Title: Grow, Grow, Growing on Public Lands

Abstract/Vignette: Engage students in outdoor activities that demonstrate how public lands are for everyone and provide many opportunities for learning, fitness, and recreation.

Grade level(s): Please check all that apply.

☐ K-2  ☐ 3-5  ☑ 6-8  ☐ 9-12  ☐ College and Lifelong Learning

Discipline: Please check all that apply.

☐ Art and Music  ☐ Health and PE  ☐ Foreign Language

☑ Literature and Language Arts  ☑ Mathematics  ☑ Science

☐ Social Studies and Geography  ☐ History  ☐ Technology

Year Developed: 2008

Period (month, week, year): 4 years

Teaching environment:

☑ In the Classroom (indoors)  ☑ On the Trail

☑ In the Community  ☐ Online/Virtual
**A Trail to Curriculum Development**

**Start Here!**

**Big Idea**
What is the main idea you want your students to come away from the unit knowing?

*Public lands are for everyone and provide many opportunities for learning, fitness, and recreation.*

**State Standards/Outcomes**
Which elements of the state framework of standards does this unit address? What are the skills and outcomes you are working towards?

10.2.6 D  
Describe and apply the steps of a decision-making process to health and safety issues.

3.1.7 C 1,2,3  
Identify patterns as repeated processes or recurring elements in science and technology.

3.3.7 A 1,2,3  
Describe the similarities and differences that characterize diverse living things.

3.3.7 D 1  
Explain basic concepts of natural selection.

4.1.7 D 2  
Explain and describe characteristics of a wetland.

4.6.7 A 1,2  
Explain the flows of energy and matter from organism to organism within an ecosystem.

4.7.7 C 5, 6,7,8  
Explain natural or human actions in relation to the loss of species.

3.1.7 E 3,4  
Identify change as a variable in describing natural and physical systems.

2.6.8.A  
Compare and contrast different plots of data using values of mean, median, mode, quartiles and range.

2.6.8.G  
Determine the validity of the sampling method described in studies published in local or national newspapers.

2.8.8.B  
Discover, describe and generalize patterns, including linear, exponential and simple quadratic relationships.

**Community Opportunities**
What opportunities or needs exist with Appalachian Trail Partners that could be fulfilled by your students? Keep in mind opportunities for interdisciplinary learning.

With the new trail section being created along the Saucony Creek, our partners need the community to be aware of the trail and how it can be utilized. The idea is to start locally with a sense of community (Saucony Creek) and move onto bigger models like the AT.

**Skills and Habits of Mind**
What are the academic or life skills students will gain from this unit? What habits of mind do you expect them to demonstrate? Think all disciplines.

- Wildlife tracking/scat identification
- Nature sketching/observation
- Orienteering/map & compass work
- Population study
- Pollution studies (chem./bio/air)
- LNT guidelines/flora and fauna id/bio monitoring
- Journaling
- Reading comprehension
- First aid
- Conservation/stewardship for sustainability
- Backpacking and hiking skills
- Safety in specific weather conditions
- Water purification
- Basic geography of trail

**Essential Questions (Content)**
What are the essential questions that will help guide students toward understanding the Big Idea?

- What can we learn/do on public lands?  
  Why do public lands need us?

- Why do we need them?  
  How can we connect our learning to our community?

- How can we conserve our natural resources?  
  What are public lands?
Project: Service-Learning
What project(s) could your class undertake that would actively engage your students in learning about this theme? What could the final project be?

Y1
- Planting a riparian buffer zone (6, 7, 8)
- Trail maintenance (6, 7, 8)
- Biological/chem monitoring every year to visualize changes (6, 7)
- Guided tours for elementary students (8)
- Student-created journals and sketching w/art classes (6, 7, 8)
- Signage and kiosk for Saucony trail w/gifted educ. classes and local Eagle scout
- Appalachian Trail unit (7)

Y2
- Plant/wildlife identification
- Student-created field guide
- Mural on bridge over Saucony trail w/art elective

Y3
- Set up questing project (each point has a part to create a birdbox upon completion)
- Visit AT w/teachers and experience stations connecting various content areas (8)
- Students take parents to AT to complete day hike and/or some of the same stations they had completed on their field trip

Y4
- Markers for plant/animal identification

Project Name: Grow, Grow, Growing on Public Lands!!!
Teacher/s: Aaron Ashman, Rachel Baur, Shelby Brett, Jennifer Reis
Grade Level: 6, 7, 8
Time Frame: ____________________
This is a pre / post plan (circle one)

Partnerships & Benefit(s)
Who are the potential community partners that could assist you in this project? What are the potential benefits for your class and your partners of working together?
- Reading Eagle, K-town Patriot, Morning Call
- DCNR – teacher education
- Berks Co. Conservancy -mgmt
- Maidencreek Watershed Assoc. –mgmt, protect
- Kutztown Boro –mgmt, protect
- Blue Mtn Eagle Climbing Club -maintenance
- Appal. Trail Conservancy -advocacy
- Berks Conservation District -mgmt
- KU –mentor, pr
- Keystone Active Zone –healthy kids
- Kutztown Elem -mentors
- Kutztown Historical Society -advocacy
- Eastern Mtn Sports -

Youth Voice
How will you guide your students to express ideas, be involved in project decisions, and evaluate outcomes?

- Classroom discussions
- Student surveys

Resources
Describe resources (books, articles, materials, supplies) you will use to support this unit?
- GPS units
- Compasses
- Eco monitoring kits (Bio, soil, chem.)
- Art supplies
- Binoculars
- Hand lens
- Maps
- Field guides
- Native plants
- Workshop for teachers
- Literature (primary sources)
- Posts and signage
- Tees for students/staff
- Native plants
- Shovels, hand tools, gloves
- Backpacking supplies
- Nest boxes
- First aid kits
- Publishing funds
- Pedometers
- Tape measures
- Publishing funds
Reflection
How will reflection be built into your curriculum and activitie(s)?

It will be woven into each of the subject area disciplines before, during, and after the place-based unit.

Reflection throughout the program via graffiti, journals, and the “What? So What? Now What?” model

Student Assessment
How will you assess student learning? How will you know if they have met the goals for the established outcomes?

Summative and formative assessments will be used. Students will complete pre- and post-unit surveys. Students will analyze data collected using statistical analysis and graphing techniques. Surveys will be stored and evaluated for long-term trends as they progress through middle school. Special consideration will be given to rubrics that will allow students to clearly understand the expectations set for them.

Models
How will students understand where they’re supposed to get? What exemplars of student work will they see? What opportunities will there be for them to critique each other’s work?

Showing to students that the AT is a model for other public land trails like the Saucony Creek behind our school

Sharing w/students work that other students have created from service learning work (Harper’s Ferry, Valley questing)

Students will score each other’s work (via blind assessment).

Your Evaluation of the Project
How will you evaluate the unit and make note of what worked well and what could be improved?

Students will be given a pre- and post-survey to assess their growth, awareness, and understanding.

Teachers will note and evaluate program issues throughout the unit.

Throughout the Appalachian Trail unit (7), a KWL will be utilized, along with activities that cause the student to question and apply information learned concerning the trail, adding to continued stewardship opportunities.

The main evaluation will be to monitor the Saucony Creek Trail and determine whether the students are taking ownership for the trail and not destroying it.

Final Celebration
How will you celebrate the success of your unit and share its results with the school and community?

Full day on AT where students take parents on a hike and through outdoor learning stations consisting of different curricular topics.
**Project Title:** Grow, Grow, Growing on Public Lands

**Project Description:**

A. **Purpose:** Engage students in outdoor activities that demonstrate how public lands are for everyone and provide many opportunities for learning, fitness, and recreation.

B. **Goals and objectives:**
   a. Decrease nature deficit disorder
   b. Increase demand for use of outdoors
   c. Create conservation and stewardship initiatives
   d. Increase literacy, process, and mathematical skills
   e. Provide outlet for learning support students
   f. Increase communication between Kutztown schools and community and create partnerships and networks
   g. Encourage mentoring and peer teaching opportunities
   h. Demonstrate to students that they CAN and WILL make a difference
   i. Participate in Sacony Creek Trail initiatives

C. **Implementation:** Three head teachers throughout all grade levels will provide an inservice day, along with Nolde State Park staff, for the rest of the middle school teachers, to encourage the collaboration efforts and demonstrate the usage of the outdoors for all content areas. Also, there will be an elective that the students can join which encourages conservation and stewardship efforts geared towards “greening” the environment.

D. **Who/Number of students:** All Kutztown Middle School students will be participating (~400), with intent on mentoring the elementary school students.

E. **Community members:** The hope is to bring awareness to the entire community, along with conserving the area surrounding the Sacony Creek since the creek provides their drinking water. The idea is that there will be cooperation between the borough, Kutztown University, Kutztown schools, Maidencreek Watershed Association, DCNR, Berks County Conservancy, Boy Scouts, and Friends of the Saucony Marsh.
   a. **Timeline/Length:** To get the full curriculum implemented, the expectations are that it will take 4 years. Each year will add on another component to the project; start with a sense of place (close to home – Sacony Creek Trail) and move onto larger scale: AT.
   b. Year 1: Plant riparian buffer zone along Sacony Creek Trail, trail planting and maintenance, soil/biological/chemical/air quality monitoring, environmental day with elementary students, art sketches, visiting artists, 2-week long AT unit
   c. Year 2: Plant/wildlife identification, student-created field guides, kiosk/bulletin board on Sacony Creek Trail
   d. Year 3: Day on the AT working through stations, thru-hiker experience, GPS/questing
   e. Year 4: Everyone to the AT – pull everything together

F. **Assessments:** Pre and post unit surveys, for the students, to determine growth, awareness and understanding. The teachers will also be evaluating the program throughout.
Appalachian Trail Unit – 7th grade life science

Day 1: Youtube video – [www.youtube.com/watch?v=LEr6oEYj0sM](http://www.youtube.com/watch?v=LEr6oEYj0sM)
   Introduction to Appalachian Trail (KWL)
   Appalachian Trail Basic Facts
   Homework: what would you pack in your bag if you were hiking the entire trail?

Day 2: Backpack discussion – What should you take and why? How much should the backpack weigh (equipment/food/water)?

Day 3: Food discussion – What types of food could you take and why? Choose meals for 4 days and determine whether the weight requirements would suffice.

Day 4: History of the Appalachian Trail
   Mapping activity – Use full map of AT; 1 state per two students; list all mountains, rivers, lakes, state parks, national parks, state forests, national forests, state reservations, preserves, trail clubs, and length of trail

Day 5: Discuss journals entries/letter writing and begin writing.

Day 6: Blaze around school – discuss blazes; walk around school/outside following blazes; end in shelter with treat waiting for them (students brought in 1 food item for their food project).

Day 7: Computer lab using Appalachian Trail Conservancy website; choose plant or animal; create trading card (drawing on front; information on back)

Day 8: Thru-hiker presentation (1 student’s father from the 7th grade class will come in and present)

Day 9: Cut out and color hiker with creating trail name: Place hiker on large strip map of AT where they would like to hike one day; Writing assessment: What does the AT now mean to me? What was your least and favorite part of the unit? Why?
Grow, Grow, Growing on Public Lands
6 October 2008
Teacher In-service

Group A
Stern
Freed
Thompson
Paterno
Daneshyar
Longacre
Sunday
Schappell
Heiter

Group B
Cottone
Patton
Haas
Summer
Neuheimer
Moreland
Weber
Zeplin
Sweeney
Roberts

Group C
Boyle
Christian
Haring
Kenney
Evans
Collier
DeVeres
Groller
Huffert
Cullen

8:00-8:30  ALL TEACHERS
Intro
Bioblitz
DVD
Breakout logistics

<table>
<thead>
<tr>
<th>TIME</th>
<th>Group A</th>
<th>Group B</th>
<th>Group C</th>
</tr>
</thead>
<tbody>
<tr>
<td>8:35-9:20</td>
<td>Trail walk w/ Dick Diehm</td>
<td>Outdoor classroom w/Nolde staff</td>
<td>Read, write, math/ OR art</td>
</tr>
<tr>
<td>9:30-10:10</td>
<td>Read, write, math/ OR art</td>
<td>Trail walk w/ Dick Diehm</td>
<td>Outdoor classroom w/ Nolde staff</td>
</tr>
<tr>
<td>10:20-10:55</td>
<td>Outdoor classroom w/ Nolde staff</td>
<td>Read, write, math/ OR art</td>
<td>Trail walk w/ Dick Diehm</td>
</tr>
</tbody>
</table>
A. T. Journal Starters on HIKING the A.T.

1. You’ve made it to Harper’s Ferry, WV, where you are to record information regarding the hike this far, approximately half way, what do you say?
2. You’ve spent the past 5 months preparing for your “big” hike on the A.T., what are your expectations? What do you hope to gain from this trip?
3. You’re 10 miles from Mt. Katahdin, how do you feel? What have you learned from your experience?
4. It’s been pouring rain for the past 3 days, and it’s really draining your emotional side. What will you do? How will you find the strength to continue?
5. You’re just been given your trail name, how did you get it? Who gave it to you along the trail? How did you meet them?
6. After hiking for 5 days and eating boxed food without showering, you arrive in a nice town, what will you do?
7. Discuss some of the interesting people you’ve met along the way.
8. Explain some of the trials and tribulations you’ve faced along the trail.
9. Discuss any interesting encounters you’ve had with wildlife, plants and animals.
10. What does the trail now mean to you?
11. How has this experience changed your life?
12. Will you travel with other people or by yourself? Why? What will happen when you meet new people along the trail?

Journal Rubric – 15 points/journal (Use Journal Starters from above; choose any)
- Includes date, place, time, scenery (5)
- Includes creativity (7)
- Adds previous knowledge from unit (3)

Letter to Thru-Hiker Rubric -- 15 points
- Explains reason for writing (2)
- Asks 10 pertinent questions (10)
- Shows previous knowledge from unit (3)

Trading Cards Rubric – 20 points
- Sketches organism in color (10)
- Provides information regarding organism (10)

http://www.appalachiantrail.org/site/c.jkLXJ8MQKtH/b.1077493/k.BA13/Plants_and_Animals.htm

Bring in Food Rubric – 25 points
- Figure out food for 4 days on A.T.
  - Plan meals for breakfast and dinner, with 2 snacks (12)
  - Weigh items, determine if they would fit within requirements of backpack load (8)
  - Bring in 1 food item that fits the A.T. food list (5)
More Basic A.T. Facts
14 states: ME, VT, MA NH, CT, NY, NJ, PA, MD, WV, VA, NC, SC, TN

>10,000 people since 1936 – 20% of all thru-hiker hopefuls make it!

