LEDA LINCOLN

Climate

Annual Temperature (Last 30 Years)

Average Annual High Temp. (F)70, (C)21
Average Annual Low Temp. (F)43, (C)6

January Temperature

Average January High Temp. (F)48, (C)9
Average January Low Temp. (F)24, (C)-4

July Temperature

Average July High Temp. (F)87, (C)30
Average July Low Temp. (F)63, (C)17

Average Precipitation (Last 30 Years)

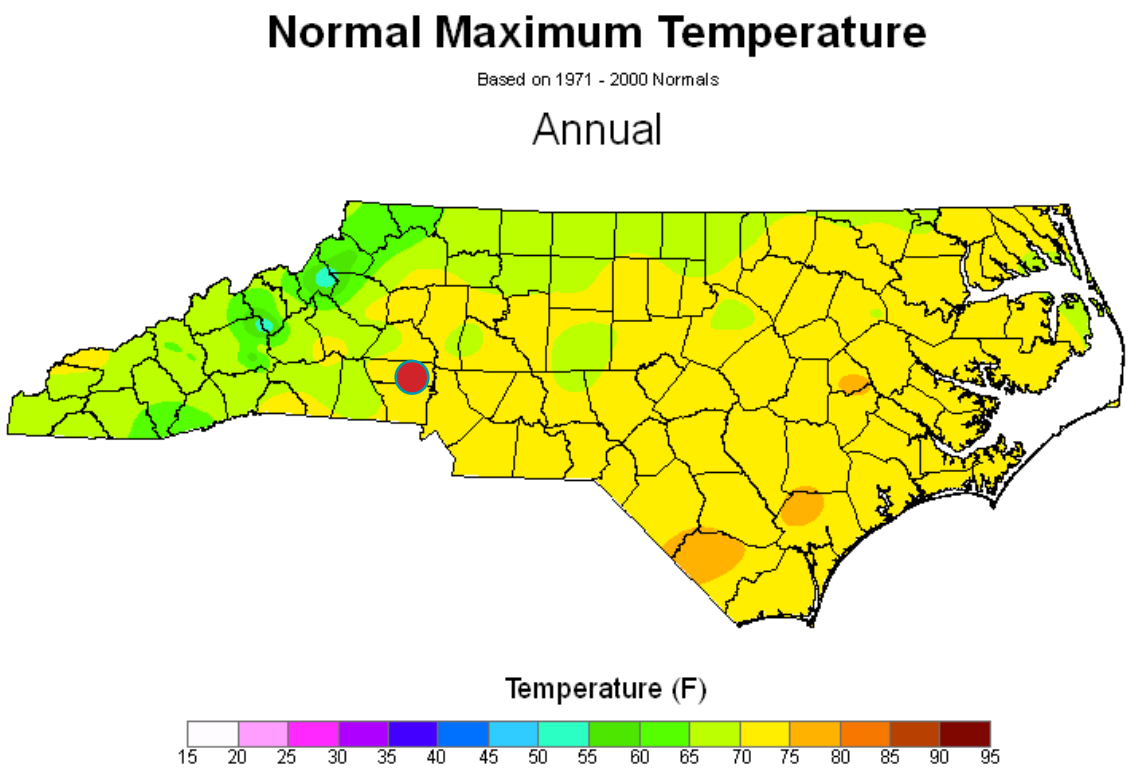
Annual Rainfall (Inches) 53.0
Annual Snowfall (Inches) 7.0

Average Degree Days (Last 30 Years)

