

Topic 8 - How is ATC Responding to the Threat Climate Change Poses to the A.T.?

ATC has long recognized that climate change poses a threat to the A.T. In 2008, ATC's Board of Directors passed a [resolution](#) committing the organization to a number of actions:

1. Reducing its own carbon dioxide emissions

The largest source of carbon dioxide emission resulting from ATC activities is the carbon dioxide emitted by the vehicles ATC members and other A.T. visitors use to get to the Trail for hiking, maintenance and other activities. ATC member Clubs have long promoted car-pooling to save money and reduce these emissions. More recently, ATC Staff has promoted car-pooling to Board of Directors and Stewardship Council meetings, and used conference calls instead of meetings to reduce travel requirements. Reducing vehicle use for ATC activities is an on-going effort at both the member club and ATC levels.

ATC owns and operates several buildings and is working to improve their energy efficiency. This is a challenging task because the buildings are old and were constructed long before energy efficiency and carbon dioxide emissions were important considerations. An energy efficiency audit of ATC's Headquarters building in Harpers Ferry, West Virginia, a historic building built in 1892, identified a number of action items that could be taken to reduce building energy use while increasing comfort levels in the building. Some of these items have already been completed, including:

- a. digital, programmable thermostats have been installed limiting heating and cooling of the building to periods when the building is actually in use;
- b. all incandescent light bulbs have been replaced with CFLs;
- c. large air leaks around doors and windows have been sealed to prevent loss of warm air in the winter and cool air in the summer; and
- d. the building attic has been prepared for additional insulation, which will be installed in the near future.

Other items will be addressed as funding is available.

ATC operates Bears Den Hostel outside Bluemont, Virginia, in a stone building built in 1933. Recently, the building's original single pane glass windows have been replaced with modern, low-E glass windows. The building was heated by two, low efficiency furnaces that burned heating oil. One of the furnaces has been replaced with a high efficiency propane furnace, and plans have been made to replace the other. The energy efficiency improvements already made have reduced Bears Den's fuel usage by about a third. Additionally, since propane is a lower

carbon fuel than heating oil, and thus produces less CO₂ per unit of heat, a further reduction in carbon dioxide emissions has been achieved. Completion of the renovations at Bears Den has greatly reduced emissions, as well as reducing ATC's fuel costs.

Finally, ATC owns and operates the Kellogg Education Center in near Great Barrington, Massachusetts. The building was originally a farmhouse built in 1744. An environmental survey has been conducted on the building. A list of actions to reduce greenhouse gas emissions and other environmental impacts is now available. These will be implemented as funds and volunteer time become available.

2. *Educate ATC members and Trail visitors on climate change and its wide-ranging effects on the Appalachian National Scenic Trail.*

This website is the major tool being used to meet this commitment. In addition, articles on climate change have appeared in *AT Journeys*, and workshops on climate change will be part of every ATC Biennial meeting.

3. *Educate ATC members and Trail visitors about the availability of mass transit and other low-carbon transportation alternatives for accessing trailheads.*

The ATC website has information about public transportation to the A.T. and shuttle services that will transport hikers from public transportation to the trail. To access this information:

1. Go to the ATC website www.appalachiantrail.org
2. Click on The Trail
3. Click on Hike the Trail
4. Click on Plan a Hike
5. Click on Getting to the Trail.

4. *Monitor climate change indicators and collect climate-relevant data through the MEGA-Transect and other environmental monitoring programs.*

As discussed in Topic 7, changes in habitat will be the most obvious impact of climate change on the A.T. Change can only be measured against a baseline, that is, the current habitat along the A.T. Comprehensive measurements of the current state of A.T. habitats are underway. Much of it is carried out using remote sensing techniques, aerial photography and satellite imagery. Aerial photographs of the southern third of the A.T. will be obtained in Fall, 2009, and actual mapping of the trail habitats will start in 2010.

Special consideration is given to rare plant species. These cannot be identified remotely, a qualified botanist must walk the Trail and identify them. Between 1989 and 2000, almost a dozen major inventories were contracted by ATC and the National Park Service with state natural heritage offices and qualified biologists. These contractors identified 1759 occurrences of rare plants and animals along the A.T.

ATC and the National Park Service subsequently developed a new procedure that improves the identification, inventory of condition, and reporting on these plants. A “train-the-trainer” session was held in March 2009 for regional coordinators for this program. They will now train the dozens of volunteers who hike to the inventoried communities of plants, monitor and report on these rare and threatened species.

The National Park Service (NPS) is developing an Appalachian Trail Environmental Monitoring Plan to coordinate the various monitoring efforts now underway. NPS expects to have this plan ready mid-2010. ATC volunteers are expected to play an important role in implementing this plan.

5. Include climate change considerations in ATC advocacy efforts.

The resolution contains four commitments related to advocacy:

- Promote mass transit accessibility to trailheads;
- Support appropriate state and federal carbon-reducing policies and measures;
- Urge continuing efforts to protect Appalachian forest lands for the increasingly important purpose of carbon sequestration and climate moderation; and
- Recognize the value of A.T. lands as a corridor to allow wildlife to adapt to climate change, and take this into account in future actions.

These commitments are now part of the ATC’s on-going advocacy effort.

During the June, 2009, House of Representatives debate on the proposed American Clean Energy and Security Act (HR 2454, also known as the Waxman-Markey Bill), ATC wrote to Speaker of the House Pelosi supporting the goals and specific features of the bill that had specific ties to the A.T. (http://www.appalachiantrail.org/atf/cf/%7BB8A229E6-1CDC-41B7-A615-2D5911950E45%7D/Speaker_Pelosi_ltr.%206-19-09.pdf)

6. Conduct further research and analysis with the Appalachian Trail Park Office to determine if the Appalachian National Scenic Trial can meet the criteria for inclusion in the National Park Service’s “Climate Friendly Parks” program in concert with the implementation of these efforts.

This effort is abeyance until sufficient positive results can be obtained from ATC's other climate change-related activities.

7. Partner with other like-minded organizations in carbon reducing efforts and climate change educations programs.

ATC has a long history of partnerships with the Federal and State agencies that own and manage the land the A.T. passes through. ATC will be an active partner with these agencies as they develop plans to address climate change.

ATC also partners with other non-profit organizations including the National Parks Conservation Association, the National Wildlife Federation, The Nature Conservancy, Southern Environmental Law Center, and a host of others.