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# Tourism and Natural Resource Management: A General Overview of Research and Issues

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## **Abstract**

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In recent years, growing awareness among tourism researchers of the relations between tourism and natural resource management has resulted in a substantial body of academic literature examining tourism issues under a relatively new set of tourism concepts. Seemingly new forms of tourism, such as nature-based tourism, ecotourism, and sustainable tourism, now are advocated as an environmentally safe basis for economic development in many rural locations worldwide. The USDA Forest Service has become interested in these new forms of tourism because of decreasing timber harvests and increasing recreation on national forest lands, and the resulting impacts of these changes on local economies. New forms of tourism are closely related to outdoor recreation, which has been a management objective of National Forests since their inception. This paper discusses the concepts of nature-based tourism, ecotourism, and sustainable tourism; provides a general overview of research and issues; and suggests potential areas for future research. The intent is to provide a general overview of existing literature to serve as a primer for researchers and policymakers initiating more thorough investigations of tourism and natural resource management.

**Keywords:** Nature-based tourism, ecotourism, sustainable development, outdoor recreation.

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## Introduction

Tourism development commonly has been advocated as an alternative to traditional natural resource-based economic development, such as timber production, agriculture, and mining. Recently, many advocates of tourism have promoted seemingly new tourism concepts, such as nature-based tourism, ecotourism, and sustainable tourism, among others. These new forms of tourism are promoted as an environmentally safe way for rural communities to generate income from natural resources. They are advocated particularly in developing countries because many developing countries possess a comparative advantage over developed countries in their ability to provide relatively pristine natural settings (Cater 1993). Affluence, education, and environmentalism all contribute to increasing visitation to wild lands and generate income for local communities through the expenditures of tourists such as lodging, transportation, food, guides, and souvenirs (Laarman and Sedjo 1992). Demand for these new forms of tourism, it is argued, arises from increased concern or interest in unique and fragile ecosystems and a growing desire to travel to new and exotic places, and an increasing number of people who have the financial means to do so (Seidl 1994).

Research interest in these new forms of tourism has surfaced in the United States partly because of decreasing timber harvests and increasing recreation on national forest lands and the resulting impacts of these changes on local economies. Supply and demand projections for outdoor recreation into the next century suggest that quantities demanded will exceed supply for many activities including wildlife observation, primitive camping, backpacking, and nature study (English and others 1993). Although tourism and local economic development are not explicitly included in the mission of the USDA Forest Service, national forest management plans often include tourism development among stated goals. For example, one goal of the Tongass National Forest management plan is to maintain recreation resource opportunities throughout national forests while cooperatively participating with local communities and user groups when implementing recreation development projects (USDA Forest Service 1997, p. 4-36). The plan seeks to coordinate information and marketing efforts with tourism providers and promoters to complement efforts, to target markets for new and existing opportunities (USDA Forest Service 1997, p. 4-37). New forms of tourism also are closely related to outdoor recreation, which has been a management objective of national forests since their inception.

This paper presents a general overview of relatively recent tourism research and issues relevant to natural resources management on public lands. It discusses the concepts of nature-based tourism, ecotourism, and sustainable tourism; provides a general overview of research and issues; and suggests potential areas for future research. The paper provides basic information about new and different tourism concepts, approaches to measuring their economic impacts and values, and issues related to successful tourism development. Published literature about tourism is extensive and international. Although this overview draws on much of the existing recent literature, it is not an exhaustive review of that literature. Rather, it includes a significant body of literature sufficient to serve as a primer for researchers and policymakers initiating more thorough investigations of the relations between tourism and natural resource management.

## Nature-Based Tourism, Ecotourism, Sustainable Tourism

Increasingly, terms such as nature-based tourism, ecotourism, and sustainable tourism, among others, have been used by tourism researchers to characterize specific types of tourism and to qualify specific ranges of tourism-related issues. Several studies devote significant attention to defining these different tourism concepts and their implications in relation to tourism (a few examples include Backman and others

1994, Buckley 1994, Garrod and Fyall 1998, Higgins 1996, Orams 1995, Tisdell 1996, Wall 1994, Wight 1993a). This paper is less concerned with debating the nuances of the different concepts than it is with suggesting what different tourism concepts imply about relations between tourism and natural resource management. At times, the terms nature-based tourism, ecotourism, and sustainable tourism seem to be used almost interchangeably. Other less commonly used terms include green tourism and alternative tourism. Among many researchers, however, each term implies a specific concept motivated by concern about the environmental, social, and cultural impacts of tourism.

