

# ADVENTURE RECREATION AND ITS IMPLICATIONS FOR WILDERNESS

BY ALAN W. EWERT AND STEVEN J. HOLLENHORST

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**Abstract:** A number of increasingly popular adventure recreation activities, including rock climbing, mountaineering, and remote-area trekking often take place in wilderness. This paper discusses the current status, trends, economic impacts, ecological implications, and future management challenges facing wilderness managers who must respond to adventure recreation in wilderness.

**T**HE GROWTH OF LEISURE ENDEAVORS THAT INHERENTLY CONTAIN ELEMENTS OF DANGER to the participant has coincided with the increase in wilderness visitation worldwide. As the popularity of adventure recreation grows, there will be increased pressure exerted on the wilderness resource by this expanding number of adventure seekers. In this article, we compare and contrast the theoretical foundations of the wilderness and adventure experience. The adventure recreation phenomenon is then described from the perspective of current status, trends, and economic impacts, and what implications and future management challenges face the wilderness manager who must respond to these new pressures.



Article coauthors Alan W. Ewert (right) and Steve J. Hollenhorst (left), taking a break on top. Photo by A. W. Ewert.

## Defining the Wilderness and Adventure Recreation Experiences

Like other wilderness experiences, adventure recreation activities are essentially nonutilitarian and provide intense, positive, intrinsically enjoyable experiences to participants (Arnould and Price 1993). Concepts that characterize the nature of both experiences include extraordinary experience (Abrahams 1986; Arnould and Price 1993), flow (Csikszentmihalyi 1975, 1990), and the Adventure Model (Ewert and Hollenhorst 1989, 1994). Embodied in these concepts are the experiential qualities of clear focus and extreme concentration; merging of action and awareness; spontaneity of action; personal control and awareness of power; intense enjoyment; and perhaps transcendence of self as congruency is found between the challenges inherent in the activity and one's abilities to respond competently to those challenges. Going beyond the traditional set of benefits ascribed to leisure experiences (e.g., physical exercise), adventure and wilderness experiences have both been described as a means to crystallize selfhood through personal testing, provide life meaning and perspective, confer awareness of one's own mortality, reduce anxiety, and improve fear-coping mechanisms (Arnould and Price 1993; Abrahams 1986; Ewert 1988; Ewert and Hollenhorst 1989).

Despite the similarities between the wilderness and adventure recreation experience, there are some important differences. In order to understand these similarities and

differences, one must look at the interplay of two factors under each experience form. These factors are (1) risk, danger, and uncertainty, and (2) interaction with the natural environment.

## Risk, Danger, and Uncertainty

Adventure recreation can be defined as: "Recreational activities that contain structural components of real or perceived danger and usually involve a natural environment setting in which the outcome is uncertain but influenced by the participant."

Apparent from this definition, adventure recreation involves activities such as mountaineering, rock climbing, scuba diving, backcountry skiing, whitewater boating, and spelunking. Activities that have more recently appeared on the risk recreational scene include snowboarding, play-boating, sailboarding, cave-diving, rapids swimming (aka "bull-frogging"), and helihiking.

Such experiences are catalysed by several factors, the first of which is the purposeful inclusion of elements of risk or danger (Ewert and Hollenhorst 1994). The risk or danger may be

**Table 1: Influencing Factors and Their Implications.**

Influencing Factors	Overall Effect	Implications
Demographic Variables	Generally mixed and variable	Changes in participation patterns
Spatial Distribution	Regional and locality levels will produce differential use patterns	Overall increases with more population exposure to areas offering risk recreation opportunities
Participation in outdoor	Slowing growth rates for some outdoor recreation activities but continued overall growth	Continued growth in risk recreation through increased exposure and information
Technological Innovations	Increases in participation	Research unclear but will involve less experienced participants who place a greater dependency and reliance on technical equipment and materials

ence. Indeed, it is not difficult to imagine wilderness experiences somewhat devoid of danger and uncertainty. This is a critical distinction: risk and danger are requisite components to the adventure experience, but are only accessory to many types of wilderness experiences.

### Interaction with the Natural Environment

A critical element in both adventure and wilderness experiences is interaction with the natural environment. Remote and natural settings imply less availability of outside aid and corresponding increases in the need for self-sufficiency, leading to a heightened sense of consequence and awareness.

