

MONITORING APPALACHIAN TRAIL CORRIDORS: AN EXAMPLE OF VOLUNTEER LAND MANAGEMENT

Robert S. Bristow

Associate Professor of Geography & Regional Planning,
Westfield State College, Westfield, MA 01086.

Greg Knoettner

New England Field Assistant, Appalachian Trail
Conference, 18 On the Common, Unit 7, Lyme, NH 03768

Rick Wagner

Appalachian Trail Committee Chair, Berkshire Chapter,
Appalachian Mountain Club, 105 Windigo Road,
Cummington, MA 01026

Abstract: The management relationship between the Appalachian Trail Conference (ATC) and various land management agencies such as the National Park Service (NPS) is a prime example of the Partnerships prescribed by the President's Commission on Americans Outdoors. The Appalachian Trail is one success story of bringing public and private resources together to help plan and manage public protected areas. The monitoring program initiated by the ATC has saved taxpayers many thousands of dollars by enlisting the help of volunteers to serve as the eyes and ears of the National Park Service and other agencies for the public AT lands. This paper illustrates the essential elements of public land monitoring including the steps necessary to implement such a program. It will identify the problems and pitfalls, as well as highlight the successes and enjoyment offered to the volunteer monitor.

Keywords: Volunteer Land Management, Appalachian Trail, Monitoring

Introduction

"The men and women of the National Park Service are wizards at doing more with less, but even they are reaching their limits" (AMC Outdoors, 1997). This quotation by Paul Pritchard, President of the National Parks and Conservation Association rings in the dire need to expand partnerships. One such partnership that exemplifies cooperation to the fullest potential is the working relationship between the Appalachian Trail Conference and the National Park Service. The Appalachian National Scenic Trail (or AT as it is commonly known) is the longest continuously maintained foot trail in the world. It stretches along the Appalachian Mountains some 2100 miles between Springer Mountain in Northern Georgia and Mt. Katahdin in Central Maine.

The AT was the inspiration of regional planner Benton MacKaye, who wrote "The Appalachian Trail: A Project in Regional Planning" in the *Journal of the American*

Institute of Architects (MacKaye 1921). The trail was constructed over the 1920s and 30s and has evolved over time, changing the route and even the southern terminus (Foster 1987). The original plan was further expounded in MacKaye's seminal work, *The New Exploration: A Philosophy of Regional Planning* (MacKaye 1962) and sought to build a "dam" to the encroaching urban landscape.

In 1968, the National Trails System Act recognized the importance of the trail and through an amendment of the Act in 1978, provided funds to secure a permanent right of way (ROW) that would preserve the route and character of the corridor. The law enhanced the working relationship between the Appalachian Trail Conference (ATC) and federal land management agencies, principally the National Park Service. In 1984, the NPS took an equally historic step by delegating the ATC and its member trail maintaining clubs the responsibility for managing NPS-acquired AT lands. This formalized a long term relationship that has made the AT one of the premier hiking experiences available to the American public and a model for other long distance trails (Burch 1979).

Support for outdoor recreation was widespread during the environmental 1960s and 70s, but waned during the economic slump of the 1980s. In the mid Eighties, the President's Commission on Americans Outdoors (PCAO 1986) re-introduced the need to develop partnerships in order to maintain and protect outdoor recreation opportunities in America. Organized and well informed volunteer initiatives in the area of public land monitoring will play a pivotal and crucial role within this framework of public and private partnerships. This paper seeks to highlight some of the issues necessary to undertake recreation trail corridor monitoring.

Background

Monitoring recreation lands is a recognized form of planning and management. As an important part of any planning process, monitoring recreation resources is necessary since conditions change over time, and as a result of these changes, managers must adapt policies to meet administrative mandates. For example, the Limits of Acceptable Change, or LAC, is a planning model utilized by the US Forest Service (Stankey et al. 1985). Monitoring is a part of the LAC planning process. Another planning model found to be successful for land managers is the Quality Updating and Learning (QUAL) model that has been utilized in many recreation resources (Chilman et al. 1991). In this model, monitoring is a dynamic process including all the individuals responsible for land management, from the backcountry ranger to the park superintendent. Yet both of these processes are inherently dependent on paid personnel, something becoming scarce on public recreation lands. A more sustainable arrangement in the tradition of the PCAO mandate, is the long time partnership that has already been in place along the Appalachian Trail since 1984.