Most of the literature on tourism describes nature-based tourism (or nature tourism) as tourism activity generated by the existence of nature preserves, parks, and refuges. It is travel that primarily involves direct enjoyment of undisturbed natural environments (Valentine 1992, Weiler and Davis 1993). Absent additional qualifiers, nature-based tourism seemingly could include what many would view as fairly mainstream tourism development ranging from large hotel and restaurant franchises intended to serve the needs of nature tourists for such activities as whale watching from cruise ships and visiting popular sites such as Yellowstone National Park. Most of the literature, however, qualifies nature-based tourism as being specifically concerned with the conservation or preservation of the "nature" on which the tourism is based. For many researchers, it is this qualification that distinguishes ecotourism from nature-based tourism.

The term ecotourism has been used as far back as 1965 (Fennell 1998). Gosling (1999) suggests that nature-based tourism is derived from the existence of natural areas with no specific concern for their protection, whereas ecotourism is concerned with the protection of natural areas. Gosling advocates ecotourism as a means to achieve rural economic development by enabling people who live in rural areas to capture the economic nonuse values derived from natural areas. Typical services offered at ecotourism destinations might include local arts and crafts, guided hikes and wildlife viewing, publications, natural history lectures, photography, and local food. Revenues are generated from fees for these services, as well as natural area user fees and local expenditures for hotels, restaurants and bars, and transportation services (Seidl 1994).

Some writers qualify ecotourism even more specifically, suggesting that it also must provide direct revenue toward the conservation or protection of natural areas and educate tourists about related environmental issues. The Ecotourism Society defines ecotourism as "travel to natural areas to understand the cultural and natural history of the environment, taking care not to alter the integrity of the ecosystem, while producing opportunities that make the conservation of the natural resources beneficial to local citizens" (Wood 1993). Orams (1995) argues that ecotourism must provide more than mere enjoyment; it must foster changes in the attitudes and behavior of tourists about the protection of natural resources.

The qualification that ecotourism not harm the natural environment raises the issue of sustainability and the additional concept of sustainable tourism. Many writers devote much attention to defining ecotourism and sustainable tourism (for example, Garrod and Fyall 1998, Hughes 1995, Hunter 1995, 1997). Definitions of sustainable tourism, however, vary according to differing views of sustainability. Sustainability in tourism literature can be considered within political, social, economic, ecological, and cultural contexts (Henry and Jackson 1996) with sustainability of natural resources being the predominant view. Whelan (1991a), for example, describes ecotourism as sustainable economic development providing employment and income to local communities while

allowing for the continued existence of the natural resource base. A different view of sustainable tourism focuses on social and cultural stability. For example, Pearce (1995) warns that focusing on ecological sustainability too often ignores sociocultural sustainability. Tourists can intrude on locals, and locals can intrude on tourists (Weaver 1995).

Many researchers define ecotourism as the type of sustainable tourism development advocated in the Bruntland Report (World Commission on Environment and Development 1987). Ecotourism precludes more intensive exploitation of natural resources in rural areas or developing countries by providing economic returns that exist as positive incentives to local residents who are enlisted in natural resource protection. In this view, nontourism industries generally are portrayed as exploitative and degrading to natural resources, whereas tourism generally, and ecotourism specifically, are advocated as ways to capture natural resource use and nonuse values. According to this view, nontourism industries must be controlled and ecotourism promoted.

Some researchers view the tourism industry itself as exploitative and degrading to natural resources as well as indigenous people and cultures. According to this view, the development of tourism is what must be controlled to sustain natural resources and cultural attributes on which tourism depends. This view of sustainable tourism, as Hughes (1995) notes, arises from dissatisfaction with present principles and practices of the tourism industry as a whole.

To some extent, sustainability concerns arising from unconstrained tourism development are related to the concept of recreation carrying capacity, a term that has been used to define appropriate social, cultural, and ecological limits to tourism development (for example, Brown and others 1997, Johnson and Snepenger 1993, Stankey and McCool 1984), although debate continues as to its usefulness (see for example, Brown and others 1998, Buckley 1999, Lindberg and McCool 1998, Lindberg and others 1997). Researchers also have discussed ecotourism in the context of the tourism life cycle (Butler 1980). The general idea is that a relatively undeveloped location initially may attract a few adventurous tourists seeking pristine nature and indigenous cultures. As tour operators and related service businesses recognize the market potential of a location, the local tourism industry expands, and the location becomes more developed. The expanded local tourism industry may continue at the location, but the initial tourists, originally attracted by the undeveloped features of the location, move on to other locations that remain undeveloped and pristine.

