

Mountain Bicycling in the Urban-Wildland Interface¹

Arthur W. Magill²

Abstract: Mountain bicycling is a rapidly growing sport exerting substantial pressure on recreation areas in the urban-wildland interface. In 1983 there were under a million mountain bike users, today there are 15 million. Little is known about the bicyclists, but hikers and equestrians have complained about encounters with cyclists speeding down trails with little regard for others. Despite the few negative reports, greater value may accrue from benefits to bicyclists, increased income for resorts from summer bicycling, and potential income for rural communities. A study is planned to describe the characteristics of mountain bicyclists, define the amount of conflict with other users, identify commercial opportunities, and define community development potential resulting from bicycling. The research will investigate activities on both sides of the country through cooperation of two USDA Forest Service Research Stations.

Bicycling is among the often conflicting activities that occur where our wildlands and metropolitan areas commingle. Yet, one might question why this long-accepted sport should be controversial. As kids, we all rode our bikes almost daily, and the greatest complaint came when we blocked the sidewalk by dropping our bikes to run into the ice cream shop! Well, that hasn't changed, but bicycles have and so has how they are used. These changes are causing problems in the urban-wildland interface.

Early in the 1970's, some biking enthusiasts transformed old balloon-tired cruisers into prototypes of today's mountain bicycles and started today's mountain bicycling rage. Popularity grew because mountain bicycles are easier to use, more comfortable to ride, more durable than road bikes, and can go most anywhere a rider's ability permits. Most important, they are not limited to use on paved roads. Most of us have seen them, some may ride them, and others may have had "encounters" with them. Whichever your experience, mountain bicycling is on the rise, and natural resource managers are having to deal with it. Little is known about these bicyclists—who they are, where they come from, why they participate, their knowledge of and concern for natural resources, their purported conflicts with other trail users, or their impact on local communities and businesses.

This paper describes mountain bicyclists as a group and in relation to the environment, other users, and local economies. It outlines a study of mountain bicycling being planned by the USDA Forest Service at locations in the southwest and northeast United States.

The Bicyclists

The pioneers of mountain bicycling and competition racers cast an image of irresponsible "machoism" couched in an ingroup status related to bikes and cycling clothing that evolved into a

reputation as "rowdy nonconformists." But, they also were linked to the baby boomers with their dual incomes, offering substantial "discretionary spending," and their adoption of fitness sports including mountain bicycling (Patrick 1988).

Mountain bicyclists also may be linked to the concept of "recreational specialization" that is a continuum from generalized to specialized recreational activity (Bryan 1977). An example is trout fishermen who form a typology from occasional fishermen to technique-setting specialists. Similarly, mountain bicyclists may range from casual riders to elite racers involved in competitive events.

Resource managers are concerned less with the elite mountain bicyclist than with casual riders who take to the trails on weekends or during vacations. The elite are attracted to interface areas once or twice a year for special events, whereas casual riders are likely to be present whenever weather and ground conditions permit.

Effects of Mountain Bicycling

Environment

Some people claim that mountain bicycles damage the environment. Cyclists retort that hikers and horses contribute as much or more damage. For example, Douglass (1987), claimed that "fat" tires exert about the same pressure on the ground as hiking boots. Grost (1989) indicated that bicycles with riders weigh about 870 pounds less than a horse, and do not have the erosive influence of motorcycles. The worst time for trail use may be when they are wet or very dry. Wet conditions can lead to deeply cut surfaces and accelerated erosion, and dry conditions to dustiness that is especially annoying during windy periods. Regardless of who the users are, alternatives are needed to assure protection of the environment.

Other Users

Conflicts between bikers and other trail users continue to occur, and some have suffered injuries as a consequence of encounters on steep trails and blind corners (Foote 1987). Consequently, state, county, and city parks have arbitrarily closed trails to bicyclists, and Federal agencies must prohibit travel in wilderness in accordance with the Wilderness Act of 1964 (78 Stat. 890; 16 U.S.C. 1131-1136). Outside of wilderness, decisions about bicycle use appear to remain at the discretion of local managers. It is not clear whether managers are opposed to mountain bicycling, *per se*, or whether they are applying an easy solution by posting "no entry."