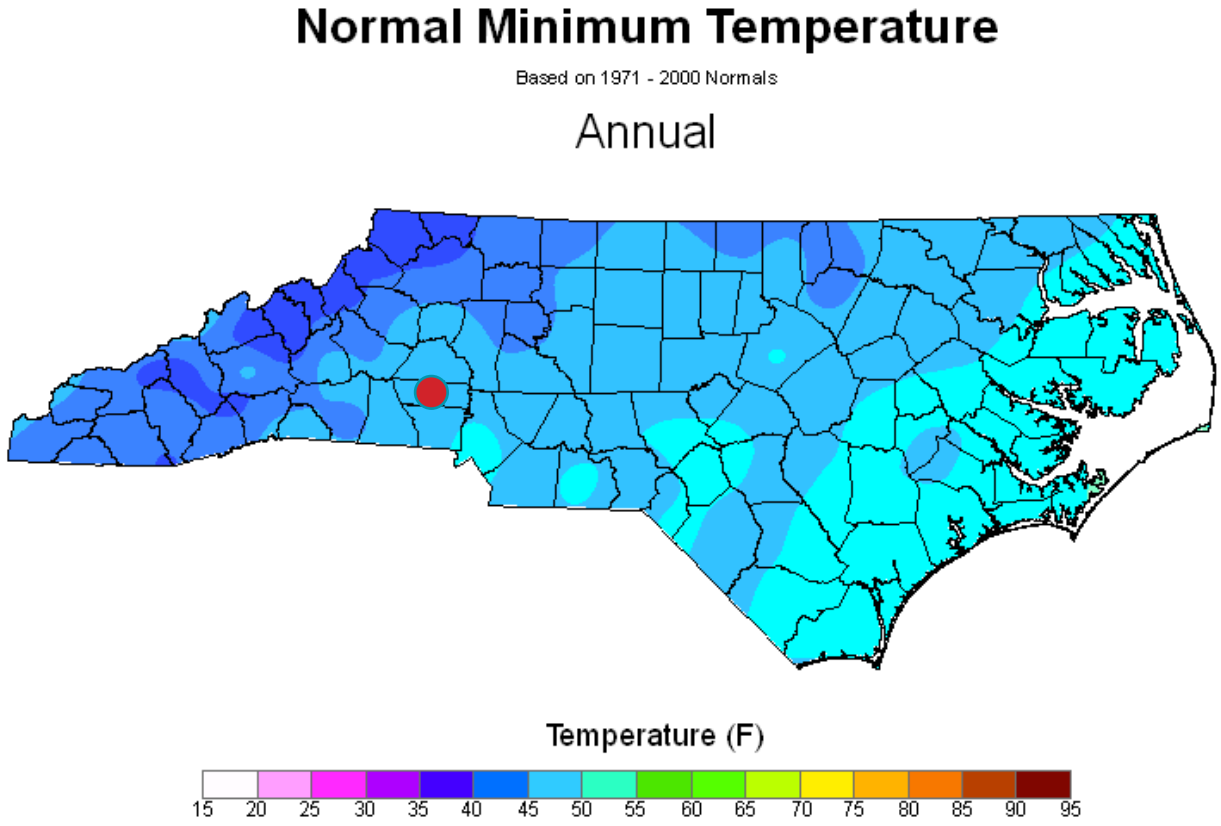
Cooling Degree Days 1,371
Heating Degree Days 3,660

