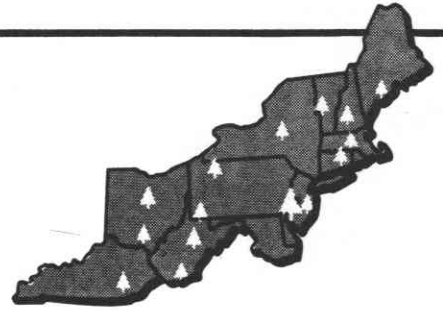


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THE TRAIL GUIDE SYSTEM AS A BACKCOUNTRY MANAGEMENT TOOL

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Abstract. A trail guide booklet containing a map, directional and distance data, and information about the natural and human history and management problems of a backcountry hiking trail was keyed to small, numbered, wooden markers along the trail. This system was evaluated on an 8-mile loop in the White Mountain National Forest in New Hampshire. The system may be useful for contacting backcountry recreationists, gaining their interest and their cooperation.

Introduction

Americans have placed tremendous demands on forest resources as a result of our society's increased mobility, affluence, and leisure time. Outdoor recreation is the dominant use of some forest areas and has equal status with timber, water, wildlife, and range in most forests. The outdoor recreation industry has continued to grow through bad times as well as good.

One element that has contributed toward this growth is the desire of many individuals for dispersed recreation. The National Forests in the Eastern Region reported that in 1975 about 69 percent of their visitors participated in dispersed-type recreation activities. Furthermore, the Forest Service's dispersed recreation program is based on

an estimated 16 percent increase by 1980; 37 percent increase by 1990, and 52 percent increase by the year 2000 (U. S. Forest Service 1976). It would appear that America's interest in dispersed recreation and the problems associated with it are here to stay.

Historically, there has been very little recognition that dispersed recreation had much impact on the physical condition of forest resources. There was seldom more use than a site could biologically handle. Furthermore, the small number of backcountry recreationists probably had little or no negative impact on each other. However, during the past 10 to 15 years, we have recognized the tremendous pressure dispersed recreationists put on backcountry resources. There is now a genuine concern that sheer numbers may spoil the physical

and social characteristics of some backcountry areas (Echelberger et al. 1974).

Managers have several options to cope with the increased pressure put on backcountry resources. They may impose use restrictions, they may harden the sites, they may use subtle techniques to shift use, or they may use a combination of these options. There is considerable research and experience with restricting use¹ (Echelberger et al. 1974; and Stankey and Baden 1977). But restricted use implies regulation, and regulation may detract significantly from the backcountry experience being sought. Managers also have considerable experience with hardening sites (Dunbar 1970; Herrington and Beardsley 1970; Homes et al. 1973; Proudman 1977). However, this may be expensive and it may detract from the attributes that contribute to a high-quality backcountry recreation experience. Furthermore, site hardening may be illegal in some locations.

Subtle means of shifting use pressure is another option, and managers may not be very familiar with its possibilities (Godin and Leonard 1976). Many dispersed recreationists are relatively well educated, fairly sophisticated, and young in spirit as well as body. Their behavior may be influenced by an explanation or a presentation of background reasoning behind management actions or use restrictions. In crowd management, managers seldom have the opportunity to explain the logic behind some of the things that visitors see.

The purpose of this report is to discuss one method that has been tried in the White Mountain National Forest of New Hampshire: the trail guide system. To decrease visitor impacts on fragile sites and improve the quality of the hiking experience, it uses an information and education approach. It can also be used to describe natural and human history, management problems, and use policies. It can also assist management in diverting pedestrian traffic to areas receiving little use or away from areas receiving excessive use.

Trail guidebooks have been in use for many years, either as an invitation to the "glories" of the mountains (Harrington 1926), or for straight trail directions and information (Larrabee 1932; Sadlier and Sadlier 1975; AMC 1976; GMC 1977).

Most of the more recent guidebooks contain a brief section on backcountry etiquette and/or how to minimize man's impact on the resource. However, very few discuss man's unintentional and often detrimental impact on specific sites. The trail guide system described here combines the two types of information: Natural systems are briefly described, managerial actions pointed out, and policies discussed along the trail directions.

Evaluation of the guidebook system convinced us that it is a worthwhile tool to (a) decrease excessive user impacts; (b) increase area used by visitors (disperse use); and (c) sustain or even improve benefits derived from a backcountry recreation experience.