The purpose of AT monitoring is to provide regular field inspections of corridor lands. The volunteer monitors are

the eyes and ears for the ATC and NPS. And like any land manager, whether public or private, the main concern is protection of the land against unwanted uses including timber theft, dumping, overuse and misuse (Berkshire Chapter, Appalachian Mountain Club 1991). Further, there is a need to be aware of natural changes in the landscape such as insect deforestation, storm damage or unnecessary erosion.

In Massachusetts, the AT travels over 80 miles between the Vermont and Connecticut borders along the Berkshire Mountains. The Massachusetts AT corridor or greenway is anchored by Mt. Greylock in the north and Mt. Everett in the south. Details of the route can be found in the Appalachian Trail Guide for Massachusetts-Connecticut (ATC 1988). There are essentially two landowners of AT lands in Massachusetts: the National Park Service and the Commonwealth of Massachusetts Department of Environmental Management (DEM). Both agencies participate in the land acquisition effort. State Forest lands make up a third land management type, where the AT corridor traverses more expansive areas of public ownership.

For purposes of trail monitoring, 37 sections of two to three trail miles (approximately 1000+/- acres of land) have been allocated amongst a armada of volunteers. These individuals are solicited from ATC and/or Appalachian Mountain Club (AMC) members and share a common interest in protecting the Appalachian Trail. Three Section Coordinators (Northern, Central and Southern segments of AT in Massachusetts) help organize and assist the monitors in their task. The Chair of the AT Committee, Berkshire Chapter, AMC, oversees the group of volunteers and reports to the AMC and ATC.

Methods

The ATC has classified corridor lands in terms of priority. This ranking is necessary since the frequency of monitoring visits varies according to the level of threat. High priority lands are areas where access or past problems make abuse most likely while less accessible lands rank lower. Sections of newly cut trails or relocations are particularly vulnerable to impacts and thus are placed in this category. These properties need to be inspected twice a month to twice a year. Table 1 lists the characteristics that make a parcel of high priority.

Table 1. Hot Spot Factors that make corridors high priority.

Easement
Special Use Permits
Ungated Powerline crossing
Ungated dirt roads
NPS owned structures
adjacent development, logging, or mineral extraction
adjacent active ATV/ORV area, rifle range or car park
Conflicting use of the land (ORVs, horse back riding etc.)
trespass (dumping camping, timber theft)

Moderate priority lands are threatened by only moderate infractions. For example, tracts that have no hot spots (Table 1.) can be considered moderate unless they are very remote. An annual inspection will probably be enough.

Low priority lands have low risks and can be inspected once every two or three years. These lands may be remote or have minimal land impact infractions. Boundaries on steep or other inaccessible areas can be thought as having a low priority. However initial and thorough inspections should still take place. A minimum level of monitoring should be established for each priority category. Exceeding the minimum levels is desirable and should be encouraged if program participation and enthusiasm is strong.

Once the corridor has been classified as to its priority, field inspections can take place. This is the real fun part of AT monitoring. Depending on the presence of known or suspected problems and the priority of need, monitors can determine what type of inspection is appropriate. More often than not, a combination of methods may be necessary.

Types of Inspections

Boundary hike. The most comprehensive type of inspection and required for initial inspections. It is important to walk the entire boundary during one visit, if possible, and to get the big picture of the properties. This will aid in subsequent inspections, especially if a hot spot is discovered that will need constant monitoring. Extensive note taking and photography will support and document the findings.

Trail hike with some boundary walking. This type of monitoring is useful for sections that have a combination of high/medium priority boundaries and low priority sections. The monitor will follow the trail through the low priority sections and concentrate on parcels threatened by outside use. It also allows the monitor to get a feel for the interior of the corridor.