Wall (1994) suggests that ecotourism is characteristic of the early stages of the tourism life cycle. Ecotourism relies on a place to look and feel pristine, but once a place is "spoiled," the ecotourism industry must search for the next undiscovered and pristine landscape or culture. In effect, ecotourism acts against the goals of ecotourism (Haenn 1994). The life cycle implies that carrying capacity is exceeded when visitation increases to the extent that a shift from ecotourists to general tourists occurs (Duffus and Dearden 1990, Thomlinson and Getz 1996). For some ecotourism advocates, sustainability issues arise from concern that destinations will evolve into these later stages. More cynical observers suggest that economic incentives to develop are too great for any tourist destination to remain undeveloped for long. As destinations become crowded or degraded because of increased visitation and human encroachment, supply is reduced until new destinations become available (Seidl 1994).

The concept of sustainable tourism also at times focuses less on tourism as sustainable development than on sustaining the tourism industry itself. For example, Cohen and Richardson (1995) and McKercher (1993b) suggest that nature-based tourism is

vulnerable to incompatible industries operating too near tourism sites. Cohen and Richardson (1995) in particular argue that the nature-based tourism industry must gain sufficient power to enlist the support of public officials to exclude incompatible industries. Hunter (1995) criticizes some of these emerging notions of sustainable tourism as tourism centric. Sustainable tourism, Hunter (1995) argues, may not be consistent with sustainable development because it focuses more on specific tourism sites and their protection than on the surrounding geographic area. With such a narrow geographic focus, the potential exists for environmental problems associated with tourism in one location to be passed on to surrounding areas (Hunter 1995).

Whichever term we use, nature-based tourism, ecotourism, sustainable tourism, or some other conceptual permutation of tourism, any one can be somewhat value-based and reveal personal biases of the individual researchers who advocate them. The concepts commonly are used as labels in tourism marketing without necessarily meeting specific sustainability criteria (Wight 1993a) and without actually addressing any of the potentially negative impacts of tourism (Wheeler 1993). The concepts can be viewed more broadly as innovation within the tourism industry as it responds to changing market conditions and consumer demand for environmentally friendly products (Hjalager 1996, 1997). The concepts themselves are not new but rather are new ways of categorizing the pleasure travel market or tourism (Backman and others 1994).

Other researchers suggest that although new concepts such as ecotourism may not represent an abrupt shift from traditional recreation and tourism, they do represent a change in the level of visitation to natural areas and a change in the goals that various stakeholders attach to visitation. In particular, tourists increasingly demand vacations that are challenging and educational. Community planners and other local officials increasingly view natural areas as potential sources of tourism revenue that can offset economic declines in other natural resource sectors and contribute to the protection of natural areas themselves (Lindberg and McKercher 1997). Because the precise meanings of new tourism concepts can be somewhat ambiguous, analysts conducting applied tourism research must adapt new tourism concepts to the specific environmental, social, and cultural constraints that characterize tourism issues under study.

## **Research and Issues**

Much academic literature has been published in recent years about various issues implied by new tourism concepts, many of which have implications for natural resource management. This section provides a brief overview of that literature. Much of this work can be loosely classified as ecotourism literature, although the label means somewhat different things to different researchers. Many of the studies discussed in this literature are conducted in developing countries. The issues raised and the methods used, however, have distinct parallels with tourism development issues in the United States, particularly those relevant to rural areas of the United States where national forests and other public lands already attract (or have the potential to attract) tourism and inspire tourism development in surrounding communities.

## **Economic Impacts, Economic Values, and Market Segmentation**

An important factor in ecotourism development is the amount of revenue that remains within local economies (Seidl 1994). For example, economic benefits derived from ecotourism can contribute to residents having positive attitudes toward local natural areas (Lindberg and others 1996) and serve as economic incentives for natural resource conservation (Wunder 2000). Alternatively, if local residents bear the costs of tourism without receiving any benefits, they may be unsupportive of not only tourism but also the conservation of natural areas on which tourism is based. Sustainable tourism development must meet the needs of the host population in terms of improved living

standards while satisfying the demands of tourism and protecting the natural environment (Seidl 1994). The costs and benefits of protection may not be distributed equally among tourism providers and local residents (Dixon and Sherman 1990).

