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# **Spreading the Word**

by Fred Dieffenbach

Collaboration is one of the fundamental tenets of the A.T. MEGA-Transect but it also presents one of the biggest challenges. Joining forces with other researchers and organizations is immediately appealing, but making it happen is not so simple. Keeping people up-to-date with newsletters is one way to promote collaboration but it's not enough, which is why I launched the Appalachian Trail Inventory and Monitoring web site in September. The site is similar to other Park Service I&M program web pages, but the content is specific to environmental monitoring activities on the Appalachian Trail. If you have not already done so, please visit the site:

## http://science.nature.nps.gov/im/units/appa/index.cfm

The site contains links to several ongoing projects, and more will be added in the future. If you want background on an A.T. MEGA-Transect project this is the first place to look. The A.T. Inventory and Monitoring web site is meant to complement the <u>A.T. MEGA-Transect site</u> that the Appalachian Trail Conservancy (ATC) administers.

# What's Happening?

by Fred Dieffenbach

<u>Vegetation Mapping:</u> During October, contractors working through USGS successfully acquired digital color infra-red imagery for the southern 2/3 of the A.T. The process was not without drama as a series of weather systems moved into the region just when we intended to capture the peak foliage imagery. We were nearing the end of the optimal



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acquisition "window" when the skies cleared. In the end the contractor was able to fly the entire stretch. With the 2009 acquisition cycle complete, the imagery is currently being prepared so that the mapping process can begin. Our intent is to make the new imagery available, but it will be some time before the imagery is ready to distribute.

A.T. Decision Support System (DSS): The multi-agency project team met for the first time at the annual SAMAB conference in Asheville, NC. The meeting helped to describe the various pieces of the project and showed how they might work together to improve resource management on the A.T. initially, and beyond the A.T. in the future. Dr. Woody Turner, NASA Ecological Forecasting Program Manager offered a positive review of the meeting, specifically commending the degree of organization and coordination that has already occurred. On the second day of the conference, Dr. Y.Q. Wang presented the A.T. DSS project to a broad and very interested audience. Judging from the response, the product, when finished, will have wide application throughout the Appalachian Region. Follow this Link for additional details.



<u>Acid Deposition:</u> The team conducting the Deposition Effects project has selected a series of potential study sites and is moving through the permitting and compliance

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process. If everything remains on schedule, they hope to begin field work next spring. They are also looking into potential collaboration opportunities with the NASA Decision Support System project. Score 1 for collaboration! Follow this <u>Link</u> for additional details.

Phenology: This fall we tested the new citizen science phenology monitoring protocol at two sites along the A.T. in Vermont. One site was located in Gifford Woods State Park on their marked nature trail, while the other was located nearby at the Thundering Falls boardwalk. The Thundering Falls site attracted all of the attention, whereas the connection between the survey forms (which were placed in the visitor center) and the Gifford Woods nature trail may have been too obscure. Sometime things that seem obvious aren't! Next year we will begin to expand the scale of the project and will eventually include the entire A.T.

The phenology project has also attracted the attention of other I&M networks and is the basis for a science program (under development) that schools can adopt and implement into their existing curriculum.

Landscape Conservation Cooperatives (LCC): The U.S. Fish and Wildlife Service (USFWS) has begun a process to build a series of "...conservation-science partnerships between the U.S. Fish and Wildlife Service, U.S. Geological Survey (USGS), and other federal agencies, states, tribes, NGOs, universities and stakeholders within a geographically defined area..." While the A.T. is not within any of the LCC's that will be created in the next few months, there is good reason to believe that the Appalachian Region surrounding the A.T. will be included next year. Representatives from several agencies met during the SAMAB conference to discuss the LCC program and form a group that will likely lead the future Appalachian Region LCC. The Appalachian Trail Environmental Monitoring Program and the A.T. DSS will both play prominent roles -details to follow! Follow this Link for additional details.

<u>Photo Monitoring:</u> I have planned to develop Standard Operating Procedures (SOP) for an A.T. photo monitoring for several years, and now we are moving forward. We have cameras and things to photograph, but we have lacked a clear and concise process. "Snapshots" have their place, but they are somewhat random which limits their value for monitoring. A few years ago I was introduced to the <a href="PicturePosts">PicturePosts</a> system by John Pickle. PicturePosts is a really well conceived system - it is simple and there are really good directions. The only problem I had with PicturePosts is that it relies primarily on permanently installed markers. For the A.T. we need a portable system, and also need to incorporate markers to provide scale and reference.

In October, Matt Stevens (ATC) and I came up with a plan to hire Lucile Pacquette to draft an SOP that would accomplish all the aforementioned goals - portability, scale, be well documented, etc. Lucile worked with us previously to identify existing water sampling programs and methodologies, so we were familiar with her work and knew she was the right person for the job. We did not ask Lucile to create a new system, rather, we asked Lucile to simply make PicturePosts portable, to add elements of systems developed by the U.S. Forest Service and Natural Resource Conservation Service, and to put the new SOP into a format that would make it easy to incorporate into any data collection process. Lucile agreed, and I am hopeful that we will have a new A.T. Photo Monitoring SOP ready for the 2010 field season.

# **Conferences**

by Fred Dieffenbach

The Southern Appalachian Man and the Biosphere (SAMAB) conference was held during the week of November 16, 2009. This year's conference was entitled "Climate Change in the Southern Appalachians" and brought together presenters and attendees from Federal, state and local agencies as well as academic researchers and nongovernmental organizations. The A.T. MEGA-Transect was frequently mentioned during presentations throughout the conference, and was specifically mentioned for its climate change monitoring potential.

There were several "take home" messages from the conference, including:

- Maintaining the status-quo is not possible, change will happen and we must be ready to adapt. Some species and communities may cease to exist. The focus should be on maintaining "complexity and functionality even as ecosystems are transformed by climate disruption into entirely new systems."
- Do not abandon existing work to focus exclusively on climate change. Instead, incorporate climate change into your existing work and consider it as a possible driving influence behind any detected change.
- Climate is, and always has been an ecological driver but climate change is a "super" driver because it modifies the normal condition in ways we have yet to understand.

There were many other important points, but those are the three that stuck in my mind.

That's all for now - have a happy Thanksgiving! I can't believe it's that time of year already!!

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