Trail hike. In the winter, the monitor can view the corridor up to 600 feet on either side of the trail in deciduous forests. A simple trail hike may suffice to narrow corridors.

Doing the Inspection

This requires some basic map and compass work. This paper will not go into the details of map and compass work; interested readers are referred to Kjellstrom's (1976) work titled Be Expert with Map and Compass. The monitor must be comfortable with map and compass since they will be traversing property lines away from the trail and other well traveled ways. Essentially it is also important to remember to account for magnetic declination when following legal boundary descriptions contained in deeds since the bearings are typically based on True North. However this is not always so. Attention to the northern reference is prudent.

Appalachian Trail corridor lands are presently being surveyed and blazed to provide monitors with up to date

and accurate information about the properties. One must then visit the property with the AT segment map, the survey map and compass. Under ideal conditions, the monitor may follow the survey blazes fairly easily, but experience tells us that the path is often obscured by plants (especially bushes with thorns) and survey blazes fade over time. Initial inspections may take all day, but once the monitor becomes familiar with the corridor, the inspections will take less time. The monitor may need only visit the "hot spots" on the majority of future visits. Shortcuts along old logging roads can reduce travel time to a particular area.

However, some sections of the AT remain unsurveyed and the monitor has only the deed information to follow in conducting the inspection. This requires a little more skill and patience, since the corridor is not as clearly marked. Fortunately for some AT segments is the fact that old landmarks may still exist and make the job easier, or at least possible. An old stone wall may mark a boundary, or even the edge between a field and the woods. The monitor will soon realize it may be easier to walk parallel to the property line, especially in steep or heavily vegetated terrain.

Since the monitor will be walking off from the trail, it may appear strange to adjacent landowners. Introducing oneself, as the AT section monitor to the neighbors, will ease their suspicion. And once the neighbors understand the role of protecting the corridor, the monitor may even enlist the landowner to become additional "eyes and ears" for the AT. A good neighbor is better than an angry one.

Report Preparation

A necessary component of monitoring is the record keeping. . While paper work may be considered to be a hassle by those monitors that just want to get outside and bushwhack through the woods, it is vital for tracking the history of problem areas and getting this information into the hands of professional land managers. The documentation may also become legal information in the prosecution of crimes committed on corridors lands. Besides the monitor report (see Appendix A), sketch maps, photographs and other support evidence will provide the best information for trail monitors. It is important to keep copies of all reports submitted, since they may become lost or misplaced

Lessons Learned From the Field

Periodic and regular field inspections can be fun and provide excellent exercise to the monitor. The best time of the year to undertake the monitoring is between the Fall and Spring, when the leaves are off the trees and visibility is maximized. Care should be exercised during hunting season, so check with local regulations about dates in the Fall. Late Spring may be muddy and since the monitor may be bushwhacking through the woods, be careful about trampling on young plants. However, the best thing about this season is the lack of insects, cooler temperatures and the private experience one finds walking in the Appalachian woods.

While the field inspections can be done solo, it is highly recommended that teams of volunteers group to assist one another with the monitoring. Besides being safety conscious, this is especially useful, since pairs of hikers can cover ground faster with a "Leap Frog" type of coverage. That is, one can set a compass bearing while the other heads off in that direction. Once a hundred feet is paced out (or some other distance, still within sight of the compass bearer), the first can "leap" ahead of the other and maintain a correct bearing.

Future

There are tremendous opportunities for this type of land management to continue in the future. As additional lands become protected for open space, traditional land management agencies will become strapped to properly oversee these properties. The partnership described in this paper is one way that the public can become involved in the management of public lands. Besides the obvious savings of public tax dollars, there are two distinct advantages to this partnership. First, it strengthens the bond between public and private agencies and provides an opportunity for all parties to better understand the needs and issues related to protecting our natural resources. And second, the satisfaction one gets by bushwhacking in the woods, knowing that they can have fun, exercise and yet still help protect the Appalachian Trail.