Measuring the economic impacts of tourism and outdoor recreation has received considerable attention in academic literature (see reviews by Eadington and Redman 1991, Frederick 1992). Economic impacts generally are examined within a cost-benefit framework (Dixon and Sherman 1990, Walsh 1986) with the benefits measured by using expenditure surveys combined with input-output analysis (for example, Briassoulis 1991, Propst 1985). Travel cost or contingent valuation methods also are commonly used to place dollar values on natural areas or marginal changes in their characteristics (Bostedt and Mattsson 1995, Durojaiye and Ikpi 1988, Echeverria and others 1995, Forster 1989, Lee 1997, Lee and others 1998, Loomis 1989, Moran 1994). The trend toward greater reliance on user fees in the financial management of public lands (Laarman and Gregersen 1996, Van Sickle and Eagles 1998) also has led to many studies examining fees and pricing policies (for example, Chase and others 1998, Leuschner and others 1987, Lindberg and Huber 1993, Rosenthal and others 1984, Ross Risher and Christensen 1999, Wilman 1988).

Measuring economic impacts or values derived from tourism necessitates differentiating between the economic benefits derived from the various forms of tourism. One of the problems in determining the economic impact of ecotourism, for example, is knowing what is meant by the term (Tisdell 1996). Differentiating between economic benefits derived from ecotourism and those derived from general tourism can depend on how each is defined.

When ecotourism is defined less restrictively, as simply tourism derived from nature preserves, parks, or refuges, researchers tend to assume that all economic impacts derived from those natural areas are ecotourism-derived impacts (for example, Boo 1990). Economic impacts are measured by using expenditure surveys of tourists visiting those areas. Tourism expenditures assumed to be generated by a particular natural area may be reported for a well-defined geographic area (English 1992, English and Bergstrom 1994, English and Thill 1996, Yuan and Christensen 1994) or combined with input-output analysis to describe secondary impacts (Cordell and others 1992, Donnelly and others 1998, Kanters and Botkin 1992). An alternative to surveying tourists is surveying local businesses (Kangas and others 1995) and residents (Lindberg and others 1996).

When ecotourism is defined more restrictively and confined to particular types of tourism activity or particular types of tourists, researchers attempt to segment tourists into the categories of ecotourist and general tourist. One approach identifies ecotourists as those individuals pursuing recreational activities that are assumed to characterize ecotourism. Economic impacts might then be based on the economic value of specific outdoor recreation activities. For example, studies have estimated the economic value of wildlife viewing (Navrud and Mungatana 1994), birdwatching (Eubanks and others 1993, Hvenegaard and others 1989, Kerlinger 1995), and whitewater recreation (Johnson and Moore 1993), among other activities (for example, Bhat and others 1998).

Another approach confines ecotourism to tourists possessing certain attitudes or motives. Attitude or motive-based segmentation combines surveys of tourists with factor and cluster analysis to segment tourists according to their trip motives or socioeconomic characteristics (Andereck and Caldwell 1994, Backman 1994, Beard

and Ragheb 1983, Loker-Murphy 1996, McCool and Reilly 1993, Ryan and Glendon 1998, Stemerding and others 1996, Thrane 1997). This method has been used to segment ecotourists from general tourists (Eagles 1992, Hvenegaard and Dearden 1998, Saleh and Karwacki 1996, Wight 1997) and ecotour operators from non-ecotour operators (Bottrill and Pearce 1995). Segmentation can be used to disaggregate expenditure, travel cost, or contingent valuation survey results into ecotourism and general tourism economic impacts. Segmentation also can be used to evaluate how preferences for site management differ among ecotourists and general tourists (for example, Betz and Perdue 1993, Holden 1998, Holmes 1996, Jurowski and others 1995).

Selecting an appropriate method for segmenting different types of tourism and tourists depends on the location and situation of interest. Focusing on specific natural areas may be appropriate in some cases, whereas focusing on different types of tourists may be appropriate in others. Some tourists may visit one location to escape commercial development, whereas others may expect typical tourist services offered by national franchises. Different tourists may differ in their spending and rates of visitation. Individual trips might take on characteristics of ecotourism at some times and characteristics of general tourism at others (Lindberg 1991). Recognition of different types of tourism and tourists, the economic impacts different tourists generate, and the use and nonuse values they hold with respect to their tourism experience can have important implications for how tourism economics research is conducted.