Climate — Livability

Normal Maximum Temperature

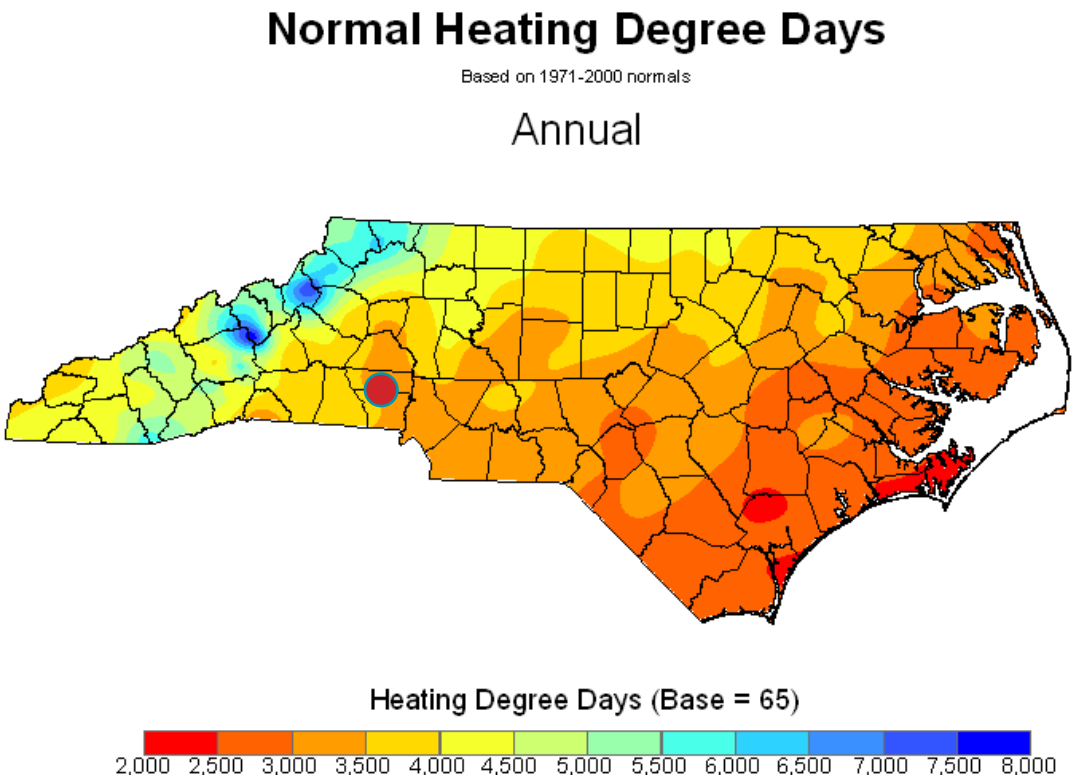


Normal Minimum Temperature

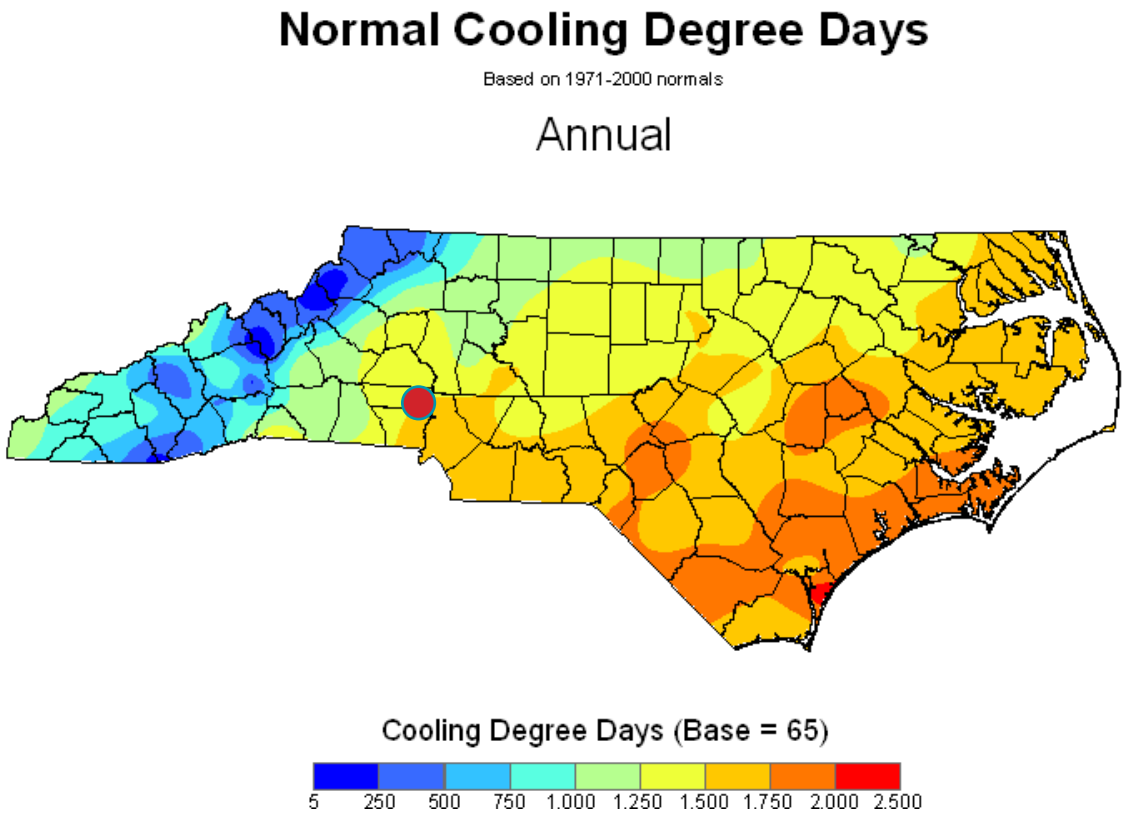


