.92	4.50	5.86	6.56	0.89	2.03	1.88	4.39	50.79
1959	2.01	3.10	2.88	5.59	2.46	2.56	10.77	1.99	5.69	8.26	5.45	3.42	54.18

STATION HISTORY

During the entire period of record, the weather station has been located at the North Carolina Research Station farm about two miles southwest of the Post Office at Oxford. Mr. J. M. Carr, Superintendent of the Research Station, is the present Observer.