## **Planning and Development Case Studies**

Perhaps the greatest proportion of published ecotourism literature presents case studies examining political, social, economic, and environmental issues related to tourism development in specific locations (for example, Akama 1996, Campbell 1999, Carr and Wilson 1994, Cooper 1995, Hall 1998, Hall and McArthur 1993, Hampton 1998, Herath 1997, Hughes 1995, Klemm 1992, Lindberg and others 1996, Moore and Carter 1993, Muir and Chester 1993, Owen and others 1993, Unwin 1996, Wall 1993, Weaver 1995). Additional case studies examine perceptions of tourism and ecotourism among local residents (Campbell 1999, Fitton 1996, Lindberg and Johnson 1997, Walker 1997), businesses (Berry and Ladkin 1997, Forsyth 1995, Hvenegaard and others 1989, Langholz 1996, Lew 1998, Thomlinson and Getz 1996, Weaver and others 1996), and local government officials (Godfrey 1998). Case studies also describe ecotourism businesses development (Herremans and Welsh 1999) and examine nature-based tourism promotion strategies (Durst and Ingram 1988).

Some studies focus more directly on difficulties associated with ecotourism planning and development. For example, ecotourism development can be adversely impacted by inadequate protection of natural areas on which ecotourism is based (Wells 1993). National political and economic priorities can dominate regional or local priorities, thereby leading to national policies that are incompatible with sustainable tourism development (Tosun 1998). In other locations, prodevelopment and proprotection roles might be reversed. Disagreement may exist between national protection interests and the economic development aspirations of local communities (Prunier and others 1993). Sustainable tourism advocates may not always agree with local residents. What sustainable tourism advocates may see as potential conflicts between tourism development and natural resource protection, local residents may see as desirable economic development. Failure to involve communities in tourism development decisions along with an inability of policymakers to form an integrated regional vision can be obstacles to sustainable development (Ioannides 1995). Progress toward sustainability most likely occurs in communities that recognize the potential costs and benefits of tourism and are willing to take a proactive approach in its planning and management (Godfrey 1998).

Collaboration is a common theme advocated for successful ecotourism development. Cooperation and coordination between public and private sectors are important (Berry and Ladkin 1997, Klemm 1992). Several case studies describe integrated roles of natural resources management agencies, tourism service industries, government agencies, and local communities as important factors leading to successful ecotourism development (Boo 1990, Bramwell and Sharman 1999, Burns and Holden 1995, Darrow 1995, Dixon and Sherman 1990, Fennell and Eagles 1990, Masberg 1996, Moore and Carter 1993, Selin 1994). Many studies advocate the need for community involvement and outline community-based tourism development strategies (Anderson 1991, Haywood 1988, Murphy 1988, Simmons 1994, Taylor 1995).

Community involvement can be impeded by disagreement over the level or type of tourism development desired (Wyllie 1998). It can be difficult to discern whether tourism development is an appropriate alternative to other types of economic development in different locations (Joppe 1996). A potential problem of basing a local economy on tourism is that tourism injects money into the economy without producing more goods for people to consume. This can result in local price inflation, which is worsened by the presence of tourists who increase demand (Seidl 1994). For many communities, tourism will have a limited growth potential. Economic activity based on tourism and recreation can suffer significant seasonal variability (Keith and others 1996). Ecotourism is subject to fluctuations owing to ups and downs in the trendiness of given destinations and modes of travel (Seidl 1994). Local residents also may face significant opportunity costs associated with restrictions on local resource use, whereas the benefits of protection may not be readily apparent. Tourism should be viewed as part of an overall economic and environmental plan that includes other industries (Anderson 1994).

Researchers argue that overdeveloped or unsustainable tourism results from the open-access nature of natural resources on which tourism is based (Lindberg 1991, Steele 1995). Overdevelopment can result in damage to natural resources and reduced enjoyment by tourists because of congestion and site degradation. Steele (1995) argues that problems derived from open access can be remedied if control over the resource is assigned to governments, local communities, or private entities who can restrict access. Assigning control to one entity, however, can lead to other problems. For example, governments may feel compelled to maintain open access as a service to the public (Lindberg 1991). Development of seemingly sustainable tourism also can lead to unsustainable tourism development if tourism businesses are unable to resist the temptation to increase visitors (Weaver 1995). Economic incentives often run counter to preservation and favor development (Backman and others 1994). Tourism development also potentially can spark desired or undesired growth in nontourism sectors.