Leave No Trace Guidelines:
1. Know before you go
2. Choose the right path
3. Trash your trash
4. Leave what you find
5. Be careful with fire
6. Respect wildlife
7. Be kind to other visitors

Backpack Information:
- 20% body weight; approximately 20-30 lbs.
- 2 lbs. food per day for 4 days
- 2 L water per day at 2 lbs. each
- Rest is left for equipment

Clothing: 3 layer system
A. Wicking: transport moisture away from skin
B. Traps body heat
  - 1 pair midweight and light wicking long underwear
  - 1 nylon shorts and 2 pair nylon liner socks
  - 1 midweight polar jacket, balaclava, and fleece socks
  - 1 weatherproof/windproof nylon parka
  - 1 weatherproof/windproof nylon rain pants
  - 1 pair thermamax glove liners and insulated weatherproof/windproof gloves
  - 1 wool/polyester cap

1 set clothing for hiking; 1 set clothing for lounging/camp gear

Blazes: rectangle of paint two inches wide and six inches high
I. White -- mark the A.T.
II. 2 White -- signal an obscure turn, route change, or incoming side trail
III. Blue -- Side trails and shelter trails
IV. Other colors -- other intersecting trails

Food:
- Breakfast – poptarts, oatmeal, cereal, coffee, hot chocolate
- Snacks – granola, cookies, trail mix, dried fruit, peanut butter, sunflower seeds, hard candy, crackers, cheese, M&M’s, pudding
- Dinner – instant rice, Ramen noodles, Lipton noodles, instant mashed potatoes, canned chicken/tuna/ham, soup mixes
- Bagels, pitas, English muffins, tortillas
History

Who was Benton MacKaye, and what was his connection to the Appalachian Trail?

He first published the idea. MacKaye (1879-1975) grew up in Shirley Center, Massachusetts, reading the work of American naturalists and poets and taking long walks in the mountains of Massachusetts and Vermont. MacKaye (which is rhymes with "sky") sometimes claimed that the idea for the A.T. was born one day when he was sitting in a tree atop Stratton Mountain in Vermont. But, after graduating from Harvard, he eventually went to work in the new U.S. Forest Service and began carving out a niche as a profound thinker and an advocate for wilderness. By 1919, his radical ideas had led to him being edged out of the USFS, and he turned his attention to creating a new discipline that later came to be called "regional planning." His initial 1921 "project in regional planning" was a proposal for a network of work camps and communities in the mountains, all linked by a trail that ran from the highest point in New England to the highest point in the South. He called it the Appalachian Trail.

Read MacKaye's article: An Appalachian Trail: A Project in Regional Planning (PDF).

Why did he propose it?

MacKaye was convinced that the pace of urban and industrial life along the East Coast was harmful to people. He envisioned the A.T. as a path interspersed with planned wilderness communities where people could go to renew themselves. That idea never gained much traction, but the notion of a thousand-mile footpath in the mountains fired the imaginations of hikers and outdoorsmen from Maine to Georgia. Inspired by him, they began building trails and trying to connect them.

What was his connection to ATC?

MacKaye was responsible for convening and organizing the first Appalachian Trail "conference" in Washington, D.C., in 1925. That gathering of hikers, foresters, and public officials embraced the goal of building the Trail. They established an organization, called the Appalachian Trail Conference, appointed MacKaye as its "field organizer," and named Major William Welch, manager of New York's Harriman Park, as its first chairman. The Appalachian Trail Conference became the Appalachian Trail Conservancy in 2005.
What happened next?

Some perfunctory scouting of routes took place. A few short sections were marked and connected. New trails were built in New York. Welch designed a logo and Trail markers. Committees met in a few northeastern states and talked about the idea. But, for several years, the idea didn't really go anywhere. MacKaye was much better at inspirational abstract thinking than practical organizing, and it soon became apparent that someone else was going to have to take the lead for the Trail to actually get built.

Who pushed the project forward?

Two men, retired Judge Arthur Perkins of Connecticut and admiralty lawyer Myron Avery of Washington, D.C. Perkins took the idea and ran with it, essentially appointing himself as the acting chairman of ATC in the late 1920s and recruiting Avery to lead the effort in the area around Washington. Both began vigorously proselytizing the idea of the Trail in 1928 and 1929, championing MacKaye's ideas to recruit volunteers, establishing hiking clubs up and down the coast, and actually going out to hike, clear brush, and mark paths themselves. As Perkins' health failed in the early 1930s, Avery took over, devoting incredible time, energy, and willpower to establishing a network of volunteers, developing clubs, working with the government, building the organization of the ATC, and setting the Trail's northern terminus at Katahdin in his native Maine. Avery remained chairman of ATC until 1952.

What was the relationship between MacKaye and Myron Avery?

They were cordial at first, but, by the mid-1930s, as Avery took charge of the Trail project, they quarreled over fundamental issues and visions of what the Trail should be. Avery was more interested in hiking and in connecting the sections of the Trail, while MacKaye was more interested in the Trail's role in promoting wilderness. MacKaye disassociated himself from ATC in 1935 to found the Wilderness Society and was not closely involved with the Trail again until after Avery's death in 1952.

When was the Trail completed?

In 1937. It fell into disrepair during World War II, when Trail maintainers were unable to work on it, and parts of the route were lost. After the war, a concerted effort was made to restore it, and it was once again declared complete in 1951.
What happened after it was completed?

It's useful to look at the Trail's history in three eras: the era of Trail-building, which lasted until the Trail was completed in 1937; the era of Trail protection, which lasted until 1968, when Congress made the A.T. a national scenic trail; and the era of management and promotion, which has lasted until the present day. The first era was dominated by personalities and focused on getting the thing built and blazed from one end to the other. The second era saw the growth of the clubs taking care of it, the growth of ATC, the construction of shelters, and a continuing battle to keep the route open over the many hundreds of miles of private property that it crossed. The third era saw an explosion of the number of people hiking the A.T. as the government began buying land along the route to guarantee the permanence of the footpath and volunteers shifted their emphasis to the hard work of managing a part of the national park system.

How was the original Trail different from today's A.T.?

At first, the goal was simply to blaze a connected route. Often, this meant that the Trail led along old forest roads and other trails. Trail maintainers mostly just cleared brush and painted blazes. Today's Trail has mostly been moved off the old roads and onto new paths dug and reinforced especially for hikers. Today's route, though engineered much more elaborately, often requires more climbing, because it leads up the sides of many mountains that the old woods roads bypassed.

How do terms like "Trailway," "greenway," "buffer," and "view-shed" fit into this history?

The idea of a "Trailway" was first embraced by ATC in 1937. It meant that there was more to the Appalachian Trail than just the footpath. The "Trailway" referred to an area dedicated to the interests of those on foot, originally a mile on either side. In some cases, that came to mean a "buffer"—a legally protected area around the path that kept the sights and sounds of civilization, logging, and development away from the solitary hiker. In other cases, it meant a great deal more. It evolved into a notion of a "greenway," a broad swath of protected land through which the Trail ran. Crucial to the idea of a greenway was that of the "viewshed," the countryside visible from the Trail's high points. In the years since the A.T. became a national scenic trail, the Conference has worked to influence the development of surrounding areas so that the views from the Trail remain scenic, even when those views are of areas well outside the boundaries of the public Trail lands themselves.

When did Trail protection begin?

The notion of a protected zone was first formalized in an October 15, 1938,
agreement between the National Park Service and the U.S. Forest Service for the promotion of an Appalachian Trailway through the relevant national parks and forests, extending one mile on each side of the Trail. Within this zone, no new parallel roads would be built or any other incompatible development allowed. Timber cutting would not be permitted within 200 feet of the Trail. Similar agreements, creating a zone one-quarter-mile in width, were signed with most states through which the Trail passes.

How were Trail lands identified?

Much of the Trail was already in national forests or national parks and state and local parks, but large portions were on private property, with the agreement of the property owners. In 1970, supplemental agreements under the 1968 National Trails Systems Act—among the National Park Service, the U.S. Forest Service, and ATC—established the specific responsibilities of those organizations for initial mapping, selection of rights-of-way, relocations, maintenance, development, acquisition of land, and protection of a permanent Trail. Agreements also were signed between the Park Service and the various states, encouraging them to acquire and protect a right-of-way for the Trail outside federal land.

Why has complete protection taken so long?

Getting federal money appropriated was difficult, and not all property owners were willing to sell, which occasionally raised the specter of the government's threatening to condemn land for the Trail—always a politically unpopular action. Slow progress of federal efforts and lack of initiative by some states led Congress to strengthen the National Trails System Act in an amendment known as the Appalachian Trail Bill, which was signed by President Jimmy Carter on March 21, 1978. The new legislation emphasized the need for protecting the Trail, including acquiring a corridor, and authorized $90 million for that purpose. More money was appropriated during the Reagan, Bush, and Clinton administrations. Today, 99 percent of the Trail runs across public lands.

What is the relationship between the A.T. and the government, the Conservancy, and the clubs?

In 1984, the Interior Department delegated the responsibility for managing the A.T. corridor lands outside established parks and forests to ATC. ATC and its clubs retain primary responsibility for maintaining the footpath, too. A new, more comprehensive 10-year agreement was signed in 1994.
Important Dates in Appalachian Trail History

**October 1921** — *An Appalachian Trail: A Project in Regional Planning* (PDF) by Benton MacKaye appears in the *Journal of the American Institute of Architects*.

**April 1922** — Appalachian Trail Committee of Washington formed.

**March 3, 1925** — Appalachian Trail Conference established.

**January 1927** — Judge Arthur Perkins becomes acting ATC chairman, stimulates additional field work.

**June 1931** — Myron H. Avery elected to first of seven consecutive terms as ATC chairman.

**August 14, 1937** — Appalachian Trail completed as a continuous footpath.

**October 2, 1968** — National Trails System Act becomes law; A.T. becomes a national scenic trail under federal protection.

**August 1972** — ATC headquarters moved from Washington, D.C., to Harpers Ferry, W.Va.

**March 21, 1978** — "Appalachian Trail Amendments" to National Trails System Act signed into law.

**January 26, 1984** — National Park Service delegates to ATC the responsibility for managing A.T. corridor lands.

**November 20, 2004** — The Board of Managers of the Appalachian Trail Conference overwhelmingly votes to change the organization's name to Appalachian Trail Conservancy to better reflect its mission of preserving the trail experience for generations to come.

**July 4, 2005** — The Appalachian Trail Conference becomes the Appalachian Trail Conservancy, celebrating 80 years of caring for the Appalachian Trail.

Follow the Blazes

The Appalachian Trail is marked for daylight travel in both directions, using a system of paint "blazes" on trees, posts, and rocks. There are some local variations, but most hikers grasp the system quickly. Above treeline, and where snow or fog may obscure paint marks, posts and rock piles called "cairns" are used to identify the route.
**What is a "blaze"?**

A blaze is a rectangle of paint in a prominent place along a trail. White-paint blazes two inches wide and six inches high mark the A.T. itself. Side trails and shelter trails use blue blazes; blazes of other colors and shapes mark other intersecting trails. Two white blazes, one above the other, signal an obscure turn, route change, incoming side trail, or other situation that requires you to be especially alert to changes in direction. In some states, one of the two blazes will be offset in the direction of the turn.

**White-paint blazes** mark the A.T., and may be located on trees, rocks, or posts.  
**Double blazes**, sometimes offset, signal an obscure turn, route change, or incoming side trail.  
**Rock cairns** identify the route above treeline and where snow and fog may obscure painted blazes.

**What if I don't see blazes?**

Distance between blazes varies. In some areas, blazes are almost always within sight; in areas managed as wilderness you may encounter only four or five per mile. If you have gone a quarter-mile without seeing a blaze, stop. Retrace your steps until you locate a blaze. Then, check to make sure you haven't missed a turn. Often a glance backwards will reveal blazes meant for hikers traveling in the opposite direction. Volunteer trail maintainers regularly relocate small sections of the path around hazards or undesirable features or off private property. When your map or guidebook indicates one route, and the blazes show another, follow the blazes.

**Clothing and Gear**

What you carry depends on how far you're going, where, and when. Camping and backpacking magazines may make it seem as if you're doomed unless you have the latest gear. But, new equipment for even an overnight hike can easily run $1,000 to $2,000 or more. Don't worry. You can plan a hike on the Appalachian Trail without bankrupting yourself in the backpacking store.

**What should I carry?**

Packing for a day-hike is relatively simple:

- Map and compass (learn to use them first!)
- Water (at least 1 quart, and 2–3 on longer hikes in hot weather)
- Warm clothing and rain gear and hat
- Food (including extra high-energy snacks)
- Trowel (to bury human waste) and toilet paper
First-aid kit, with blister treatments
Whistle (three blasts is the international signal for help)
Garbage bag (to carry out trash)
Sunglasses and sunscreen (especially when leaf cover is gone)
Blaze-orange vest or hat (in hunting season)
On longer hikes, especially in remote or rugged terrain, add:

Flashlight (with extra batteries and bulb)
Heavy-duty garbage bag (emergency tarp or to insulate a hypothermia victim)
Sharp knife
Fire starter (a candle, for instance) and waterproof matches
If you're backpacking and plan to camp out, we suggest you consult a good "how-to" book for details about what to carry, or talk to an experienced hiker. Most A.T. backpackers carry the following items, in addition to the day-hike checklist and some method of treating water. Some items can be shared with a partner to lighten the load:

Shelter (a tent or tarp)
Lightweight pot, cooking utensils
Stove (a small backpacking model, with fuel)
Medium-sized backpack (big "expedition-size" packs are usually overkill)
A pack cover or plastic bag for rainy weather
Sleeping pad (to insulate you from the cold ground)
Sleeping bag of appropriate warmth for the season
Food and clothing
Rope or cord (to hang your food at night)
Water filter or another method of treating water
Remember that renting gear or buying used equipment are low-cost options when you're first starting out.

Do I have the right clothing?

