

CONNECTION TO SOCIAL STUDIES**● The Little Ice Age**

Earth's weather changes over time. These changes, in the form of warming trends and cooling trends, last for hundreds of years. During the cooling periods, glaciers advance. As the glaciers grow and spread, they can affect the rock and soil over which they move. Glaciers can flatten hills and polish rocks. Moving glaciers also cause long, straight, and deep scratches in rocks called striations. As a glacier retreats during a warming period, it can deposit rocks and grit picked up during the advance into valleys and plains.

From about 600 to 1400, Europe experienced warm and dry weather. This mild climate contributed to rising prosperity, better health, and increased population. Then the Little Ice Age occurred. This was a period of cooling that occurred from about 1550 to about 1850.

Effects of the Little Ice Age

During the Little Ice Age, the temperature cooled by approximately 1°C – 2°C over a period of several hundred years. The effects of this cooling were strongest in a band from Paris, France to St. Petersburg, Russia. Glaciers advanced down Alpine valleys farther than they had been in over a thousand years. Storm zones shifted about 500 km further south. Tide records from the Netherlands and Germany show that sea levels dropped. This drop occurred because more of Earth's water was frozen in ice sheets and in glaciers.

Because of the shift in temperature, spring weather was cooler and summers were wetter. Therefore, crops failed, which caused famine and disease to increase dramatically throughout Europe.

Your Turn to Think

1. What is glacial polishing, and what causes it?
2. How much did Earth cool during the Little Ice Age?
3. What physical data were used to identify the Little Ice Age?
4. What effect did the Little Ice Age have on Europe?