### **Establishing Criteria for Success**

Several studies propose specific principles, criteria, or guidelines by which to judge ecotourism development success (D'Amore 1992, Driml and Common 1996, Ecotourism Society 1993, Lane 1994, Moscardo and others 1996, Todd and Williams 1996, Valentine 1993, Wallace and Pierce 1996, Wight 1993b). Some attempts at sustainable tourism development also have relied on the implementation of charters or codes of ethics designed to guide the activities of tourists and the tourism industry (Blangy and Wood 1993, D'Amore 1992, Mason 1994, Millman 1989). Dowling (1993) proposes an environmentally based tourism development planning model as one way to implement environmentally compatible sustainable tourism. The usefulness of such prescriptions for ecotourism likely are dependent on specific circumstances of specific locations.

## **Tourism Research and the USDA Forest Service**

National forests and other public lands undoubtedly have played a role in attracting tourism in many communities located near them, by providing significant outdoor recreation opportunities in relatively undeveloped settings. Much of this tourism fits within new nature-based tourism, ecotourism, and sustainable tourism concepts. Many of the issues and concerns that motivate interest in new forms of tourism are consistent with the traditional conservation-oriented multiple-use objectives that have characterized national forest management. Although outdoor recreation historically has been an important component of research conducted by the USDA Forest Service, tourism research has not. Although recreation and tourism research address many similar concepts and issues, little integration exists between the two. Increasing recognition of the role of national forests as tourism destinations may imply a need to expand traditional outdoor recreation planning to include inquiry into the economic, social, and ecological impacts of tourism.

## **Evaluating National Forests as Tourism Resources**

An important factor in tourism development is whether natural or cultural resources exist on which to base a tourism industry. New tourism concepts, such as ecotourism, may require natural areas or cultures that are relatively unique or pristine. Economic feasibility depends on a site having a marketable product (Seidl 1994). Not all locations are sufficiently unique to draw tourists. If a location is a less popular or highly specialized destination, there can be risks involved in developing a reliance on tourism (Anderson 1991). Poor accessibility owing to remoteness or inadequate transportation systems can constrain tourism growth. Some communities may be unable to provide or develop necessary complementary tourist services. Different scales and types of tourism development may be appropriate in different locations. Some communities located near national forests or other public lands likely possess comparative advantages in offering relatively undeveloped natural areas potentially of interest to tourists seeking outdoor recreation opportunities. Whether their comparative advantages in tourism exceed those in other natural resource-based industries is not always clear. Evaluating the existing and potential role national forests can play in attracting local and regional tourism likely would aid national forest managers in natural resource planning.

## **Forest Management Impacts on Tourism**

In addition to the natural resource endowments provided by national forests, how those endowments are managed will significantly impact the numbers and types of tourists that will be attracted. Traditional multiple-use objectives of national forests may be incompatible with certain types of tourism. For example, it is plausible that certain types of tourists may be unwilling to accept any signs of intensive forest management for commercial timber production. Locations that can enhance or maintain their relative environmental quality will improve their comparative advantage over other destinations (Farrell and Runyan 1991). Also, certain recreational activities may be incompatible with others, thereby resulting in conflicts between different tourists seeking different forms of recreation. Hikers may be at odds with off-road vehicle users, hunters may be at odds with birdwatchers, and motorized boaters may be at odds with nonmotorized boaters. Accommodating every type of tourist may be infeasible in every location. Tourism planning may require aligning forest management with the preferences of tourists in specific locations. User surveys could assist in identifying specific outdoor amenities and forest management activities that attract or repel different types of tourists (for example, Betz and Perdue 1993, Holmes and others 1996) and aid in developing appropriate forest management prescriptions in specific locations.

