

# How old is that Stone Wall?

## Looking at Lichen

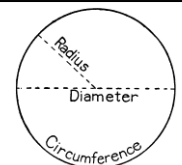
Have you ever noticed that strange grey-green stuff growing on rocks and trees and wondered what it is? That is called **lichen**! Lichens aren't plants, and they aren't just one organism, they are symbionts which are things living together. Lichens are a symbiotic relationship between algae and a fungus.

### Living Clocks

Lichens are some of the oldest organisms on earth and many are very long-lived. Their slow and steady growth rate can be used to date events in time. This is called **lichenometry**. You can measure the radius of the largest known lichen on a rock to figure out how long the rock has been exposed in that spot. Measuring the largest lichen on a stone wall can tell you the age of the wall. There are over 25,000 miles of stone walls in Connecticut alone! Many animals use them for food, shelter, and hibernation. Find one near your home and determine its age by following the steps below!



### How to Date a Stone Wall: Measuring Lichen



**You will need a ruler with centimeters.**

- Find a stone wall. Locate lichen on the rocks in the wall. They are grey and flat and grow in circles (unlike moss). Look for lichens that are perfect circles. Blob shapes are multiple lichens growing together and are not accurate for measuring.
- Lichens grow very slowly. **It takes them 10 years to grow 1 centimeter!**
- To measure the lichens: measure from the center to the edge (the radius) in centimeters. Multiply the number by 10 to get the age of the lichen, as well as the number of years the rock has been in that particular position in the stone wall. (Example: If the measurement from center to edge is 8cm, the lichen is 80 years old, and the rock will have been in that place for 80 years.)
- Take several measurements along the stone wall. If there is a measurement that is much higher or lower than the others, disregard that measurement. It could be caused by the rock falling or being moved. These measurements will give you the approximate age of the stone wall.
- **Remember, this does not tell you the age of the rock! It only tells you how long the rock has been in that spot.**