

## Hiking the Appalachian Trail



The Appalachian Trail from Maine to Georgia

In 1921 a Connecticut born man named Benton MacKaye first proposed a 2,000-mile footpath from Georgia to Maine that would travel the spine of the Appalachian Mountain Range and serve as a refuge from work life in cities.

The Trail (known now as the A.T.) is actually 2,180 miles long. It was completed in August of 1937 and follows the spine of the Appalachian Mountains from Springer Mountain in Georgia to Mount Katahdin in Maine. It travels through 14 states and is marked with a white blaze.



Over the years millions of people have walked on the Trail. Some people try to walk the entire trail. These trekkers come in three varieties:

- Thru-hikers: walk the entire trail in one continuous path.
- Section-hikers: complete sections of the Trail over a span of years.
- Flip-floppers: complete the entire Trail in discontinuous pieces.

1. If you were to spend an entire day (7am to 5pm) hiking on the Appalachian Trail, how many miles do you think you might be able to travel?

2. In actuality, thru-hikers generally take at least 5 months to hike the entire trail.
  - a. How many miles per day, on average, must a five-month thru-hiker walk?
  - b. What factors make the rate of travel so slow?
  - c. How does this rate of travel compare to walking on flat land?

We found this data on the number of thru-hikers that were recorded for the decades between 1930 and now.

<b>2,000-Milers By Decade</b>	
1930s	5
1940s	3
1950s	14
1960s	37
1970s	778
1980s	1,435
1990s	3,344
2000s	5,964
2010s	9,261
<b>Total</b>	<b>20,841</b>

If I were writing a newspaper article in 1950, I could say that the number of people hiking the entire Appalachian Trail increased 3 fold since its 1930's beginning.

3. Since the beginning of the Trail, by how many "folds" had the number of thru-hikers increased at the end of the 1970s? Please show how you figured this out.

4. Evidently 1 in 4 hikers who attempt to thru-hike the trail succeed. How many hikers must have attempted to thru-hike the Trail in 2000s decade?

Thru-hikers need to carry all of the food that they will need for their present section of the Trail. They often mail packages to themselves with supplies for their next section to nearby towns along the route. A key to the food that they carry is that it must be high in calories and lightweight. Candy bars and Ramen Noodles are popular supplies. A back packer might use 6,000 calories a day while hiking the Trail.

A 4 oz, king size Snickers Bar	540 calories
An average package of Ramen Noodle	2 servings of 190 calories each

5. Devise a few days' menus for me that consist of only Ramen Noodles and Snickers bars so that I will be able to fulfill my need for 6,000 calories while hiking just one day. (This doesn't sound attractive to me.)

Sources: <http://www.bostonglobe.com/opinion/editorials/2012/08/14/appalachian-trail-portal-natural-world/eujKrdU47eCCUX27726Tcl/story.html?event=event12>  
<https://appalachiantrail.org/explore/hike-the-a-t/thru-hiking/2000-milers/>