Hope for the best weather; pack for the worst. Clothing to protect you from cold and rain is a must—even in midsummer and especially at higher elevations. Avoid cotton clothes, particularly in chilly, rainy weather, which can strike the mountains at any time of year. Wet cotton can be worse than nothing and can contribute to hypothermia, a potentially fatal threat. Synthetic fabrics such as polypropylene and various acrylic blends will help protect you against the dangers of hypothermia. Layer your clothes—a “polypro” shirt, synthetic fleece, and a coated nylon or “breathable” waterproof outer shell will keep you both warmer and drier than a single heavy overcoat in cold, damp weather.

Remember, hiking will make you sweat, no matter the weather. Shedding thin layers enables you to regulate your body temperature more effectively
than choosing between keeping a heavy jacket on or taking it off.

**Is my footwear adequate?**

Hiking boots are optional for day-hikes but recommended for overnight and long distance hikes over rough terrain. Old-style heavyweight mountain boots are usually unnecessary now that good-quality lightweight boots are widely available. The most important thing is that boots fit well and are well broken-in before you hit the Trail: Nothing ends a hike quicker than blistered feet, and even minor blisters can become infected and cause serious trouble. Backpackers can expect their feet to swell; long-distance hikers should buy boots half a size too big, to allow room for this.

**Food, Water, and Sanitation**

You should carry some kind of food and water on even the shortest A.T. hike, but anything longer than a short day-hike presents special considerations.

**What sort of food should I take?**

If you're out for the day or the weekend, you can probably pack along whatever foods you like best—even fresh vegetables and fruits. But since these spoil quickly and are heavy (due to their high water content), they're not good for extended backpacking trips. Whatever food you choose, be sure to pack out all your garbage, including items such as apple cores and orange peels. Don't burn garbage in a campfire; it rarely burns completely.

Backpackers generally carry dried foods such as pasta that they boil and prepare on their portable stoves. Don't rely on fires. Not only is it more convenient and easier in wet weather, it minimizes your impact on the wilderness around your camp.

Go cold when it's hot. In summer months at low altitude, experiment with food that requires no cooking. Reduce your pack weight by leaving your stove, fuel, and pots at home. (Don't try this in cold weather or in higher elevations with exposed areas, where hot drinks may be needed to arrest hypothermia.)

There's no need to carry more than a week's food on most parts of the A.T. For hikes longer than a week, hikers typically leave the Trail periodically to resupply in nearby towns. Some ship food parcels ahead to post offices, hostels, and businesses near the Trail; others buy food along the way. Backpacking food doesn't have to be expensive or specially prepared; many hikers get everything they need at the supermarket.
How much food should I carry?

Backpacking burns a lot of energy. Plan on a tasty diet of 3,000 to 4,000 calories a day, including high-energy snacks to eat while you're walking or during breaks. Thru-hikers may need to eat more—the typical male thru-hiker burns 5,000-7,000 calories a day. However, novice backpackers on the A.T. often make the mistake of carrying too much food. Many hikes have ended in misery and injury because of packs that were too heavy. When deciding how much food to carry for your trip, keep these tips in mind for an enjoyable trip:

1 1/2 to 2 lbs. per day is ample lightweight backpacking food.
In cold weather, when you need more calories to stay warm, carry 2 1/2 lbs. per day.
If you are hiking in the winter or early spring, carry food for an extra day or two in case you are stranded by a snowstorm.
Resupply points on the A.T. are more frequent than many other backcountry trails, typically three to five days apart. Resupply points are less frequent in the deep South and the far North.
Extreme exertion during the first day or two of a hike may actually decrease your appetite.
Many lightweight backpacking staples can be purchased at a grocery store; you need not rely on expensive prepared “backpacking food” sold at camping stores.
Dehydrating your own food can provide you with nutritious, tasty and lightweight meals and snacks, but is labor- and time-intensive.

Where and how do I find water?

Reliable, natural water sources are listed in guidebooks; springs and streams are marked on most official A.T. maps. Most (although not all) shelters are near a reliable water source. Some springs and streams dry up during late summer and early fall, so plan carefully.

Is the water safe to drink?

Water in the backcountry and in water sources along the A.T. can be contaminated by microorganisms, including giardia lamblia and others that cause diarrhea or stomach problems. Waters may be clear, cold, and free-running and may look, smell, and taste good. In spite of all that, giardia and other waterborne parasites may still be present, and can cause debilitating illness. We recommend that you treat all water, using a filter or purifier or water-treatment tablets, or by boiling it. Several ways of treating "raw" water make it safer:

Boiling. The most certain treatment to destroy Giardia and Cryptosporidium is to bring water to a rolling boil for at least one minute. Boiling will also
destroy other organisms causing waterborne disease, although at high altitudes you should maintain the boil 3-5 minutes for an additional margin of safety.

**Portable water filters.** A far less reliable treatment is the use of portable water filters. Some claim to remove Giardia cysts and Cryptosporidium oocysts, but test protocols are not uniform in the industry and many have not been tested in unbiased laboratories. Purchase only from reputable dealers, and check product literature to ensure that the filter is labeled according to filter manufacturing standards as at least an “Absolute” 1 micron filter, or is labeled as meeting American National Standards Institute (ANSI/NSF) (formerly the National Sanitation Foundation) International Standard #53 for “Cyst Removal.” No other filters are reliable for removing Giardia and Cryptosporidium.

**Chemical treatments.** Chemical disinfectants such as iodine or chlorine tablets or drops are not reliable for killing Giardia cysts and Cryptosporidium oocysts. These disinfectants do work well against most disease causing waterborne bacteria and viruses that may not have been removed by filtration so water that has been filtered should be disinfected before consumption. Add 8 drops of liquid household bleach or 20 drops of tincture of iodine per gallon of water and let stand for 30 minutes. Double the concentration if the water is cloudy. (Iodine and chlorine tablets are available in drug stores and camping or sporting stores. Use according to directions.)

For short trips, take a supply of water from home or from other treated domestic sources.

Water safety information is adapted from A.T. publications and *Is the Water Safe? Think Before You Drink*, available from the National Park Service Public Health Program.

**Can I wash up in a mountain stream or spring?**

Please don't. Carry water from the water source in a bottle or other container, then wash your dishes, and yourself, away from streams, springs, and ponds. Don't leave food scraps to rot in water sources, and don't foul them with products such as detergent, toothpaste, and human or animal waste.

**Where are the restrooms?**

Few and far between. Many A.T. shelters have privies, but often you will need to "go in the woods." Proper disposal of human (and pet) waste is not only a courtesy to other hikers, but is a vital Leave No Trace practice for maintaining healthy water supplies in the backcountry and an enjoyable hiking experience for others. No one should venture onto the A.T. without a trowel, used for digging a 6"-8" deep "cathole" to bury waste. Bury feces at
least two hundred feet or seventy paces away from water, trails, or shelters. Use a stick to mix dirt with your waste, which hastens decomposition and discourages animals from digging it up. Used toilet paper should either be buried in your cathole or carried out in a sealed plastic bag. Hygiene products such as sanitary napkins should always be carried out.

**Weather**

Getting ready to hit the Trail? Current watches, warnings and advisories are available from the National Weather Service. Local weather reports and more are available from the [weather.com Outdoor Guide](https://www.weather.com). You can also check our chart of average temperatures along the Appalachian Trail.

For an overview of optimal times of year to hike in specific areas, check the state-by-state information in [A.T. Essentials](https://www.at.org/).  

**Fast-changing weather**

Always be prepared for drastic weather changes along the Appalachian Trail. Don’t be surprised if you encounter sudden spells of "off-season" cold weather, hail, sleet, and even snow. Winter-like weather can occur in the southern Appalachians as late as May or as early as October. In Vermont, New Hampshire, and Maine, extreme weather can occur practically year-round. Make sure you pack appropriate clothing for these weather extremes.

**Winter hiking**

The A.T. is open year-round, except for [Baxter State Park](https://www.baxtermaine.com) in Maine. Those with extensive winter camping and hiking experience and proper gear will find solitude in abundance. However, the degree of preparation, experience and self-sufficiency required is far greater than for summer hiking, and the potential for disaster is much higher.

All portions of the Trail have the potential for snowfall from late October through early April. At higher elevations in the South and through much of New England, snow and cold weather sets in much earlier. In the far north, snow may linger into May and even June at the higher elevations.

The mildest weather on the A.T. typically occurs in the northern Virginia, West Virginia, Maryland and southern Pennsylvania sections, which have the most favorable combination of low elevation and a southerly latitude. Georgia has comparable conditions, but is very crowded in March and April with hikers on spring break and aspiring northbound thru-hikers.

**High elevations**
The higher the mountain, the colder, windier and wetter you can expect it to be. Use extra caution if planning a trip to one of these areas:

- **Baxter State Park**, Maine.

**Summer thunderstorms**

Thunderstorms pose a hazard all along the Trail, particularly on open balds and above tree line. Usually you can see these storms approaching from some distance, giving you time to find suitable shelter away from open ridgetops and tall, isolated trees. See more tips for avoiding lightning danger.

**General tips for health and safety**

Choose clothing and equipment carefully, and make sure you have adequate food, water, and shelter available. Carry a basic first-aid kit that can treat scrapes, blisters, sprains, and aches. Always carry first-aid information with you and make sure someone in your group has first-aid training.

**In an emergency, how do I get help?**

Much of the A.T. is within range of mobile phone systems, although signal reception is sometimes not good in gaps, hollows, and valleys; shelters are often located in such areas of poor reception. Emergency numbers are included in guidebooks and on maps. If you don't have a phone or can't get through, the standard call for distress consists of three short calls, audible or visible, repeated at regular intervals. A whistle is particularly good for audible signals. Visible signals may include, in daytime, light flashed with a mirror or smoke puffs; at night, a flashlight or three small bright fires. Anyone recognizing such a signal should acknowledge with two calls—if possible by the same method—then go to the distressed person to determine the nature of the emergency. Arrange for additional aid, if necessary.

Most of the A.T. is well-enough traveled that, if you are injured, you can expect to be found. However, if an area is remote and the weather is bad, fewer hikers will be on the Trail, especially after dark. As a rule, keep your pack with you, and, even in an emergency, don't leave marked trails and try to "bushwhack" out—you will be harder to find and are more likely to encounter dangerous terrain. If you must leave the Trail, study the guidebook or map carefully for the nearest place where people are likely to be and attempt to move in that direction. If it is necessary to leave a heavy pack behind, be sure to take essentials, in case your rescue is delayed. In
bad weather, a night in the open without proper covering could be fatal.

**Weather-related dangers**

Walking in the open means you will be susceptible to sudden changes in the weather, and traveling on foot means that it may be hard to find shelter quickly. Pay attention to the changing skies. Sudden spells of "off-season" cold weather, hail, and even snow are common along many parts of the Trail. Winter-like weather often occurs in late spring or early fall in the southern Appalachians, Vermont, New Hampshire, and Maine. In the northern Appalachians, it can snow during any month of the year. Hypothermia, lightning, and heat exhaustion are all legitimate concerns. Don't let the fear of them ruin your hike, but take sensible precautions.

**Hypothermia.** A cold rain can be the most dangerous weather of all, because it can cause hypothermia (or "exposure") even when conditions are well above freezing. Hypothermia occurs when wind and rain chill the body so that its core temperature drops; death occurs if the condition is not caught in time. Avoid hypothermia by dressing in layers of synthetic clothing, eating well, staying hydrated, and knowing when to hole up in a warm sleeping bag in a tent or shelter. Cotton clothing, such as blue jeans, tends to chill you when it gets wet from rain or sweat; if the weather turns bad, cotton clothes increase your risk of hypothermia. Natural wool and artificial fibers such as nylon, polyester, and polypropylene all do a much better job of insulation in cold, wet weather. Remember that, when the wind blows, its "chill" effect can make you much colder than the temperature would lead you to suspect, especially if you're sweaty or wet.

**Lightning.** The odds of being struck by lightning are low, but an open ridge is no place to be during a thunderstorm. If a storm is coming, immediately leave exposed areas. Boulders, rocky overhangs, and shallow caves offer no protection from lightning, which may actually flow through them along the ground after a strike. Tents and convertible automobiles are no good, either. Sheltering in hard-roofed automobiles or large buildings is best, although they are rarely available to the hiker. Avoid tall structures, such as ski lifts, flagpoles, powerline towers, and the tallest trees, solitary rocks, or open hilltops. If you cannot enter a building or car, take shelter in a stand of smaller trees or in the forest. Avoid clearings. If caught in the open, crouch down on your pack or pad, or roll into a ball. If you are in water, get out. Disperse groups, so that not everyone is struck by a single bolt. Do not hold a potential lightning rod, such as a fishing pole or metal hiking pole. More information on avoiding lightning danger is available.

**Heat.** Dry hot summers are surprisingly common along the Trail, particularly in the Virginias and the mid-Atlantic. Water may be scarce on humid days, sweat does not evaporate well, and many hikers face the danger of heat stroke and heat exhaustion if they haven't taken proper precautions. The
best measures against heat emergencies are wearing a hat and sunscreen, staying well hydrated as you walk, and drinking plenty of water in camp. The following are the most common types of heat problems:

*Sunburn* occurs rapidly and can be quite severe at higher elevations; hikers in the Virginias and southern Appalachians are often surprised by bad sunburn in spring, when no leaves are on the trees.  
*Heat cramps* are usually caused by strenuous activity in high heat and humidity, when sweating depletes salt levels in blood and tissues.  
*Heat exhaustion* occurs when the body's heat-regulating system breaks down. A victim may have heat cramps, sweat heavily, have cold, moist skin, and a face that is flushed, then pale.  
*Heat stroke* is life-threatening and occurs when the body's system of sweating fails to cool a person adequately. Body temperature can rise to 106 degrees or higher.