As more and more parks establish citizen partnerships, we can expect the ties to strengthen even further. These "Friends of the AT" become advocates to insure the continued protection of public open space and greenways.

Bibliography

- Appalachian Trail Conference. 1988. *Appalachian Trail Guide to Massachusetts-Connecticut*, 7th edition. Harpers Ferry, WV: ATC.
- Appalachian Trail Conference. 1986. *Handbook for Corridor Monitoring of the Appalachian Trail in Massachusetts*. Harpers Ferry, WV: ATC.
- Appalachian Mountain Club. 1997. "Shouting for National Parks: will the funding crisis take public lands out of public hands?" *AMC Outdoors*. March.
- Berkshire Chapter, Appalachian Mountain Club. 1991. *Handbook for Corridor Monitoring of the Appalachian Trail in Massachusetts*.
- Burch, Wm. 1979. *Long distance Trails: The Appalachian Trail as a guide to Future Research and Management Needs*, New haven, CT: Yale University School of Forestry and Environmental Studies.
- Chilman, K. , Foster, D. Everson, A., Lane, D. 1991. Monitoring systems for measuring trends in wildland social conditions. In: *Proceedings of the National Outdoor Recreation Trends Symposium III*, O'Leary, J. and Fesenmaier, D. eds. Indianapolis, IN: Purdue University.

Foster, Charles. 1987. The Appalachian National Scenic Trail: A Time to Behold. Harpers Ferry, WV: Appalachian Trail Conference.

Kjellstrom, B. 1976. Be Expert with Map and Compass. NY: Scribner.

MacKaye, B. 1962. The New Exploration: A Philosophy of Regional Planning. Urbana: U of I Press.

MacKaye, Benton. 1921. The Appalachian Trail: A Project in Regional Planning. Journal of the American Institute of Architects. October.

President's Commission on Americans Outdoors. 1986. Executive Summary. Washington, DC: USGPO.

Stankey, G. Cole, D. Lucas, R. Peterson, M. and Frissell, S. 1985. The Limits of Acceptable Change (LAC) system for wilderness planning. Gen. Tech. Report INT-176. Intermountain Forest and Range Experiment Station, Ogden, Utah.

Figure 1 Inspection Report

MASSACHUSETTS APPALACHIAN TRAIL CORRIDOR INSPECTION REPORT

Name: _____ Date: ____/____/____

Area and Tracts Monitored: _____

I monitored my Corridor Section and submit the following report:

- 1) Unsightly dumping of garbage, litter or large items, ie cars, or household goods:
- 2) Evidence of camping outside of designated zones, litter or camping/woodcutting:
- 3) Evidence of use by vehicles or horses:
- 4) Evidence of logging or household wood cutting:
- 5) Evidence of damage by natural causes; such as disease, insects or fire:
- 6) Building of fences, shelters or structures on trail corridor:
- 7) Evidence of or knowledge of adjacent development, which can adversely affect the Appalachian Trail or its environment:
- 8) FOR TRACTS WITH EASEMENTS, evidence of violations of restrictions or terms of deed:
- 9) FOR AREAS WITH SPECIAL PERMITS, evidence of any violations of the permit:
- 10) Other

Yes	No	Tract # if Yes

If the answer to any of the above is YES, Please describe below using the back of this form or additional sheets if needed. Include tract #, exact location and/or sketches. Also include suggestions and/or follow-up needed. If you consider the problem to be AN EMERGENCY, please call your MONITOR COORDINATOR or the AMC Regional Office (413) 443-0011, or DEM Regional Headquarters (413) 694-8928, if the problem is on State Land.

Notes

Corridor Monitoring Statistics (This Report):

Hours Spent on Corridor: _____ Travel Hours: _____ Other Help: _____ Help Hours: _____

Number of contacts with land owners, neighbors, and local officials: _____

List and Comments: _____

Signature of Monitor: _____

Address: _____

Phone: _____