## **Evaluating Economic, Social, and Ecological Tradeoffs**

Recent literature on tourism tends to differentiate between mass tourism, which is viewed as environmentally and culturally destructive, and alternative forms of tourism developed on a smaller scale so as to minimize adverse impacts to local environments and cultures. These alternative forms of tourism, it is argued, provide local residents greater employment opportunities, maintain a greater share of economic benefits within the local area, and result in less negative impacts (Hampton 1998). In contrast, mass tourism is associated with large-scale, high-density accommodations, contrived attractions, seasonal markets, and limited benefits to the local economy with minimal concern for carrying capacity and a lack of local involvement (Weaver 1995). One advantage of tourism development on a larger scale, however, is the ability for local government agencies to control accommodation standards and recoup tax revenues through licensing, which is more difficult with more fragmented and small-scale tourism development (Carey and others 1997). Different types and scales of tourism development imply economic, social, and ecological tradeoffs.

Virtually any kind of tourism activity will result in some impact to natural resources somewhere (Cater 1993, Hunter 1997). Despite strong ethical and environmental motives, ecotourists still are seeking primarily pleasure and entertainment (McKercher 1993a). As Prunier and others (1993, p. 141) suggest, a person who wishes to be a “green” holidaymaker should remain at home. Wildlife biologists are concerned that even ecotourism can adversely affect wildlife (Jacobson and Lopez 1994). Moscardo and others (1996) suggest that rather than embracing a simplified dichotomy between “good” and “bad” tourism, a more useful analytical framework may be to examine the dimensions underlying the different manifestations of tourism. A successful tourism industry in one area may not fit in another.

In their discussion of recreation carrying capacity, Stankey and McCool (1984) suggest that the question of “how much is too much?” may focus on the wrong issue. Rather, the focus should be on identifying what kinds of resource and social conditions are appropriate and acceptable in different settings. In considering if tourism development is appropriate in a given location, the comparative advantages of different types and scales of tourism development need to be evaluated. Social, economic, and ecological constraints need to be identified. Successful tourism development will depend less on how tourism is labeled than on the natural endowments in given locations and the existing infrastructure, local expertise, and community support necessary to complement those endowments. Studies could address what types and scales of tourism development are appropriate in certain locations from economic, social, and ecological perspectives.

## **National Forest Fees and Local Economic Impacts**

In recent years, there has been increasing interest in charging user fees for access to public lands. Revenue can be made both by entrance fees charged to tourists and by use permits charged to businesses offering tourist services such as guided tours on public lands. Fees can help public agencies recoup the costs of natural resource management and reduce congestion at certain sites by creating economic disincentives to visit. Entrance fees to parks and natural areas frequently are set below amounts visitors are willing to pay and below amounts required to finance park budgets (Laarman and Gregersen 1996). Low fees often persist because of a lack of information regarding site demand, and potential impacts of charging higher fees often are unknown (Lindberg and Johnson 1994). Pricing potentially can lead to greater efficiency, fairness, and environmentally sustainable nature-based tourism (Laarman and Gregersen 1996). For national forests, this may imply setting user fees that are sufficient to capture positive unpriced benefits derived from forest resources.

## Defining the Role of the Forest Service in Tourism

For local communities, however, a significant socioeconomic factor in tourism development is the proportion of tourism income that can be captured by the local economy. Such income is generated through employment in tourism-related services such as food and lodging, gasoline, local tour guiding, and sale of souvenir and outdoor recreation equipment. Charging access fees to public lands potentially reduces visitation and can result in adverse economic impacts to local communities where access to public lands is a primary attraction. User surveys incorporating contingent valuation, travel cost, or other methods could be used to provide information about the impact of fees on rates of visitation. Such studies could be combined with economic impact assessments within local communities to describe different fee levels in terms of potential local economic impacts. The fiscal benefits of access fees on public lands could be evaluated within a broader context to include the tourism industry in which public lands are a part.

National forests likely will have an increasingly significant impact on tourism in communities located near them. As the U.S. population continues to grow and become more urban, so do ever-increasing demands for outdoor recreation opportunities. Such increased demands will place growing pressure on National Forests and other public lands to provide the types of nontimber amenities desired by many recreationists. These changes will lead to increasingly difficult decisions about national forest management as managers try to balance traditional multiple-use objectives. The role the USDA Forest Service intends to play in tourism development in local communities is not clearly defined. Should the agency be more actively involved in local tourism development planning? Are there types of tourism the agency should encourage or discourage? How would the role of the agency differ depending on local economic, social, and ecological conditions, and in relation to economic diversification, community resiliency, and economic dependence on public lands? These likely will be some of the questions confronting researchers and policymakers in the future.

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