**Wildlife**

**Lyme disease and other tick-borne diseases.** Ticks, which carry Lyme disease, ehrlichiosis and other diseases, are a risk on any hike. The northeastern United States—from Massachusetts to Maryland—has the highest concentration of reported cases of Lyme disease. Always check yourself for ticks daily. When in tick habitat (grassy, brushy, or woodland areas) your chances of being bitten by a tick can be decreased with a few precautions:

- Avoid tick-infested areas, especially in May, June, and July (many local health departments and park or extension services have information on the local distribution of ticks).
- Wear light colored clothing. Dark ticks can most easily be spotted against a light background.
- Tuck your pant legs into your socks. Tuck your shirt into your pants. Deer ticks grab onto feet and legs and then climb up. This precaution will keep them on the outside of your clothes, where they can be spotted and picked off.
- Spray insect repellent containing DEET on clothes and on exposed skin other than the face, or treat clothes (especially pants, socks, and shoes) with permethrin, which kills ticks on contact.
- Wear a hat and a long-sleeved shirt for added protection.
- Walk in the center of trails to avoid overhanging grass and brush. After being outdoors, remove clothing and wash and dry it at a high temperature. Inspect body carefully and remove attached ticks with tweezers, grasping the tick as close to the skin surface as possible and pulling straight back with a slow steady force; avoid crushing the tick’s body. In some areas, ticks (saved in a sealed container) can be submitted to the local health department for identification. More information is available from the **Centers for Disease Control and Prevention**. Precautions are adapted from *Lyme Disease in the National Parks*, available from the **National Park**
**Service Public Health Program.**

**Bears.** Black bears live along many parts of the Trail and are particularly common in Georgia, the Shenandoah and Great Smoky Mountains national parks, and parts of Pennsylvania and New Jersey. While attacks on humans are rare, a startled bear or a female with cubs may react aggressively. The best way to avoid an encounter while you are hiking is to make noise by whistling, talking, etc., to give the bear a chance to move away before you get close enough to make it feel threatened. If you encounter a bear and it does not move away, you should back off, speaking calmly and firmly, and avoid making eye contact. Do not run or "play dead" even if a bear makes a "bluff charge."

The best defense against bears in camp is preparing and storing food properly:

- Cook and eat your meals away from your tent or shelter, so food odors do not linger.
- Hang your food, cookware, toothpaste, personal hygiene items, and even water bottles (if you use drink mixes in them) in a sturdy bag from a strong tree branch at least ten feet off the ground and well away from your campsite. Make sure the bag is at least six feet from the trunk of the tree; black bears are crafty climbers and good reachers. Bear canisters also provide an effective alternative.
- Where bear boxes, poles, or cable systems are provided, use them. Never leave trash in bear boxes.
- Never feed the bears or leave food behind for them. That simply increases the risks to you and the hikers who follow behind you.
- A bear that enters a campsite or cooking area should be considered predatory. Yelling, making loud noises, throwing rocks, may frighten it away, however, you should be prepared to fight back if necessary.

If you are actually attacked by a bear, you should fight for all you are worth with anything at hand – rocks, sticks, fists.

**Snake bites.** Poisonous and nonpoisonous snakes are widespread along the Trail in warm weather, but they are generally passive. Please don't kill them! Watch where you step and where you put your hands. Snakes are active at night in hot weather, so use a flashlight and wear shoes.

Snake bites are rare, and bites from poisonous snakes do not always contain venom. Very few people die from snakebites in the U.S. If you are bitten by a snake you believe to be venomous, try to remain calm. Call 911 and seek medical treatment as quickly as possible. In the backcountry, this may mean walking out to a trailhead instead of waiting for emergency personnel to reach you. Wash the wound with soap and water. Do not apply ice. Do not apply a tourniquet; remove rings or other jewelry that could function as a tourniquet if swelling occurs. Do not use a “cut and suck” method to try and remove venom. More information is available from the **U.S. Forest Service**, 
the National Park Service, and emedicinehealth.com.

**Rabies.** Cases of rabies have been reported in foxes, raccoons, and other small animals; a bite is a serious concern, although instances of hikers being bitten are rare. More information is available from the Centers for Disease Control and Prevention.

**Hantavirus.** One case of the rare but dangerous rodent-borne disease hantavirus pulmonary syndrome (HPS) has been reported on the A.T. In 1993, an A.T. thru-hiker contracted hantavirus as he hiked through Virginia. He became quite ill but did recover and completed his hike the next year; investigators were unable to pinpoint the exact location of infection. Precautionary measures for hikers: Air out a closed, mice-infested structure for an hour before occupying it. Avoid sleeping on mouse droppings (use a mat or tent) or handling mice. Treat your water, and wash hands. More information is available from the Centers for Disease Control and Prevention and the National Park Service Public Health Program.

**Blisters**

Blisters are one of the most common ailments suffered by hikers. Break in new boots before you begin your hike. Always keep your feet dry while hiking. When you stop for breaks, take your shoes and socks off to air out your feet; change socks. Don't wait for a blister to develop. As soon as you feel any discomfort, place adhesive tape, duct tape, moleskin, or a blister-care product over areas of developing soreness.

**Is poison ivy common along the Trail?**

Poison ivy grows plentifully in the wild, particularly south of New England, and can be an annoyance during hiking season. Poison ivy is most often seen as a vine trailing near the ground or climbing on fences or trees. The leaves are in clusters of three, the end leaf with a longer stalk and pointed tip, light green in the spring but darkening as the weeks pass. The leaves often appear glossy in the sun. The inconspicuous flowers are greenish; the berries, white or cream. If you have touched poison ivy, wash immediately with strong soap (but not with one containing added oil). If a rash develops in the next day or so, treat it with calamine lotion or Solarcaine. Do not scratch. If blisters become serious or the rash spreads to the eyes, see a doctor. More information is available from the National Park Service Public Health Program.

**Is the water safe to drink?**

Water purity in the backcountry cannot be guaranteed. You must filter, boil, or chemically treat all water before consumption or use. Learn more.
Is hunting permitted on the A.T.?

Hunting is allowed along more than half of the Appalachian Trail's length, including some part of all 14 Trail states. During hunting season, make sure you can be seen and heard. Wear a blaze-orange cap and vest and/or backpack cover at all times, including in and around camp. Learn more about hunting and the A.T.

Camping and Shelters

If you've planned something longer than a day-hike, now is the time to anticipate where you might spend the night once you're on the Trail. On most sections, you have two basic choices: staying in a shelter or pitching a tent.

Where can I find shelters?

More than 250 backcountry shelters are located along the Appalachian Trail at varying intervals, as a service to all A.T. users. A typical shelter, sometimes called a “lean-to,” has a shingled or metal roof, a wooden floor and three walls and is open to the elements on one side. Most are near a creek or spring, and many have a privy nearby. Hikers occupy them on a first-come, first-served basis until the shelter is full. They are intended for individual hikers, not big groups. If you're planning a group hike, plan to camp out or to yield space to individual hikers who may not have the resources you do. Many shelters are near good campsites for tenting.

Shelter locations are noted in the maps and guidebooks, the Appalachian Trail Data Book, and the The Appalachian Trail Thru-Hikers' Companion, all available through our Ultimate A.T. Store. Some shelters in heavy-use areas require a permit, registration and/or fees.

What's the downside of shelters?

Shelters can be grimy and rodent-infested when hikers don't clean up after themselves, and they may be crowded. You or your camping partners must carry a tent, in case a shelter is not available. Remember that shelters require considerable volunteer effort to build and maintain.

So, why stay at a shelter?

First, shelters are the best places to stay dry in wet weather; they fill up fast when it rains. Second, they are often a good place to meet and talk with other hikers, and most have privies and water sources nearby. But, third and more importantly, staying at shelters reduces hiker impact on the Trail environment and is a good Leave No Trace practice. It concentrates use in a
relatively small area. A shelter site may seem trampled and overused, but, since the vegetation is already gone, the site will not deteriorate much more, no matter how many people use it. Meanwhile, nearby areas stay pristine. To encourage others to use shelters, please be considerate: Keep the grounds litter-free, don’t cut down trees, and don’t vandalize the structures.

Should I pitch a tent?

You can usually pitch a tent near a shelter, but your guidebooks will also indicate the locations of designated campsites at intervals along the Trail. Those usually have flat, cleared places to pitch tents and are near a water source; they rarely have a privy. Some may have “tent platforms” or pads where you can pitch and tie down a free-standing tent. Some campsites in heavily used areas require a lot of work by clubs to keep them pristine, and consequently a fee (usually $8 or less) is charged.

Can I find my own campsite?

In some areas, particularly the national forests of the Virginias and the southern Appalachians, “dispersed camping” is allowed. Dispersed camping means you can choose your own place to camp, but it carries with it a special responsibility of leaving no trace: You must be more careful to minimize your impact in pristine areas. Choose a site with no sign of previous use. Avoid places that show the beginnings of frequent use—those still have a chance to recover if left alone. Set up tents on durable surfaces, such as dead leaves or grass, well apart from each other and at least seventy paces from water. Avoid trampling plants and seedlings.

Should I build a fire?

Campfires create the worst visual and ecological impact of any backcountry camping practice. Building fire rings pockmarks pristine woodlands with blackened rocks, piles of ash and charcoal, blackened cans, and unburned wood. Vegetation disappears and soil packs down around the fire ring. Soil becomes sterile, which retards plant recovery. Hikers trample vegetation while looking for wood, and, when they find it, remove woody debris critical to a healthy ecosystem.

Leave No Trace principles encourage you to go without a fire. Use a backpacking stove instead. If you do intend to build a fire, check your A.T. guidebooks for fire restrictions along the Trail; some areas do not permit fires at all. Keep in mind that forest fires are always a potential hazard along the A.T., especially during early spring, summer, and fall.

Where fires are permitted, build them only in established fire rings. Don’t add rocks to an existing ring. Keep fires small. Burn only dead and downed wood that can be broken by hand—leave saws and axes at home. Never leave a fire unattended, and never build a fire on a windy day.
Erase your campfire when you leave. Drown it with water, then stir the ashes. Feel for heat with your hand to ensure it is out. Remove unburned foil and plastic and pack them out. If you used an existing fire ring, scatter the ashes and camouflage the burned area with organic matter. Finally, scatter unused firewood you gathered in the forest.

Can I stay in a hostel or inn?

Hostels (inexpensive bunkhouses catering to hikers) are available in some towns along the Trail. Similarly, motels, inns, and B&Bs tend to be clustered in towns near the Trail. Those towns are typically from fifty to one hundred miles apart at the northern and southern regions of the Trail and from thirty to fifty miles apart in the middle regions. The only opportunities for “inn-to-inn” hiking on the Trail itself exist in Virginia’s Shenandoah National Park and in the far more rugged White Mountains of New Hampshire. Learn more about cabins, hostels, inns, and other lodging options along the Trail.

Permits, Fees, and Regulations

"The Appalachian Trail is a way, continuous from Katahdin in Maine to Springer Mountain in Georgia, for travel on foot through the wild, scenic, wooded, pastoral, and culturally significant lands of the Appalachian Mountains. It is a means of sojourning among these lands, such that the visitors may experience them by their own unaided efforts.” (Appalachian Trail Management Principles)

Are there fees to hike the Appalachian Trail?

The Appalachian Trail is free for all to enjoy. No fees, memberships, or paid permits are required for walking on the Trail. However, the A.T. passes through numerous state and national parks, forests and public lands, a few of which require permits, fees, or reservations to stay overnight in shelters or campsites. Rules and regulations along the A.T. are set and enforced by two major federal agencies—the National Park Service (NPS) and the USDA Forest Service (USFS)—and state and local agencies as appropriate.

Detailed information about permits, fees and other rules and regulations can be found in the official Trail guidebooks. Current information on permits and fees trailwide is available in the A.T. Thru-Hikers’ Companion. Learn
Where are permits required and fees charged?

**Great Smoky Mountains National Park (Tennessee/North Carolina).** Backcountry camping **permits** are required for all backpackers in the Great Smoky Mountains National Park. Most visitors must reserve in advance a space in a specific shelter or campsite. However, the park recognizes the difficulty long-distance hikers have in setting a detailed itinerary far enough in advance to obtain a reservation, and has allowed some flexibility for thru-hikers. There are no fees for entering the park or staying overnight in the backcountry.

**Shenandoah National Park (Virginia).** Backcountry camping permits are required for all backpackers in Shenandoah National Park. Backcountry self-registration kiosks are located on the A.T. near the north and south boundaries of the park. No reservations are required. There is no fee for hikers entering the park via the Appalachian Trail. Hikers entering the park from other trailheads must pay the standard park entrance fee.

**Green Mountain National Forest/Green Mountain Club (Vermont).** The Green Mountain Club (GMC) maintains the A.T. from the Vermont/Massachusetts state line to Vt. 12. Fees are collected at some high-use campsites in this area to help defray field-program costs and support shelter and Trail maintenance along the A.T. in Vermont. A GMC caretaker may be present at other sites, but a fee is not charged. No permits or reservations are required.

**White Mountain National Forest/Appalachian Mountain Club (New Hampshire).** **Campsites:** Overnight fees are charged at some Appalachian Mountain Club (AMC)-maintained campsites in the White Mountain National Forest, though all are available on a first-come, first-served basis. A work-for-stay option may be available to thru-hikers at the tentsites and shelter sites that have caretakers. **Huts:** Reservations are required for the AMC-run huts. Contact AMC to verify the huts' season-opening and closing dates as well as rates. Thru-hikers can sometimes make a reservation "on-the-fly" by having a caretaker radio ahead. A work exchange at the huts is sometimes possible. For more details, visit the Appalachian Mountain Club's [thru-hiker](#) page.

**Baxter State Park (Maine).** All persons entering Baxter State Park, by car or on foot, must register at one of the three entry gates or at the nearest campground. There is a camping fee for all visitors staying overnight in the park. Overnight space is limited; reservations are recommended.

Can people ride or drive the Trail?

No, with a few exceptions. The Appalachian Trail is designed, built, and
maintained by hikers for foot travel. Motor vehicles are illegal on all off-road sections of the Appalachian Trail. Bicycles and mountain bikes are not permitted except where the A.T. is coaligned with the **C&O Canal** towpath in Maryland and the **Virginia Creeper Trail** in Virginia. Pack animals, including horses, mules, donkeys, goats, and llamas, are not allowed on the A.T. (whether they are packing anything or not), except that horses are permitted along the C&O Canal towpath in Maryland and in the **Great Smoky Mountains National Park** (where, by law, about 50 percent of the A.T. in the park is open for horses as a historical use).

**Can I bring my dog?**

Dogs are allowed everywhere on the Trail except in three areas:

- Great Smoky Mountains National Park, Tennessee and North Carolina,
- Trailside Museum and Wildlife Center in Bear Mountain State Park, New York, and
- Baxter State Park, Maine.