Some hikers and equestrians regard bicyclists as hazardous and inconsiderate—negative perceptions that result from a few "irresponsible" riders. Correcting poor images and fostering

¹Presented at the Symposium on Social Aspects and Recreation Research, February 19-22, 1992, Ontario, California.

²Research Forester, Pacific Southwest Research Station, USDA Forest Service, Riverside, California.

thoughtful and responsible actions of the majority of bicyclists is an endeavor of several mountain bicycle organizations, such as the International Mountain Bicycling Association, the Low Impact Mountain Bicyclists of Missoula, and the Tahoe Area Mountain Bicyclists Association. They are working to educate cyclists on proper behavior and the public about responsible bicyclists while trying to encourage dialogue between hikers, equestrians, and bicyclists (Keller 1990).

Conflicts over space by competing resource users is not new. For example, canoeists and motorboaters have been found to participate in "asymmetrical" or one-sided conflicts (Watson and others 1991). In such conflicts, one group tends to regard the other with favor, but the feelings are not reciprocated. People are known to use available cues to draw inferences about others. Thus, the speed and noise of motorboats established first impressions of motorboaters by canoeists (Adelman and others 1982). This example suggests that hikers or horseback riders, unaccustomed to meeting bicyclists on trails, may be startled by their sudden appearance, have their desire for solitude violated, lose feelings of possessory rights to the trail, and become antagonistic toward bicyclists.

Local Economy

Many resort communities across the country experience a "feast and famine" situation each year, especially those that obtain their predominant income from winter sports. Recreational activities at such locations, including the urban-wildland interface, are drastically reduced during spring and fall, but may improve during summer. Summer use, however, is predominantly camping, hiking, fishing, or sightseeing, which contributes far less to local economies than skiing does. The introduction of mountain bicycling to the urban-wildland interface may bolster weak summer incomes. It is not known yet, however, if mountain biking at resorts and interface communities is profitable.

A Study of Mountain Bicycling

Research units at the Northeastern and the Pacific Southwest Research Stations of the USDA Forest Service are under-

taking a joint study of mountain bicycling. The purpose is to examine the socioeconomic characteristics of mountain bicyclists, their concern about natural resources, the severity of conflicts with other resource users, opportunities to stabilize or bolster local economies, and means for communicating opportunities to potential mountain bicyclists.

The research will examine the background, activities, and expenditures of mountain bicyclists in relation to specific urban-wildland interface resorts. It will investigate cyclists' knowledge of natural resources and views about conflict with other users. The economic influence of mountain bicycling will be determined through analysis of cyclists' expenditures for various goods and services at specific resort areas. And the economic influence on local merchants, before and after the advent of bicycling, also will be studied to determine if the sport has contributed to community stability or growth.

Results of the research should provide resource managers with information to guide planning and decision making regarding use restrictions and public information efforts. It also should give rural communities information suggesting whether mountain bicycling might contribute to their economic well-being.

References

- Adelman, B. J. E.; Heberlein, T. A.; Bonnickson, T. M. 1982. Social psychological explanations for the persistence of a conflict between paddling canoeists and motorcraft users in the Boundary Waters Canoe Area. *Leisure Sciences* 5(1):45-61.
- Bryan, H. 1977. Leisure value systems and recreational specialization: the case of trout fishermen. *Journal of Leisure Research* 9(3):174-187.
- Douglass, D. C. 1987. Accommodating mountain bikes on multi-use trails. In: Report of 1987 Congress on Parks and Recreation, 1987 September 19; New Orleans, LA.
- Foote, J. Two-wheel terrors. *Newsweek*, 1987 September 28. p. 72.
- Grost, R. T. 1989. Managing the mountain bike. *American Forests* 95(3 & 4):50-53, 75-77.
- Keller, K. 1990. Mountain bikes on public lands: a manager's guide to the state of practice. Washington, D.C.: The Bicycle Federation of America, Inc.; 68 p.
- Patrick, K. 1988. Mountain bikes and the baby boomers. *Journal of American Culture* 11(2):17-24.
- Watson, A. E.; Williams, D. R.; Daigle, J. J. 1991. Sources of conflict between hikers and mountain bike riders in the Rattlesnake NRA. *Journal of Park and Recreation Administration* 9(3):59-71.