The Study

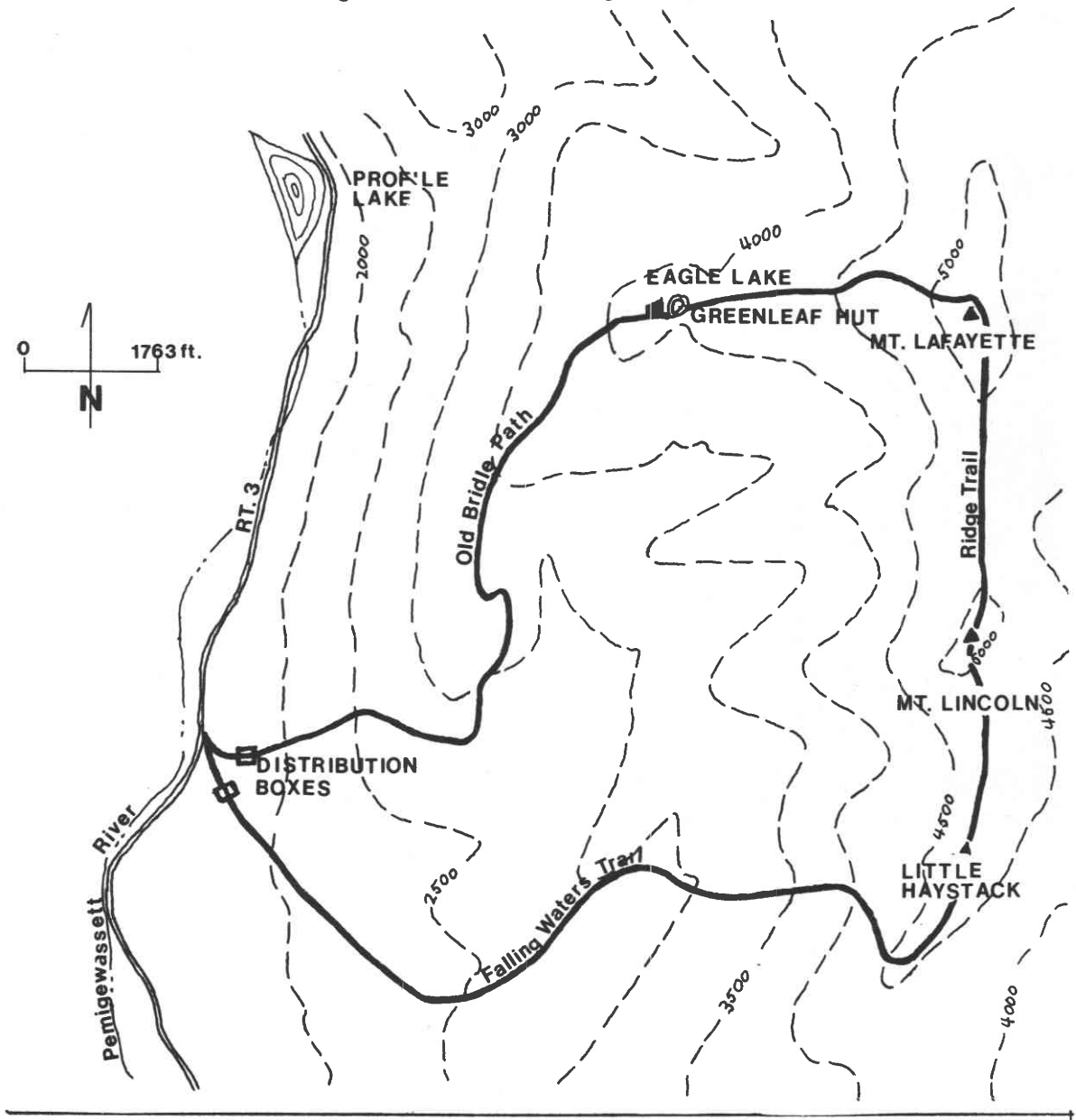
The booklet was made available to hikers on 11 days during July and August. On 6 days unobtrusive observers recorded the behavior of 155 groups (506 hikers). Ninety-two percent of the groups took booklets from the distribution boxes. Only 8 percent of these displayed neutral or negative reactions to the booklets.

The Franconia Ridge Trail Guide System was introduced to the Franconia Notch region of the White Mountains in the summer of 1976. Franconia Notch is a popular mountain pass between North Woodstock and Franconia, New Hampshire. Appalachian Mountain Club hut crew members estimated that about 15,000 hikers passed over the Franconia Ridge during the summer of 1975 (Hamblin 1977). Distribution boxes at the two trailheads of the Franconia Ridge 8-mile study loop (Fig. 1) contained guide booklets which included a topographic map, a mountain profile map, and a trail guide that discussed management problems such as fragile areas and trail erosion, and restricted use policies. Directional and distance information and information about the natural and human history of the area also were included. There were 15 numbered tags along the loop that pinpointed stations referred to in the guide booklet (Fig. 2).

<i>Reaction category</i>	<i>Percent of groups</i>	
	<i>Observed</i>	<i>Interviewed</i>
Strongly positive	41	41
Positive	51	35
Neutral	7	19
Negative	1	5
Total	100	100

¹ Rationing of Backcountry Use—Great Smoky Mountains National Park. Unpublished paper by R. Proudman on file with the Appalachian Mountain Club, Pinkham Notch, New Hampshire.

Figure 1.—Franconia Ridge study loop.