Dogs must be leashed on the forty percent of the Trail that uses National Park Service-administered lands. (Actually, we recommend that you keep your dog leashed at all times.) Learn more about [hiking with dogs](#).

**Are groups allowed to hike on the A.T.?**

Groups are welcome on the Trail, but they do have some special considerations. Learn more about [group hiking](#).

**Is hunting permitted on the A.T.?**

Hunting is allowed along more than half of the Appalachian Trail's length, including some part of all fourteen Trail states. During hunting season, make sure you can be seen and heard. Wear a blaze-orange cap and vest and/or backpack cover at all times, including in and around camp. Learn more about [hunting and the A.T.](#).

**Can I carry a gun?**

ATC strongly discourages hikers from carrying firearms. In areas of the Trail corridor where hunting is legal, hikers may see hunters carrying firearms. On National Park Service lands outside national recreation areas, possession of firearms by private citizens is illegal. The prohibition applies on many other public lands as well. Where firearms are allowed, state laws on licenses, registration, and related matters govern.

**What other rules and regulations apply?**

The A.T. passes through fourteen states, eight national forests, six national
park units and numerous state park, forest, and game lands. Additional lands between those public lands have been acquired by the National Park Service and make up the Trail corridor. As a unit of the National Park system, the Trail is administered by the NPS-Appalachian Trail Park Office in Harpers Ferry, WV, which works cooperatively with ATC and other federal, state, and local partners. The Appalachian Trail Conservancy and local Trail clubs may make policy and influence actions affecting the Trail but have no law-enforcement authority.

The following information provides an overview of rules and regulations applicable to most of the A.T. It is the responsibility of the individual user to learn the rules and regulations that govern the section of Trail that they will be traveling. Keep in mind that not all Trail behavior is codified into legal regulations. Always follow the Leave No Trace ethic to help minimize your impact on the natural environment.

**National Park Service rules and regulations.** Listed below is a summary of rules and regulations set and enforced by the National Park Service for the NPS-acquired A.T. corridor. This is not a comprehensive list.

- Overnight stays at camping and/or shelter sites shall be limited to the maximum number of nights specified by local authorities (typically 2–3) or to two nights where no local policies have been adopted.
- Camping shall follow policies established by local authorities or shall be limited to established overnight shelters and tenting areas.
- Dead wood may be collected for use in campfires at designated campsites or shelters. Campfires are prohibited except at those locations specifically designated by local authorities. All fires shall be completely extinguished and cold to the touch prior to abandonment.
- Disposal of human bodily waste shall be accomplished only at sanitary facilities or must be buried four to six inches deep in an area not frequented by the public, not visible from trails, campsites or developed areas, and at least 100 feet from any water source.
- Motorized vehicles are not permitted.
- Bicycles and mountain bikes are not permitted on the Trail or the Trail corridor (see “Can people ride or drive the Trail” above).
- Pack animals, including horses, mules, burros, goats, and llamas are not allowed (see “Can people ride or drive the Trail” above).
- All edible berries, fruits, and nuts found along the A.T. footpath may be gathered by hand for personal consumption.
- Any noise level from a radio, tape deck, compact disc, or other mechanical device that is more audible than a conversational voice at a distance of 50 feet from the source is prohibited.
- Scattering of human ashes (memorialization) on NPS lands is prohibited without a special permit from the NPS director.
- The installation of any monument, memorial, tablet, structure or other commemorative along the A.T. or in the A.T. corridor is prohibited.
without authorization by the NPS. Permits are required for certain activities, including specimen collection, special events, public assemblies, sale/distribution of printed matter, agricultural grazing, memorialization, business operations, and commercial photography.

All incidents resulting in injury to persons or damage to property in excess of $300 must be reported by persons involved to the superintendent (park manager or his/her rep) as soon as possible.

Visit the National Park Service Web site for more information on the national parks that the Trail passes through—Blue Ridge Parkway, C&O Canal National Historical Park, Delaware Water Gap National Recreation Area, the Great Smoky Mountains National Park, Harpers Ferry National Historical Park, and Shenandoah National Park.

United States Forest Service rules and regulations. Here are the major rules and regulations that apply to the A.T. where it passes through national forests in New Hampshire, Vermont, Virginia, Tennessee, North Carolina, and Georgia:

- Dispersed camping is allowed at least 200 feet from any water source and 100 feet from any trail.
- Fires are allowed except where specifically prohibited. Some national forests have additional regulations. Visit the USDA Forest Service Web site for more information.

State and local laws. Every state, town, and municipality crossed or bordered by the A.T. has a vested interest in the activities of persons using the Trail. Sometimes, the state plays a primary role—for example, in Maryland the A.T. is mostly on state-owned land. Listed below are the most common prohibitions on the activities of A.T. hikers:

- Littering or defacing of any public property is not allowed. Creating graffiti on rocks or other natural or manmade objects is not allowed.
- Trespassing on private property along the Trail is not allowed. Camping or building fires on private property is not allowed without the permission of the landowner.
- Removing, damaging, or disturbing of vegetation, rocks, or other natural objects or artifacts is not allowed.

If you cause a fire, you are legally responsible for all costs of fire suppression and property damage, including any timber value.

Leave No Trace

Plan a Hike › Getting to the Trail › Follow the Blazes › Clothing & Gear › Food, Water & Sanitation › Weather › Health & Safety › Camping &
As more and more people use the Trail and other backcountry areas, it becomes more important to learn to enjoy wild places without ruining them. The best way to do this is to understand and practice the principles of Leave No Trace, a seven-point ethic for enjoying the backcountry that applies to everything from a picnic outing to a long-distance expedition. Leave No Trace is also a nonprofit organization dedicated to teaching the principles of low-impact use. For more information, visit the Leave No Trace Web site: www.lnt.org.

The seven principles of the Leave No Trace ethic are:

**Plan ahead and prepare.** When you don't have the facts about where you are going or what to expect, you're more likely to cause problems in the backcountry.

**Travel and camp on durable surfaces.** Stay on the trail and don't cut switchbacks. Keep off fragile trailside areas, such as alpine zones. Camp in designated spots.

**Dispose of waste properly.** Bury or pack out excrement. Pack out all trash and food waste, including that left behind by others. Do not bury trash or food, and do not try to burn packaging materials in campfires.

**Leave what you find.** Don't take flowers or other sensitive natural resources. Don't disturb historical artifacts such as cellar holes and arrowheads.

**Minimize campfire impacts.** Know local regulations, which may prohibit fires.

**Respect wildlife.** Don't feed or disturb wildlife. Store foods properly to avoid attracting bears and rodents. If you bring a pet, keep it leashed.

**Be considerate of others.** Limit overnight groups to ten or fewer, twenty-five on day trips. Minimize noise and intrusive behavior. Use cell phones out of sight and sound of other people. Share shelters and other facilities. Be considerate of Trail neighbors.

**Preparing for a Thru-Hike**
Questions

Thru-hiking has a lot of romance associated with it, and it's easy to be swept up in the dream of doing it yourself after watching a video or reading a book in the comfort of your home. But, reading a how-to guide will not prepare you for the physical and psychological punishment of hauling a fully-loaded backpack. The smartest thing you can do is to take a practice hike that includes at least two nights out on terrain that approximates the part of the Trail you plan to start on. This will help you evaluate gear, physical conditioning, and mental readiness. A variety of workshops are available, too.

Do I have to register?

No. There's no formal registration system. But, let friends and family know where you are, what your itinerary is, and your "Trail name." The A.T. passes through numerous state and national parks, forests and public lands, a few of which require permits, fees, or reservations to stay overnight in shelters or campsites. In some cases, the reservation system is different for long-distance hikers. Learn more: Regulations and Permits.

What kind of equipment will I need?

The most predictable mistake thru-hikers make is carrying too much stuff. Almost all hikers learn to trim their pack weight to 25-50 lbs.; those who don't end up going home. Put as much effort into determining what you don't need as what you do. Choosing the right basic equipment—backpack, sleeping bag, tent, boots, etc.—is a personal decision. Hikers have completed the entire A.T. using both external frame and internal frame backpacks. Emma "Grandma" Gatewood, the first woman to complete a continuous hike of the entire Trail (1955), used only a handmade duffel bag. Some hikers with car support use only a small daypack.

Because of the very subjective nature of equipment decisions, ATC does not endorse any specific brands or types of equipment, but there is a wealth of information already available to hikers looking for more information. Talk to other hikers, both those who have completed the Trail in the past and can offer a wealth of “lessons learned,” or those who are planning a future trip. Your local outdoor store can help you understand your options, and may even have a past thru-hiker on staff. There are also many books and videos to help you sort through the many choices and decide what kind of equipment is best for you.

Do I need to carry maps?

The Trail is well-marked, so many thru-hikers, who become skilled at following the blazes, choose not to carry maps. But, maps are quite useful for planning a thru-hike, and, in an emergency, are your best source of
information on how to get off the Trail and find help. Maps and guidebooks also help you get a sense of where you are and how far you've gone and can enrich your Trail experience. See: Guidebooks and maps.

How do I get food and supplies?

There's no need to carry more than a week's food on most parts of the A.T. Thru-hikers typically leave the Trail periodically to resupply in nearby towns. Some ship food parcels ahead to post offices, hostels, and businesses near the Trail; others buy food along the way. Many hikers employ a combination of the two methods. Learn more: Resupply and Mail Drops. See Food, Water, and Sanitation for more details about what sort of food should you take and how much should you carry.

How much does it cost?

A fair amount of money—typically about $3,000 to $4,000—to undertake a 2,000 mile, five- to seven-month hike, not counting $1,000 to $2,000 or more for gear. Many dollars are spent in vain, along with planning time and effort, when someone learns too late that a thru-hike is not for him or her. Most of your money will be spent in town. Few thru-hikers can resist the temptation of restaurant food, motel beds, and hot showers after days of deprivation. You will also need money for supplies, laundry, postage, equipment repair, and equipment replacement.

Physical preparation

The first few miles of any hike are often the toughest, and you will appreciate any physical edge you can bring to your trip during these first few miles. Don't overlook the basics: Take a few overnight training hikes; be sure to seek out mountainous terrain or you won't have a clue about what you are getting into for 6 months. Thoroughly break in new boots. They should be at least 1/2 size larger than your normal size. Get used to carrying your pack, fully loaded and adjusted. You'll be surprised to find how unnecessary some items become after you've carried them uphill for 5 miles.

On the Trail, start out with low mileage and gradually increase distance to avoid injury. Allow two to four weeks on the Trail to get into peak condition if you are already fit; six to eight if you are not. Knee and foot injuries, stress fractures, and shin splints force many hikers off the Trail; the risk of these can be minimized by keeping your pack light and your mileage conservative in the beginning.

Mental preparation

The drop-out rate among thru-hikers is high. Each year, many prospective 2,000-milers start at Springer Mountain in Georgia, only to quit at the first
town twenty miles up the Trail. Up to 15 percent quit in the first week, but approximately 20 percent make it the whole way. They give up for all kinds of reasons. Starting too early, heavy rains and snow, a schedule that is too ambitious and leads to injury, unexpectedly rugged terrain, overspending a meager budget, poor physical shape, ill-fitting boots and equipment, or no sense of humor—all contribute to an ill-fated expedition.

Only you know best what kind of person you are. Will you endure days of rain, when every item you own becomes soggy, including your tent and sleeping bag? Are you willing to plod up seemingly endless mountains with muscles that ache, only to see another grind still to come? Will you still be inspired after every view starts to look the same and the Trail seems like an endless green tunnel?

**When Should I Start?**

Deciding when and where to start your hike is one of the toughest you will have to make in your planning. Northbound, southbound, a little of both—only you can decide what is best for you. **Remember:** The northern end of the Trail at Katahdin in Baxter State Park in Maine is closed to overnight hikers from mid-October to mid-May, and bad weather may close Katahdin earlier in the fall and delay opening in the spring.

**Northbound—Georgia to Maine**

Most thru-hikers start their trips in early March or April at Springer Mountain in Georgia and finish at Katahdin in September. Starting at Springer in March guarantees hiking in winter conditions for much of the first several weeks and also guarantees a crowd of fellow northbounders—in 2005, about 1,400 thru-hikers started from Springer.

A typical northbounder, starting in March or April and finishing in September, can expect:

- Starting among crowds of other thru-hikers—thirty or more a day.
- Cold weather to start, with some snow or ice, but occasional warmer weather in Georgia.
- Snow, sometimes deep, at high elevations throughout North Carolina and
Tennessee.
Bare trees and winter conditions at high elevations for the first month or two. Cold-weather gear is usually advised until you have hiked beyond the Mt. Rogers high country in southwest Virginia.
Hot, humid weather though the mid-Atlantic states.
Favorable temperatures through most of southern New England.
Periods of cold weather in New Hampshire and Maine in September and October.
A dramatic ending: Katahdin.
To avoid crowds, the optimal time to start a northbound thru-hike is after April 15; however, since the average thru-hiker takes six months to finish, this can mean cutting it close: Baxter State Park in Maine is closed from October 15 to May 15, and the Appalachian Trail up Katahdin is closed on any day when the weather makes hiking there dangerous.
If you are hiking northbound and you reach Harpers Ferry, West Virginia, after July 15, you should consider a “leapfrog” or a “flip-flop” hike, unless you have covered the first thousand miles in two months or less. From Harpers Ferry, you still have almost 1,200 miles to go, and, once you reach the White Mountains in New Hampshire, your mileage from there north through most of Maine will drop by a third. If you continue northward from Harpers Ferry after July 15, you may have to hike faster than you'd like or face having to finish your hike another year.

Southbound—Maine To Georgia

Southbound thru-hikers start in June or July at Katahdin and finish in Georgia in November or December. A southbound hike will allow you much more solitude, but you will be “breaking in” on the most rugged part of the Trail. A Maine-to-Georgia hike also requires that you traverse long distances between resupply points in the early part of your trek. In many ways it’s a tougher hike than a northbound thru-hike. Fewer than 500 people have reported completion of the A.T. southbound.