Climate — Livability

Normal Heating Degree Days



Normal Heating Degree Days

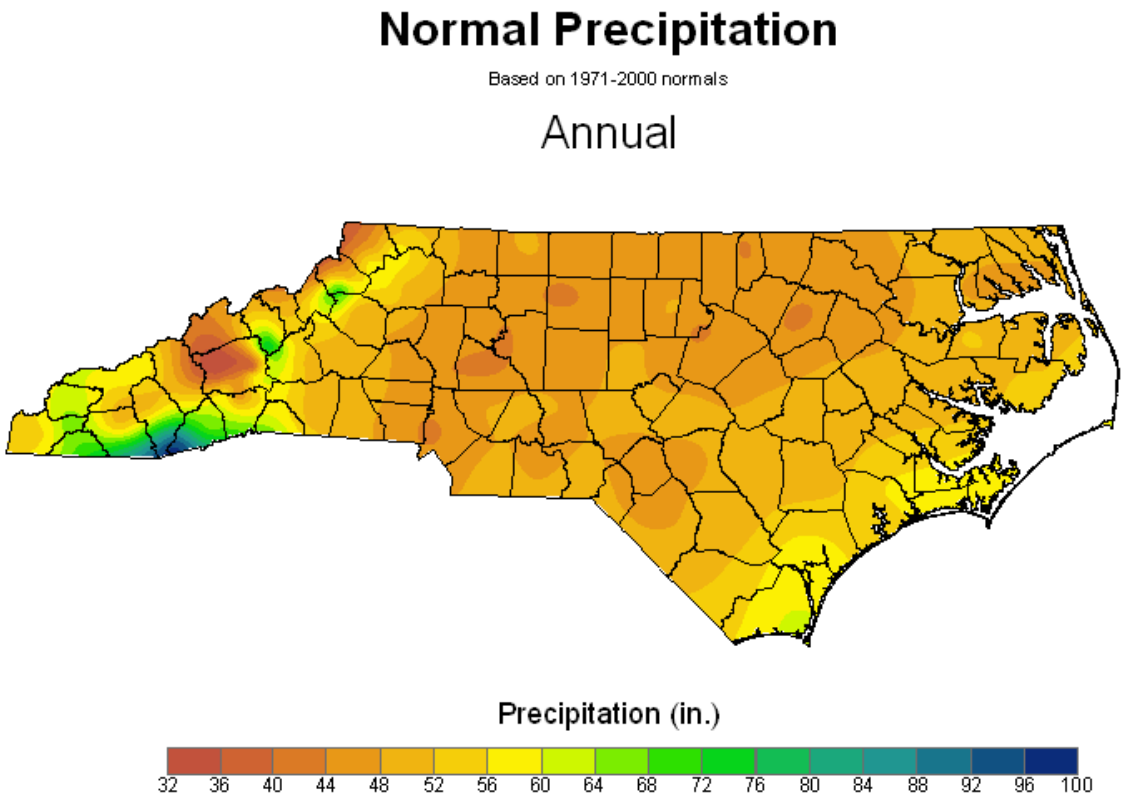


What are heating degree days and cooling degree days?

