

This was written as part of an audio guide to Acadia National Park.

CADILLAC MOUNTAIN

At the summit of Cadillac Mountain, you are at the highest point on the Atlantic seaboard of the United States. In fact, if you were to follow the coastline south from here you wouldn't find a higher piece of land until you reached Brazil. Because of its height and location, this granite peak has the distinction of being the first place in the country to see the sunrise between October and March, when the sun rises south of due east. In the spring and summer months, that honor goes to Mars Hill Mountain, which is 150 miles to the northeast and near the Canadian border.

The dramatic vistas that you can see in every direction were carved by the glacial forces of the last ice age. If you had been standing atop Cadillac Mountain 20,000 years ago, you would have been quite cold. As a matter of fact, you would have been frozen beneath many feet of ice. This was the period of the Wisconsin glaciation, when an ice sheet covered much of Canada and the northern United States. All of New England was buried by up to a mile of ice and glaciers stretched across New York, the upper Midwest and into the Dakotas.

Glaciers form when a massive buildup of snow becomes compacted into ice that has a depth of at least 60 meters, or about 200 feet. These ice sheets are so large they're able to move under the force of their own weight. As a glacier inches slowly across the land it scoops up soil, gravel and rocks, which then transform the bottom of the glacier into something like a giant piece of sandpaper. All of these forces combine to spectacularly reshape the landscape over which a glacier flows - molding mountains and valleys, and even leaving gouges and scratches in the granite surface of places like Cadillac Mountain.

Now, if you were here 17,000 years ago, you may have been slightly less cold and you also might have seen the tip of Cadillac Mountain slowly become visible above the ice sheet. This is when a warming Earth caused the ice to melt and the glaciers to retreat northward. Cadillac Mountain was possibly the first piece of land in Maine to emerge from the glacier and it would have appeared as a rock island amidst a field of ice. The entire process of deglaciation took place during about eight millennia, after which Acadia National Park - and all of the northeastern United States, in fact - took on its current shape and appearance. So 9,000 years ago the area would have looked similar to what it does today. That's also when humans took advantage of the retreating ice and began moving into the region.

Today, not only do people live in the vicinity, but nearly two million tourists a year come to appreciate Cadillac Mountain's stunning panorama and the unique beauty of its pink granite face. For a short period in the late 1800's, in fact, there was even a cog railway up the mountain's western slope and a 50-room hotel on the summit. Both the railway and hotel were short-lived, however, because of financial difficulties, and the 1930's saw construction of the current 3.5 mile summit road, which made this into one of the country's most accessible mountaintops.