A typical southbounder, starting in June or July and finishing in December, can expect:

- A small number of other southbound thru-hikers for companionship.
- Starting with Katahdin, the most difficult climb on the entire A.T., and the two most challenging states of the entire Trail—Maine and New Hampshire.
- Swarms of black flies in Maine in June.
- Muddy trail and difficult stream crossings in Maine in June.
- Four weeks of hot, humid weather in the mid-Atlantic states.
- Fall colors in Virginia.
- Hiking through hunting season from late October onward.
Cold weather during last month or two of hike, snow likely. The **Maine Appalachian Trail Club** and **Baxter State Park** recommend a start date of no earlier than July 1. Before that time, you'll face a number of obstacles: ferocious bugs, lingering snow at higher elevations, blowdowns, high water at stream crossings, wet and muddy trail. The footpath is also more fragile and sustains more damage when you hike under these conditions.

**Flip-flops, leapfrogs, and other alternatives**

How can you avoid the crowds and still hike the entire Trail? Increasingly, hikers are choosing to start somewhere in the middle of the Trail. These alternatives to an end-to-end thru-hike are commonly known as "flip-flop" or "leapfrog" hikes. ATC encourages these alternative hikes as a way to even out the flow of hikers and minimize resource damage to the Trail. Review **sample alternative itineraries** that optimize terrain, weather, and crowd avoidance.

**Advantages** of an alternative hike include favorable terrain and weather, and crowd avoidance:

**Terrain.** The easiest terrain on the A.T. is not at either end of the Trail, where thru-hikers normally start, but in the middle of the Trail (from Shenandoah National Park in Virginia north through southern Pennsylvania). In both directions, the Trail gradually gets more difficult as you head north or south. If you want to break in gradually to the rigors of long-distance backpacking, avoid starting south of Virginia, and especially avoid starting in New Hampshire and Maine, the two most difficult states on the Trail. Review sample alternative itineraries with starting points located in moderate terrain.

**Weather.** In predicting weather on the Trail, time of year, elevation, and latitude are the most important variables to consider. Of these, the most frequently overlooked is elevation. For example, Blood Mountain, Georgia, at 4461 feet, has colder temperatures and more snow than Harpers Ferry, West Virginia, at about 250 feet, almost a thousand Trail miles to the north.

**Cold.** Because the Trail is often at high elevations, the potential for snow lasts into April in Georgia and the mid-Atlantic states, until early May in the highest mountains of the South and much of New England, and until early June in New Hampshire and Maine. The first snows of autumn fall in late September in Maine and New Hampshire and in October through the rest of New England and highest mountains of the South. In November any part of the Trail can receive snow.

**Heat.** Weather that is uncomfortably hot and humid for backpacking starts to occur intermittently in June in Georgia, Virginia, and the mid-Atlantic states. July and August can be too hot for comfortable
backpacking in much of the mid-Atlantic and South, although above five and six thousand feet the temperatures are often pleasant. High temperatures often linger sporadically into September.

**Avoiding crowds.** Leaving Springer in March or early April you will find viewpoints, shelters and campsites crowded, and opportunities for privacy and solitude are substantially reduced. An average of more than 35 thru-hikers a day leave Springer between March 1 and April 1. Northbound thru-hikers create a large, moving group of people, the majority of whom are concentrated over a 300-400 mile stretch of Trail. Georgia especially is crowded, before the attrition process takes its toll. "Spring break" hikers are also drawn to the southern end of the Trail in March and April. Crowded conditions continue well into Virginia. You can avoid these conditions by following any one of the alternative itineraries.

**Disadvantages** of an alternative hike include psychological factors and logistics:

**Psychological factors.** While too many people on the Trail may detract from your experience, so can loneliness. Almost all people find they enjoy their experience more if they have someone with whom they can share both hardships and joys. It also can help to have other thru-hikers around who can encourage you to stick it out when you get bored or discouraged and feel like quitting. For this reason, disadvantages of an alternative hike include psychological factors and logistics. In almost all of these variations you will be ending at a point other than Katahdin, the northern terminus of the A.T. in Maine. Katahdin is a mile-high stand-alone mountain that is hard to beat for a dramatic finish and a powerful draw to spur you on. However, hiking Katahdin earlier in your journey will mean you won't have to race the weather or rush to make Baxter State Park's October 15 deadline. A hiker who is not following the most common approach to thru-hiking is likely to encounter those who insist that the only "right" way to hike the Trail is to walk from Georgia to Maine or vice versa; a few hikers have found this peer pressure has detracted from their ability to enjoy their experience. Some miss the continuity and simplicity of a straight-through trek. On the other hand, you may find satisfaction in knowing that you are not adding to already-crowded conditions caused by the main group of thru-hikers elsewhere on the Trail. By traveling where and when there are fewer people you will minimize your impacts on soils, flora, and fauna, as well as on volunteer-maintained campsites and other Trail resources.

**Logistics.** Some additional logistical planning and expense is required to get to the second leg of your journey. Those who plan to leave the Trail for brief hiatus (i.e. graduation, wedding of a family member, etc.) may find this type of hike fits conveniently into their travel plans.
Alternative Itineraries

These seven scenarios outline possible variations from the typical Georgia-to-Maine thru-hike. Sample itineraries are generally designed for a six and one-half month hike. This allows for the average thru-hike time of six months and two weeks for travel and a little extra time off between legs of the journey. Sample itineraries are designed to optimize terrain, weather, and crowd avoidance. Most also provide opportunities for companionship and camaraderie. For a more complete discussion of the issues involved in determining your own hiking schedule, review When Should I Start?

Head-start: April

Damascus, Va. north to Katahdin; Damascus south to Springer Mountain.

Sample itinerary: Start in Damascus mid-April, hike north to climb Katahdin mid-September; resume hiking south third week of September, finish on Springer Mountain beginning of November.

Start ahead of crowds of thru-hikers, but be assured of companionship from early hikers.

Be prepared for snow across the Mt. Rogers highlands (a 26-mile high-elevation stretch that starts about 17 miles north of Damascus).

Do not expect to keep up with the pace of thru-hikers who started in Georgia; allow yourself 3-6 weeks to get in optimal shape.

Start out in terrain of moderate difficulty.

Plenty of time to reach Katahdin before it closes.

Enjoy fall colors in the deep South.

Head-start: May

Harpers Ferry, W.Va., north to Katahdin; Harpers Ferry, W.Va., south to Springer Mountain.

Sample itinerary: Start in Harpers Ferry first half of May, reach Katahdin second half of August; return to Harpers Ferry after Labor Day; finish at Springer Mountain the second half of November.

Start in easiest part of the Trail that very gradually gets more difficult.

When you start do not expect to keep pace right away with thru-hikers who
started in Georgia.
Start in mild, pleasant weather.
Start amidst spring wildflowers and walk north with spring.
Hike through the mid-Atlantic before it gets hot, humid and water sources become scarce.
If you start earlier than May, plan to reach Vermont after mud season ends (about June 1).
Reach the White Mountains in July, before the peak crowds.
Reach Maine in August, when black flies are gone (but expect crowds the last hundred miles of Maine).
Plenty of time to reach Katahdin before it closes.
Walk south with fall colors on the second half of your hike.
Companionship with early northbounders the first half, then finish the Trail with early southbounders.
Be prepared for hunting season in the South.
Be prepared for cold weather and the possibility of snow in November.

**Head-start: June**

Southern New England north to Katahdin; southern New England south to Springer Mountain.

**Case study:** “Scatman” started on the NY/CT line mid-June and hiked northbound, climbing Katahdin mid-August. He returned to starting point in NY and headed south with the southbound thru-hikers, finishing the end of November.

**His comments:** “I believe that beginning in Connecticut in early June was beneficial. By hiking southbound for most of the trip, we also avoided the crowded shelters and the 'spring break' atmosphere of the early part of a northbound hike. It also allowed me to 'follow autumn' for much of the southbound portion of my hike. We did experience some cold weather at higher elevations and some snow in the Smokies ... Doing New England northbound also afforded me the opportunity to approach Katahdin head-on, one of the most exciting sights on the A.T.”

**Flip-flop**

Springer Mountain north to Harpers Ferry, W.Va.; Katahdin south to Harpers Ferry.

**Sample itinerary:** Start at Springer Mountain second half of April and hike north, reaching Harpers Ferry, W.Va., middle of July; then flip to Katahdin. Hike south to Harpers Ferry and end first half of November.

  Start at Springer Mountain, but without the crowds.
  Minimal chance of snow or severe cold the entire hike.
  Avoid heat in most of mid-Atlantic.
Avoid crowds of other thru-hikers.
No worries about reaching Katahdin before it closes.
Hike with late northbounders first half; hike with southbounders the second half and meet northbounders a second time.
Hike south with fall colors.

**Southbound Circuit, a.k.a. Wraparound**

**Sample itinerary:** Start in Harpers Ferry first half of April and hike south, reaching Georgia the first half of July. Flip to Katahdin and hike south, finishing in Harpers Ferry the second half of October.

**Case study:** “Lonesome Dove” started March 13 in Harpers Ferry. When he reached Shenandoah National Park a week later, he encountered an ice storm that made parts of the Trail impassable and he was forced to walk on Skyline Drive. After completing the southern half of the A.T. a few months later, he took off several weeks and started again southbound in Maine in late summer, finishing his hike in Harpers Ferry the first week of November. His summary of this approach: “A great hike south without bugs and heat of summer. I enjoyed it but it can be lonely.”

To avoid snow and ice do not start before April.
To take advantages of services in Shenandoah National Park do not start before April.
Experience a great deal of solitude.
Consider staying at Skyland Lodge in Shenandoah National Park, so you can use it as a mail drop and cut the food you have to carry through the Park in half while you’re still getting in shape.
Start in mostly gentle terrain and gradually work up to the more challenging terrain of the deep South.
Enjoy rhododendron, mountain laurel, and azalea in bloom for several weeks in the south.
Expect hot, humid weather in Georgia.
No worries about reaching Katahdin in time.
Walk south with southbounders and fall color.
Because of the loneliness factor, this alternative may be best suited to couples and small groups.
Harpers Ferry has direct train access.

**Leapfrog**


**Sample itinerary:** Start at Springer second half of April and hike north, reaching Harpers Ferry middle of July; “leapfrog” to Great Barrington, Mass; hike north to Katahdin, finishing in September. Return to Great Barrington and hike south to Harpers Ferry.
Start at Springer Mountain with other hikers, but without the crowds. Minimal chance of snow or severe cold the entire hike. Avoid the worst heat in most of the mid-Atlantic. Hike in New England before severe cold sets in. Walk north toward Katahdin with little or no time pressure. Hike through southern New England and mid-Atlantic in fall colors. Additional logistics required.

**Cool Breeze**

Hike the Trail in three equidistant pieces, all southbound. Start with the middle third of Trail, followed by the northern third, ending with the southern third.

**Sample itinerary:** Start in southern Connecticut late April, hike south, reaching Troutville, Virginia (Roanoke area) late June. Hike from Katahdin south, reaching southern Connecticut end of August/ early September. Hike from Troutville south, ending at Springer early November.

**Case study:** After completing the Trail twice, “Cool Breeze” designed his third hike to put him in each part of the Trail during optimal weather conditions. “I hit many places in their most clement and beautiful seasons (Pennsylvania in moist May, Maine and Whites in balmy July and August, Smokies in late October peak colors) and finished at Springer before snow fell in early November. It required 2 flips, Virginia to Katahdin, and Connecticut to Virginia, but it allowed me the best weather of any of my A.T. trips.”

Hike in mid-Atlantic during spring, before it gets hot and dry. Hike first two months in moderate or easy terrain. Hike in New England after bug season, in temperate weather before it gets cold. Expect few other long-distance hikers traveling in the same direction, especially on first leg. Additional logistics required. No worries about Katahdin closure. Avoid extremes of both heat and cold.

**Resupply and Mail Drops**

The Trail passes directly through only a handful of towns, but an increasing number of businesses located within a few miles of the Trail offer resupply opportunities. Many hikers buy food along the way, and use maildrops only for specialized items. Maildrops can be sent to hiker-friendly establishments or post offices.

**Sending maildrops**

Many businesses along the A.T. hold packages for hikers. The United States Postal Service also provides mail service at post offices for customers who are not permanently located. Most thru-hikers use these services at some point during their hike—whether for routine re-supply or to get occasional mail or packages from home.

**TIP**: The *Appalachian Trail Thru-Hikers’ Companion* includes information on businesses and hostels along the Trail that hold packages for hikers, and unlike post offices, may be open seven days a week.

Detailed information about businesses, hostels, and post offices along the Trail that hold packages for hikers can be found in the *A.T. Thru-Hikers’ Companion*. Businesses and hostels, unlike post offices, may be open seven days a week. The A.T. Data Book provides a very condensed version and can serve as a handy quick reference. Learn more about these books in *Guidebooks and Maps*; both titles are available through the **Ultimate A.T. Store**.

ATC recommends using first class mail to ship packages. Shipping times for parcel post are less reliable and may take several days or weeks. You will need a photo ID to pick up general delivery mail from a post office and some businesses.

**“Bounce” boxes**

A popular practice among long-distance hikers is to use a “send-ahead” or “bounce” box, which follows (or leads) you up the Trail. Hikers fill them with supplies such as extra batteries, cell phone chargers, “town clothes,” and toiletries. Often in stores you’ll have to buy more of something than a weight-conscious backpacker needs; a bounce box will allow you to send ahead the extra. Also be sure to include mailing tape, labels, and magic markers so you have supplies to send your box ahead.

**Addressing mail**

Write legibly! Include on your package or mail label:

Your name
Business name and address OR "c/o General Delivery" for post offices
City, State, ZIP Code
Return address (phone number optional)
"Please hold for A.T. hiker"
Date you expect to pick up package

If your maildrop box contains liquid stove fuel (white gas, alcohol, or pressurized butane canisters), you must clearly label on the address side of the package, "ORM-D - Consumer Commodity" and "Surface Mail Only." More info on Postal Service restrictions and labeling requirements can be found in **USPS Publication 52 - Hazardous, Restricted, and Perishable Mail**.

**Forwarding mail and packages**

It's always a good idea to fill out a forwarding card at any post office you use, even if you're not expecting additional mail. Forward your mail ahead to a post office you expect to reach in two or three weeks, or to your home address.

**Special requirements for forwarding packages.**

A written and signed Form 3575 is required to forward a package. You may not forward a package by a telephone request.
If you will be receiving jointly addressed packages, list both names on the form.
First class mail can be forwarded at no additional cost; a third class package can not be forwarded.
A package may not be forwarded after it is opened.