Heating degree days are indicators of household energy consumption for space heating. It was found that for an average outdoor temperature of 65 degrees Fahrenheit, most buildings require heat to maintain a 70 degree temperature inside. Similarly, for an average outdoor temperature of 65 degrees or more, most buildings require air-conditioning to maintain a 70 degree temperature inside.

How heating and cooling degree days are computed?

Take the high and low temperature for the day, and average them. If this number is greater than 65 F, then we have (Average temperature - 65) cooling degree days. If the average temperature is less than 65 degrees, then we have (65 - Average temperature) heating degree days. Running totals are kept for these units over a time period of a year so fuel distributors and power companies can assess average demands.



North Carolina lies between 33 1/2° and 37° north latitude and between 75° and 84 1/2° west longitude. The extreme length from east to west is 503 miles: greater than any other state east of the Mississippi, and its extreme breadth from north to south is 187 miles. The total area of the State is 52,712 square miles, of which 49,142 square miles are land and 3,570 squares miles are water.

The range of altitude is also the greatest of any state east of the Mississippi River, ranging from sea level along the Atlantic coast to 6,684 feet at the summit of Mount Mitchell, the highest peak in the eastern United States. Mount Mitchell is in the heart of the Blue Ridge;

this mountain range, along with the Great Smokies, lies partly in North Carolina and partly in Tennessee and forms the highest part of the Appalachian Mountains. The three principal physiographic divisions of the eastern United States are particularly well developed in North Carolina. From east to west, they are the Coastal Plain, the Piedmont, and the Mountains.

With its nearly 7,000 foot range in elevation and 300 mile range from the ocean, North Carolina has one of the most varied climates of any eastern state. Latitude accounts for some climatic variations, as do soils, plant cover, and inland bodies of water. The Gulf Stream has some direct effect on North Carolina temperatures, especially on the immediate coast. Though the Gulf Stream lies some 50 miles offshore, warm water eddies spin off from it and moderate the winter air temperatures along the Outer Banks. Coastal fronts are common during the winter months, and can push inland, bringing warmer than expected temperatures to coastal areas. However, the southern reaches of the cold Labrador Current pass between the Gulf Stream and the North Carolina coast, offsetting most of the general warming effect the Gulf Stream might otherwise have on coastal temperatures. The meeting of the two opposing currents does provide a breeding ground for rough weather. Strong low-pressure systems having their origin there develop into major storms, causing rain along the North Carolina coast and over states to the north as well.

The most important single influence contributing to the variability of North Carolina climate is altitude. In all seasons of the year, the average temperature varies more than 20° Fahrenheit from the lower coast to the highest elevations. The average annual temperature at Southport on the lower coast is nearly as high as that of interior northern Florida, while the average on the summit of Mount Mitchell is lower than that of Buffalo, NY.

Other Climatic Factors

The average relative humidity does not vary greatly from season to season but is generally the high- est in winter and lowest in spring. The lowest relative humidity is found over the southern Piedmont, where the year around average is about 65 percent. The highest are along the immediate coast, averaging around 75 percent. The least amount of actual moisture is found in the higher mountain areas, but the lower temperatures there result in relative humidity's that are about the same as else- where in the State.

Sunshine is relatively abundant, the average annual percent of possible sunshine ranges from 58 to 65 at the various stations having sunshine recorders. An average of 126 days per year are clear, 117 partly cloudy and 122 cloudy, while measurable rain falls on 120 days. The prevailing winds are generally from the southwest for 10 months of the year, and from the northeast during September and October. The average wind speed is about eight to 10 miles per hour; however, winds along the coast can exceed 100 miles per hour when hurricanes strike.

Source: State Climate Office of North Carolina