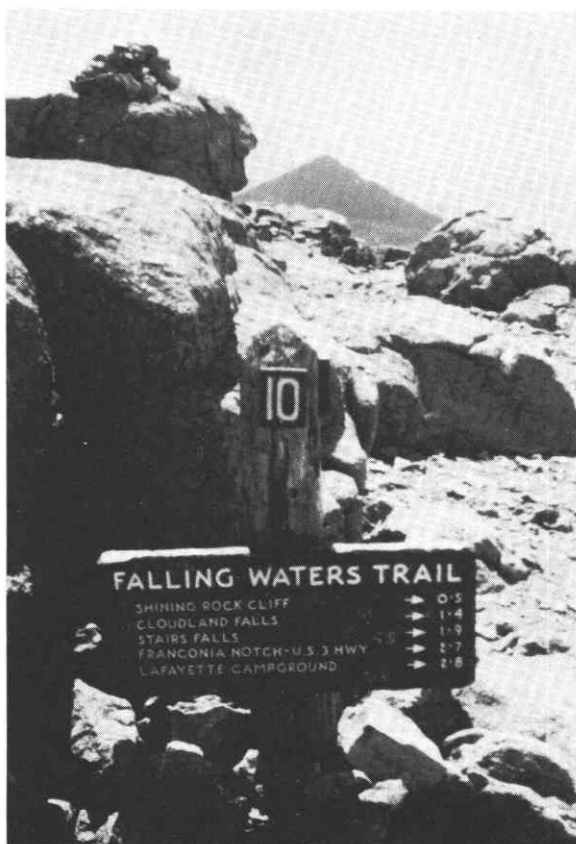


On 7 days, unstructured interviews were conducted with 96 groups (297 individuals). Of the groups interviewed, 76 percent responded positively to the booklets. This figure varied from 79 percent during good weather to 65 percent during inclement weather. Family groups were especially favorable toward the booklets. None of the 5 negative responses indicated more than a mild dislike; they just didn't think much of the system. The dis-

crepancy between observed reactions and interviewed reactions is because 18 percent of the groups interviewed did not have booklets; they either had not picked one up at the trailhead or had reached the interview area by a different trail. These groups were recorded as neutral, even if they expressed interest in having a booklet.

Franconia Ridge backcountry hikers did not perceive the booklet as a threat to their hiking ex-

Figure 2.—Station 10 at Little Haystack. Note numbered tag on intersection post.



perience; instead, they were favorably impressed by it. Booklets were not found littering the trails, nor dropped off at the Greenleaf Hut on the trail loop. There was little or no vandalism of boxes or tags.

The booklet offered the hiker interesting explanations along with the regulations. It does say, “No”, “This is fragile,” and “Watch where you walk”; but most of the hikers found these admonitions palatable in that context.

Discussion

In spite of its limited scope, this study demonstrates that a trail guide system can be valuable for contacting backcountry recreationists and gaining their interest and cooperation. These findings agree with those of Hendee et al. (1968), who felt that most wilderness visitors in the Pacific Northwest would probably purchase and use a small booklet describing features along a trail, and But-

terworth (1970), who proposed a Glacier Peak Wilderness guidebook that would be useful to visitors, contain information about the area’s features, and assist in managing the resource.

There are still some questions to be answered. For example, was the system accepted mostly as a novelty? Would it be seen as favorably by visitors after a longer time? Are backcountry recreationists willing to alter their behavior as a result of new knowledge? Would they change trip itineraries and overnight sites after picking up a guidebook at a trailhead? There also is a need to determine the extent and durability of a positive change in attitude toward management objectives. The applicability of this system to other areas is also unknown.

The trail guide system must be carefully planned and articulated to give the manager a chance to explain his management problems and policies. It could encourage a more knowledgeable hiking public and could also reduce the proliferation of signs seen on some backcountry trails. An advantage of this system is that it can be used as heavily or as lightly as one wishes. If it were a fairly regular part of a backcountry management program, it could induce users to pick up maps which they do not always do now. A number of hikers become lost because they don’t carry a trail map—they simply don’t bother to pick one up. A trail map with a guidebook would make the trip more interesting, and might help managers by cutting search and rescue expenses.

Care must be taken to prevent a trail guide system from becoming a nature trail system: People interested in dispersed recreation often do not favor that type of development. A judicious blend of directional and management information is necessary for a successful trail guide.

Another advantage of the trail guide system is its flexibility. It can be very expensive to change signs in the backcountry, but numbers can be removed and items blocked out of the guidebook at will. Another advantage is that the trail guide can provide more exact information about overnight facilities. A numbered tag and information in the booklet that this is the last water and that a good campsite is 1/2-mile farther on could be very much appreciated by the user.

This guidebook system would probably be most useful in areas where user density is moderate. Some hikers who use such areas are not proficient in reading topographic maps; a keyed informa-

tional map and booklet could be very helpful to them. In more remote areas, where users are widely dispersed, the trail guide system might not be cost effective; in crowded areas it probably would not reduce the need for signs.

The trail guide system, combined with user restrictions, site hardening, and other subtle techniques to shift use may be helpful to managers facing increased use pressure on backcountry resources. The combination of directional information, historical information, and information about man's impact on specific stretches of the trail seems to enhance the backcountry experience for most hikers and can enhance the usefulness of the resource.

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