**Other Post Office services**

Although post offices in trail towns will sometimes hold hiker packages longer, they are only required to hold them for 30 days and some may not even hold them that long. As thru-hiker traffic and the volume of the packages increases, post offices may no longer be able to hold packages as long as they have in the past.
Post offices are not obligated to provide mailing tape free of charge, but some post offices offer it for sale. It's a good idea to include mailing tape, labels, and magic markers in your food packages or your send-ahead box.
The post office cannot accept a FedEx or UPS package.
Post offices now accept credit cards and ATM cards. On ATM purchases, you can get up to $50 cash back, provided the post office has the cash on hand. (Small post offices may not have this much cash on hand, especially in the morning.)

**What Happens When I Finish?**
The greatest rewards are personal ones—the memories, friendships, photographs, the sense of accomplishment, and the deeper appreciation of the eastern mountains. When you finish the entire Trail, either in one season or in sections added together over the years, let ATC know: Appalachian Trail 2,000-Miler Application (PDF). The information collected through these applications helps ATC keep accurate records and up-to-date Trail statistics.

You can also pick up the application on the Trail at Katahdin Stream Campground (Baxter State Park, Maine), Walasi-Yi Center (Neels Gap, Georgia), Amicalola Falls State Park (Georgia), and the Harpers Ferry A.T. Visitor Center (West Virginia).

When you return your completed application, your name will be added to our roster of 2,000-milers. ATC will send you a certificate of recognition and a "2,000-Miler" rocker for an A.T. patch. We work with volunteer help to process the applications as quickly as we can, but please allow up to 12 weeks to receive your certificate and patch.

Our recognition policy:

- Gives equal recognition to thru-hikers and section-hikers.
- Recognizes blue-blazed trails or officially required roadwalks as viable substitutes for the official, white-blazed route in the event of an emergency, such as a flood, a forest fire, or an impending storm on an exposed, high-elevation stretch.
- Operates on the honor system.

Our recognition policy does not consider sequence, direction, speed, or whether one carries a pack.

2,000-Milers: Facts and Statistics
Questions

2008 Northbounders as of October 3, 2008

<table>
<thead>
<tr>
<th>Location</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Springer Mtn., Ga.</td>
<td>1250</td>
</tr>
<tr>
<td>Neels Gap, Ga. (30 miles)</td>
<td>1150</td>
</tr>
<tr>
<td>Fontana Dam, N.C. (160 miles)</td>
<td>1050</td>
</tr>
<tr>
<td>Harpers Ferry, W.Va. (1,000 miles)</td>
<td>667</td>
</tr>
<tr>
<td>Katahdin, Maine (2,175 miles)</td>
<td>148*</td>
</tr>
</tbody>
</table>

*This number will continue to climb as reports are sent in.

Where do we get these numbers?

It’s estimated that 3 to 4 million visitors hike a portion of the Appalachian Trail each year. Most enjoy day hikes and short backpacking trips, but each year a small fraction of those hikers complete the entire Trail. How many? Since 1936, more than 10,000 hike completions have been recorded by ATC. This includes thru-hikes, multiyear section-hikes, and more than 300 hikes by people who have already completed the A.T. one or more times. We call all these hikers “2,000-milers.”

2,000-milers in recent years

<table>
<thead>
<tr>
<th>2,000-milers</th>
<th>2001</th>
<th>2002</th>
<th>2003</th>
<th>2004</th>
<th>2005</th>
<th>2006</th>
<th>2007</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total hike completions recorded:</td>
<td>622</td>
<td>589</td>
<td>600</td>
<td>578</td>
<td>546</td>
<td>488</td>
<td>441</td>
</tr>
</tbody>
</table>

For recording purposes, we sort 2,000-miler reports according to direction and type of hike: northbound, southbound, flip-flop, or section-hike. Starting numbers and completion rates for recent years are shown below, as available.

Northbounders

<table>
<thead>
<tr>
<th>Location</th>
<th>2002</th>
<th>2003</th>
<th>2004</th>
<th>2005</th>
<th>2006</th>
<th>2007</th>
</tr>
</thead>
<tbody>
<tr>
<td>Springer Mountain, Ga.</td>
<td>1,875</td>
<td>1,750</td>
<td>1,535</td>
<td>1,392</td>
<td>1,150</td>
<td>1,125</td>
</tr>
<tr>
<td>Neels Gap, Ga. (30 miles)</td>
<td>1,500</td>
<td>1,400</td>
<td>1,305</td>
<td>1,156</td>
<td>1,076</td>
<td>1,005</td>
</tr>
<tr>
<td>Fontana Dam, N.C. (160 miles)</td>
<td>999</td>
<td>1,028</td>
<td>864</td>
<td>1,124</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>Harpers Ferry, W.Va. (1,000 miles)</td>
<td>687</td>
<td>741</td>
<td>661</td>
<td>682</td>
<td>659</td>
<td>613</td>
</tr>
<tr>
<td>Katahdin, Maine (2,100+ miles)</td>
<td><strong>388</strong></td>
<td><strong>408</strong></td>
<td><strong>393</strong></td>
<td><strong>358</strong></td>
<td><strong>334</strong></td>
<td><strong>299</strong></td>
</tr>
<tr>
<td>Completion rate:</td>
<td>20%</td>
<td>23%</td>
<td>25%</td>
<td>25%</td>
<td>29%</td>
<td>27%</td>
</tr>
</tbody>
</table>

Northbounders hike from Springer Mountain to Katahdin in one continuous journey. They represent more than 65 percent of reported 2,000-milers.

Southbounders

<table>
<thead>
<tr>
<th>Location</th>
<th>2002</th>
<th>2003</th>
<th>2004</th>
<th>2005</th>
<th>2006</th>
<th>2007</th>
</tr>
</thead>
<tbody>
<tr>
<td>Katahdin, Maine</td>
<td>286</td>
<td>291</td>
<td>233</td>
<td>217</td>
<td>200</td>
<td>184</td>
</tr>
<tr>
<td>Kennebec Ferry, Maine (150 miles)</td>
<td>N/A</td>
<td>204</td>
<td>163</td>
<td>161</td>
<td>154</td>
<td>141</td>
</tr>
<tr>
<td>Harpers Ferry, W.Va. (1,170 miles)</td>
<td>109</td>
<td>88</td>
<td>102</td>
<td>95</td>
<td>90</td>
<td>94</td>
</tr>
<tr>
<td>Springer Mountain, Ga. (2,100+)</td>
<td><strong>62</strong></td>
<td><strong>63</strong></td>
<td><strong>51</strong></td>
<td><strong>52</strong></td>
<td><strong>30</strong></td>
<td><strong>45</strong></td>
</tr>
</tbody>
</table>
Completion rate: 22% 22% 22% 24% 15% 24%

Southbounders hike from Katahdin to Springer Mountain in one continuous journey. They represent about 10 percent of total reported 2,000-milers.

Flip-floppers

<table>
<thead>
<tr>
<th>Year</th>
<th>2002</th>
<th>2003</th>
<th>2004</th>
<th>2005</th>
<th>2006</th>
<th>2007</th>
</tr>
</thead>
<tbody>
<tr>
<td>Finishing</td>
<td>36</td>
<td>33</td>
<td>32</td>
<td>31</td>
<td>25</td>
<td>31</td>
</tr>
</tbody>
</table>

Flip-flopers complete the Trail in one trip, but with an alternate itinerary. They make up about 5 percent of reported 2,000-milers.

Section-hikers

<table>
<thead>
<tr>
<th>Year</th>
<th>2002</th>
<th>2003</th>
<th>2004</th>
<th>2005</th>
<th>2006</th>
<th>2007</th>
</tr>
</thead>
<tbody>
<tr>
<td>Finishing</td>
<td>103</td>
<td>97</td>
<td>102</td>
<td>105</td>
<td>101</td>
<td>120</td>
</tr>
</tbody>
</table>

Section-hikers complete the Trail in more than one trip. They represent about 20 percent of total 2,000-milers.

History

<table>
<thead>
<tr>
<th>2,000-milers by decade</th>
</tr>
</thead>
<tbody>
<tr>
<td>1930s</td>
</tr>
<tr>
<td>1940s</td>
</tr>
<tr>
<td>1950s</td>
</tr>
<tr>
<td>1960s</td>
</tr>
<tr>
<td>1970s</td>
</tr>
<tr>
<td>1980s</td>
</tr>
<tr>
<td>1990s</td>
</tr>
<tr>
<td>2000-present</td>
</tr>
<tr>
<td>Total:</td>
</tr>
</tbody>
</table>

Get year-by-year details

The number of people hiking the entire Trail has risen dramatically over the years. From 1936 to 1969, only 61 completions are recorded. In 1970, the numbers began to rise. Ten people completed the Trail in 1970, including Ed Garvey, whose thru-hike was well-publicized. The trend was further fueled by the release of Garvey's popular book, *Appalachian Hiker: Adventure of a Lifetime*. The term “2,000-miler” was coined in the late 1970s to help identify this growing group of hikers.

By 1980, the total number of 2,000-milers had increased more than ten-fold. The total had doubled by 1990 and again by 2000. More hike completions were reported for the year 2000 alone than in the first 40 years combined. The 10,000th hike completion was recorded in 2008.

Read about noteworthy 2,000-milers.
Frequently Asked Questions: Thru-Hiking

How long does it take?

From five to seven months, depending on how fast you hike. The average is six months.

When should I start a thru-hike?

Hikers have tackled the Appalachian Trail at all times of year, and with varied itineraries. Most thru-hikers start their trips in early March or April at Springer Mountain in Georgia and finish at Katahdin in September. A few start in June or July at Katahdin and finish in Georgia in November or December. Starting at Springer in March guarantees hiking in winter conditions for much of the first several weeks and also guarantees a crowd of fellow northbounders—in 2006, about 1,150 thru-hikers started from Springer. To avoid crowds, the optimal time to start a northbound thru-hike is after April 15; however, since the average thru-hiker takes six months to finish, this can mean cutting it close: Baxter State Park in Maine is closed from October 15 to May 15, and the Appalachian Trail up Katahdin is closed on any day when the weather makes hiking there dangerous. More: When Should I Start?

How can I avoid the crowds and still hike the entire Trail?

Hike southbound, or “flip-flop.” Increasingly, hikers are choosing to start somewhere in the middle of the Trail; they hike to Katahdin, then return to their starting point and hike south to finish their hike at Springer. On flip-flops such as that you’ll find some fellow hikers (without the crowds), better terrain to begin with, and better weather. More: Alternative Itineraries.

Do I have to register?

No. There's no formal registration system. But, let friends and family know where you are, what your itinerary is, and your “Trail name.” The A.T. passes
through numerous state and national parks, forests and public lands, a few of which require permits, fees, or reservations to stay overnight in shelters or campsites. In some cases, the reservation system is different for long-distance hikers. Learn more: Permits, Fees, and Regulations.

Do I need to carry maps?

The Trail is well-marked, so many thru-hikers, who become skilled at following the blazes, choose not to carry maps. But, maps are quite useful for planning a thru-hike, and, in an emergency, are your best source of information on how to get off the Trail and find help. Guidebooks and maps also help you get a sense of where you are and how far you've gone and can enrich your Trail experience. More: Guidebooks and maps.

How detailed should my plan be?

Be mindful that unforeseen factors can affect things. A section of damaged Trail or extreme weather, for instance, may slow you down considerably. A grand view from a trailside overlook may likewise make you run late. In either case, include some flexibility in your plans, and adjust your itinerary accordingly.

What are my chances of finishing a thru-hike?

Each year, many prospective 2,000-milers start at Springer Mountain in Georgia, only to quit at the first town twenty miles up the Trail. Up to 10 percent quit in the first week, but approximately 25 percent make it the whole way. They give up for all kinds of reasons. Starting too early, heavy rains or snow, a schedule that is too ambitious and leads to injury, unexpectedly rugged terrain, overspending a meager budget, poor physical shape, ill-fitting boots and equipment, or no sense of humor—all contribute to an ill-fated expedition.

Only you know best what kind of person you are. Will you endure days of rain, when every item you own becomes soggy, including your tent and sleeping bag? Are you willing to plod up seemingly endless mountains with muscles that ache, only to see another grind still to come? Will you still be inspired after every view starts to look the same and the Trail seems like an endless green tunnel?

How can I know if I can stand it?

The smartest thing you can do is to take a practice hike that includes at least two nights out on terrain that approximates the part of the Trail you plan to start on. This will help you evaluate gear, physical conditioning, and mental readiness. More: Preparing for a Thru-Hike.
How much does it cost?

A fair amount of money—typically about $3,000 to $5,000—to undertake a 2,000 mile, five- to seven-month hike, not counting $1,000 to $2,000 or more for gear. Many dollars are spent in vain, along with planning time and effort, when someone learns too late that a thru-hike is not for him or her.

What costs so much?

Most of your money will be spent in town. Few thru-hikers can resist the temptation of restaurant food, motel beds, and hot showers after days of deprivation. You will also need money for supplies, laundry, postage, equipment repair, and equipment replacement.

What happens when I finish?

The greatest rewards are personal ones—the memories, friendships, photographs, the sense of accomplishment, and the deeper appreciation of the eastern mountains. When you finish the entire Trail, either in one season or sections added together over the years, let ATC know. You'll get a form to report and describe your hike. When you return it, ATC will send you a certificate of recognition and a "2,000-Miler" rocker for an A.T. patch. Your name will be added to our roster of 2,000-milers. Forms are also available at Baxter State Park in Maine and Amicalola Falls State Park in Georgia. More: What Happens When I Finish?

How many hikers have completed the entire A.T.?

More than 9,000 people have informed ATC that they have hiked the entire Trail. This includes hikers who have completed the Trail over many years as well as those finishing in one trip.

How does ATC define thru-hiking?

We don't. ATC uses the term "2,000-miler" as a matter of tradition and convenience. ATC defines a "2,000-miler" as anyone who has hiked the entire Trail between Springer Mountain in Georgia and Katahdin in Maine. We don't consider issues such as the sequence, direction, speed or whether one carries a pack. We do expect that persons applying for inclusion in our 2,000-miler records have made an honest effort to walk the entire Trail.

A.T. Essentials

In 1921, the Appalachian National Scenic Trail was simply an idea. Benton MacKaye – an off-and-on federal employee, educated as a forester and self-
trained as a planner – proposed it as the connecting thread of “a project in regional planning.”

The efforts of countless volunteers made MacKaye's idea a reality. Today, the Appalachian Trail is best known as a simple footpath, yet it also has other identities – as a greenway, a flyway, a "mega-transect"; by which to monitor environmental health. It is the mission of the Appalachian Trail Conservancy to ensure that future generations will enjoy clean air and water, scenic vistas, wildlife and opportunities for simple recreation and renewal along the entire Trail corridor.

At a Glance

The Appalachian Trail, completed in 1937:

- Is a unit of the National Park Service.
- Is the nation's longest marked footpath, at approximately 2,175 miles.
- Is the first national scenic trail, designated in 1968.
- Houses more than 2,000 occurrences of rare, threatened, endangered, and sensitive plant and animal species.
- Crosses six national parks.
- Traverses eight national forests.
- Touches 14 states.
- Crosses numerous state and local forests and parks.
- Is maintained by 30 trail clubs and multiple partnerships.

Threats to the A.T. experience include:

- Highway construction
- Housing developments
- Invasive exotic plants
- Declining air quality

Fun facts about the Appalachian Trail:

- Lowest elevation: 124 feet.
- Highest elevation: 6,625 feet.
- There are 165,000 blazes along the length of the Trail.
- More than 9,000 people have reported hiking the length of the Trail.
- It takes approximately 5 million footsteps to walk the entire length of the Trail.

Learn more about the Appalachian Trail state by state.

Trail at a Glance

**Length:** 2,160 miles  
**Route:** Ridgelines of the Appalachian Mountains  
**Completion:** 100%  
**Hiker Purity:** Pristine
National Scenic Trails  Appalachian Trail - History

The Appalachian Trail was designed, constructed, and marked in the 1920s and 1930s by volunteer hiking clubs joined together by the Appalachian Trail Conference (ATC). Formed in 1925 and now a nonprofit organization based in Harpers Ferry, West Virginia, the ATC had the National Park Service, Forest Service, states, and local communities as active partners in the trail project from the beginning. The Forest Service and states acquired much of its land and administer 850 and 420 trail miles, respectively.

Most great ideas begin life as idle conversation. A "super trail" was much talked about in turn-of-the-century hiking circles of New England. "The AT" evolved from the 1921 proposals of Massachusetts regional planner Benton MacKaye to preserve the Appalachian crests as an accessible, multipurpose wilderness belt—a retreat from Eastern urban life. (Two-thirds of the Nation's population lives within 550 miles of it.) The old clubs that united behind MacKaye, plus the new clubs formed specifically to advance the AT idea, concentrated on the hiking aspects of his vision, under the leadership of Myron H. Avery, ATC chairman from 1931 to 1952. The clubs, the two federal agencies, states, and the Depression-era Civilian Conservation Corps combined forces to open a continuous trail by August 1937. Hurricanes, highway construction, and demands of World War II undid those efforts until 1951 saw all sections finally relocated, opened, and marked for hikers and nature lovers.

The 1968 National Trails System Act made the AT a linear national park and authorized funds to surround the entire route with public lands, either federal or state, protected from incompatible uses. The goal is to maintain the entire Trail environment as a place for everyone to hike, backpack, or otherwise enjoy the Appalachian mountains and wildlands, while at the same time conserving the natural, scenic, historical, and cultural resources of this one-of-a-kind park.

www.youtube.com/watch?v=LEr6oEYj0sM
Appalachian Trail Unit

Goal: To maintain the entire trail environment as a place for everyone to hike, backpack, or otherwise enjoy the mountains and wildlands, while at the same time conserving the natural, scenic, historical, and cultural resources of this 1-of-a-kind park.

History:
- Idea of _________________  ____________________ to create a ___________ running from the highest point in New ________________ to the highest point in the ________________
- Convinced that the _______________ and _________________ life was _______________ to humans
- 1925 – MacKaye gathered ___________________________________ and public _________________ in Washington D.C. for the AT _________________
- Through conference recruited ___________________ and hiking _______________ to hike, _________________, and _______________ paths
- In 1951, the trail was _______________________ through 3 eras
  o  Trail – building
  o  Trail protection – National ________________________________
  o  Management and promotion
    ▪  Greenway = broad swath of ________________________________ _______; 1 mile on each side of trail where no _________________ can occur
    ▪  Appalachian Trail Bill = ___% of trail on _________________ land

General Facts:
- ________________ miles
- Run through _________________
- Touches ______ states; 8 national _________________; 6 national _________________
- > _________________ species
- __________________ identify where the trail is _________________
- __leave _o _race Guidelines – (___) _________________ of trail
- Mt. Katahdin to Springer Mt. or vice versa

Things to Consider/Think About:
- Gear/Equipment
- Clothing/Boots
- Water
- Food
- Sanitation/Hygiene
- Safety/First Aid
- Weather
- Wildlife
Appalachian Trail Unit

**Goal:** To maintain the entire trail environment as a place for everyone to hike, backpack, or otherwise enjoy the mountains and wildlands, while at the same time conserving the natural, scenic, historical, and cultural resources of this 1-of-a-kind park.

**History:**
- Idea of **Benton MacKaye** to create a **trail** running from the highest point in New England to the highest point in the **South**
- Convinced that the **urban and industrial** life was **harmful** to humans
- 1925 – MacKaye gathered **hikers, foresters, and public officials** in Washington D.C. for the **AT conference**
- Through conference recruited **volunteers and hiking clubs** to hike, **brush**, and **mark** paths
- In 1951, the trail was **complete** through 3 eras
  - Trail – building
  - Trail protection – National **Scenic Trail**
  - Management and promotion
    - **Greenway** = broad swath of **protected land**; 1 mile on each side of trail where no **development** can occur
    - Appalachian Trail Bill = **99%** of trail on **public land**

**General Facts:**
- 2,160 miles
- Run through **National Park Service**
- Touches **14 states**; 8 national **forests**; 6 national **parks**
- > **2,000** species
- **Blazes** identify where the trail is **located**
- **Leave No Trace** guidelines (7) – **ethics** of trail
- Mt. Katahdin to Springer Mt. or vice versa

**Things to Consider/Think About:**
- **Gear/Equipment**
- **Clothing/Boots**
- **Water**
- **Food**
- **Sanitation/Hygiene**
- **Safety/First Aid**
- **Weather**
- **Wildlife**
What is a Wetland?

Wetlands are transitional areas between terrestrial and aquatic systems where the water table is usually at or near the surface. They have no visible boundary or flowing water like a stream, river, or lake. Wetlands can include swamps, marshes, bogs, and other similar lowlands covered with shallow and sometimes temporary or intermittent waters. To be classified as a Wetland, an area must possess these three attributes:

- **Hydrology:** A supply of water that is at or near the ground surface at least a portion of the year.
- **Hydraulic Soil:** Hydric soil develops under saturated conditions and has the capacity to hold water on or near the ground surface for at least a portion of the year.
- **Wetland Plants:** Plants whose root systems have adapted to living in wet or flooded soil. They are also called hydrophytic (hydro means water, phyte means plant).

What is the Function of a Wetland?

Wetlands perform a variety of unique physical, chemical, and biological functions, which are essential to the health of the environment and valuable to the local community. Wetlands serve as natural flood control devices. Wetlands slow and store floodwaters, recharging the surface and groundwater. This ecosystem thrives on nitrogen and has the ability to break down organic matter, settle out sediments and absorb excess nutrients from agricultural and urban runoff, transforming toxic materials into harmless compounds.

Wetland habitats support an array of animal and plant species and are among some of the most productive ecosystems in the world. Wetlands also serve as drought protection, lessening or discharging stored water in times when the water table is low.

What is a Wetland Buffer?

A wetland buffer is a zone of vegetation that usually begins from the boundary of wetland-dependent vegetation and extends outward, until it interfaces with another land use. Its size varies in size depending on the characteristics of the wetland and surrounding area.

Our Wetland, the Sacony Marsh

Protecting the health of this unique ecosystem directly impacts the water value of our community, but the Marsh’s important work reaches far beyond our immediate area. The water here helps to supply the Maiden Creek Watershed, Lake Ontelaune, and the Schuylkill River down through to the Delaware River Basin.

How do Wetland Buffers Impact Your Community?

- Reduce surface water runoff from surrounding land into the wetland.
- Maintain good quality drinking water by reducing sediment, nutrient, and pollutant loads in runoff.
- Create breeding and feeding habitats for wetland fauna.
- Provide passive recreational opportunities for hiking, bird watching, photography and art.

Recharge / Discharge

Recharge is the process by which groundwater is replenished. Discharge is the opposite and describes the process of water leaving the aquifer and moving to the surface.

Recharge begins as precipitation, such as rain or snow. Precipitation infiltrates the soil, passing into the unsaturated zone, an area below the land surface containing pores or fractures that are filled with water and air. The water eventually percolates through the unsaturated zone to a saturated zone, where all pores or fractures in the rock materials are filled with water. The boundary between the two zones is called the water table.

Discharge occurs when groundwater leaves the aquifer and flows to the surface and is released into streams, springs and seeps. This ongoing process demonstrates how surface water and groundwater systems are interconnected.
**What is a Watershed?**

It is the land that water flows across, or runs on its way to a stream, river, or lake. The landscape is made up of many interconnected watersheds. Within each watershed, all water runs to the lowest point—a stream, river, or lake. On its way, water travels over several types of surfaces such as farm fields, forestlands, suburban lawns and city streets, or it seeps into the soil and travels as groundwater through aquifers. Watersheds come in many different shapes and sizes and have many different features. Watersheds can have hills or mountains or be nearly flat. They can have farmland, woodland, small towns, and big cities. Parts of your watershed can be so rough, rocky, or muddy that they’re suited only for certain trees, plants, and wildlife.

Large watersheds, like the Schuylkill River Watershed, are made up of many smaller watersheds such as the Tocks Island Creek, Mansewanny Creek, Wyoming Creek, and Hay Creek to name a few. It also includes the Maiden Creek Watershed, which encompasses the Saco Creek, the Saco River, and the Saco Creek Watershed.

**What are the Economic Impacts of Riparian Buffers?**

- Save taxpayer money by reducing downstream property damage caused by floods
- Add to property value by keeping nearby waterways clean
- Can be a cost-effective alternative in some cases to expensive steel technologies in waste water treatment
- Stimulate the local economy by attracting people to recreational hot spots for activities like hiking, fishing, camping, and boating
- Provide a great area for nature observation, photography and art

**Our Riparian Buffer**

The Riparian Buffer along the Saco Creek protects wildlife, filters excess nutrients and chemicals from runoff, minimizes flood damage and improves the overall well-being and quality of the creek water.

**What is a Riparian Buffer?**

A zone of trees, herbaceous plants or other vegetation along waterways that separates the waterway from other land uses, and which improves water quality and stream health.

**What are the Functions of a Riparian Buffer?**

By intercepting surface runoff, subsurface flow and even deeper groundwater flows, the riparian buffer removes or reduces the effects of excess nutrients, pesticides, or other chemicals from upland use, which could otherwise enter the waterway.

The riparian buffer provides food (leaf litter) for stream insects, while creating shade and protective cover for wildlife. Dense root masses of emergent and woody hydrophytes stabilize streambanks and stream channels, reducing erosion and sedimentation caused by storm flooding.
What is Groundwater?
Groundwater is found beneath the surface of the earth. It is a “hidden treasure” held within interconnected openings of saturated rock called aquifers. We access the groundwater in aquifers by drilling wells and pumping the water to the surface.

Why is Water Quality Important?
The quality of our groundwater is important because 85% of the water used for human consumption in Pennsylvania comes from groundwater. The quality can change as it flows through the watershed. Human activities, such as waste disposal, resource extraction, agricultural practices and urbanization can negatively affect groundwater quality as well as quantity. The mishandling of hazardous materials and chemicals on land can also lead to water contamination underground.

What is Wellhead Protection?
Wellhead Protection is the protection of water wells, source water and the surrounding area from pollution that could compromise the groundwater. To protect public health, municipalities set ordinances that regulate land use near wells. For example, landfills, gas stations, junkyards, dry cleaners and other possible sources of contamination are kept at a safe distance from wells for public water systems. Farmers are encouraged to implement best management practices to minimize the effect agriculture has on groundwater.

Best Management Practices (BMPs) are the ways we can best protect and enhance our water quality. Examples of BMPs are:
- Restricting activity in wetlands, floodplains, and streams by implementing wetland buffers
- Limiting hard surfaces and storm water run off
- Leaving fragile steep slopes undisturbed
- Encouraging native unmowed vegetation and planting trees
- Reducing and eliminating toxic chemical and product use
- Thinking consciously about the effects of our behavior and our choices on our environment.

Our Groundwater and Wellhead Protection
Protecting the surface water and groundwater that flows through the entire Sacony Creek Watershed and Borough of Kutztown Wellheads is important to the quantity and quality of the drinking water that is ultimately available in our homes.

What are the Economic Impacts?
- The quality of our drinking water is important to our health and safety.
- Water supplied by a public water system is tested and treated so users can be assured that their water is safe.
- Rural homeowners with their own wells are responsible for the safety of their own water supply.
- Cleaning up contaminated groundwater is very expensive and sometimes the damage is irreversible. The best solutions is to prevent contamination from happening at all.
- The water supply for the Borough of Kutztown is groundwater drawn from wells on the Borough farm. In order to protect the quality of this water, there is a Wellhead Protection Plan, Best Management Practices (BMPs), and buffers that are utilized on the Borough farm.
- The water quality in the Borough is also protected by an Implementation Plan for encouraging BMPs throughout the Sacony Creek Watershed.

From Underground into Your Home
You’re invited

Dedication of the Sacony Trail in Kutztown, PA.
2:00pm on Friday, October 24, 2008
Rain or Shine.

Please arrive 15-20 minutes early to enjoy the walk along the Sacony Creek to our Observation Deck.

Parking is available at the Kutztown Borough Swimming Pool.
A volunteer will be at the parking lot to direct you to the event.

Directions from Kutztown University:
On Main Street in Kutztown, turn right onto Constitution Blvd (Turkey Hill on corner). Continue to first stop sign and make a left onto Normal Avenue. Travel approximately one block just over the bridge and turn left onto Industrial Avenue to the pool.

Partnership With:
Berks County Conservancy • County of Berks • Friends of Sacony Marsh
Borough of Kutztown • Maiden Creek Watershed Association