An important difference between the two concepts is that while interaction with pristine natural environments is generally considered a prerequisite to satisfying wilderness experiences, such interactions are only accessory to many adventure recreation experiences. In fact, adventure experiences are commonly pursued in relatively developed or urban settings. Examples include whitewater boating through urban areas, rock climbing on crags located adjacent to roadways and parking lots, or ice climbing in quarry sites.

Indoor activities such as climbing walls and ropes courses, while valuable

for training and expression of physical talent, not only lack in naturalness, but also cause exposure to noncontrived risk, danger, and uncertainty. Such activities could be considered “threshold” adventure recreation experiences that may lead to or prepare participants for greater levels of involvement, including activities in wilderness. Thus, the offering of outdoor and indoor adventure activities may ultimately lead to an increase of wilderness activity. Given this interplay between the wilderness and adventure concepts, it may be important for the wilderness manager to be cognizant of the current trends and issues facing adventure.

### Variables Influencing Adventure Recreation

There are a number of variables that influence participation in adventure recreation including demographics, location of population, participation trends, and technological innovations. The effect of these variables is summarized in Table 1.

#### Demographic Variables

Because of the physical demands, increasing age will generally serve to reduce participation in adventure recreation (Marcin 1993). Older adults, however, may substitute many of their current adventure recreation activities for other less demanding adventure endeavours. For example, mountaineering may be replaced by mountain-walking or engaged in at easier, less-challenging levels. Second, technology may serve to offset age by offering equipment that is lighter, more multifunctional, and provides for a higher level of safety. Third, population subgroups may have different expectations relative to activities and participation. For example, Miller (1995) points out that the children of the baby boomers born between 1978 and 1995 (i.e., “echo-boomers”) will form an age cohort of 73 million and will begin to impact the number of households aged 24 to 34 around the turn of the century. Thus, a new influx of potential adventure recreation participants will be emerging in the next five years.

Younger participants are already impacting adventure recreation by pushing the extreme edge of various activities,

either perceived (i.e., apparent to the participant but not really present) or real (i.e., actual injury or death might occur and in some situations have a substantial probability of occurring). Close proximity to danger tends to heighten concentration and adds consequence to individual decision making. A related factor is the concept of “uncertainty of outcome.” In contrast to the chance probabilities inherent in gambling, this uncertainty can be influenced by skills and actions of the participant. Chance occurrences such as bad weather and falling rock are attenuated by the decisions of the recreationist. Competent response to this uncertainty requires appropriate actions and intense concentration, both of which contain the potential of leading to extraordinary experiences.

Risk and uncertainty also accompany many types of wilderness experiences, but, unlike adventure recreation, they are not necessary antecedents to the experi-

**Table 2: Projected Growth in Outdoor Recreation.**

Activity	1993 Number of Participants	Projected Growth	
		1989-2000	2000-2040
Wildlife-Related	76.5 million	16%	74%
Camping (Developed)	47.1 million	16%	77%
Hiking (Day)	22.7 million	31%	193%
Backpacking	10.4 million	34%	155%

such as the new breed of kayakers who have abandoned traditional whitewater rivers to perform first descents of extremely difficult and dangerous "steep creeks." The same phenomenon is bringing revolutionary change to other adventure activities such as mountaineering and rock climbing.

Changing family structures will impact adventure recreation in two ways. First, the increase in single-parent families will probably reduce participation in adventure recreation by decreasing the amount of available time, disposable income, and opportunity awareness,

Second, family engagements in adventure recreation, as already observed in a number of adventure recreation activities such as rock climbing and whitewater canoeing, will be increased. From an adventure travel perspective, family engagements involve the following statistical breakdown, beginning with spouses (58%), children and grandchildren (36%), and parents or grandparents (11%) (TIA 1994).

Third, changes in race and ethnic composition suggest that an increasing proportion of younger potential participants will be nonwhite. Since adventure recreation has traditionally been associated with white participants, the effect of this change is relatively unknown. More important influences to participation may be associated with available opportunities, disposable income, discretionary time, and age (Murdock, Backman, Hoque, and Ellis 1991).

#### Distribution of the Population

Population distribution impacts participation in two ways: (1) regional shifts and (2) movement from urban to suburban/rural locations. In the first case, regional shifts will involve movement to the South and West (Wetrogan 1988). Increases in adventure recreation participation can be expected because of increased exposure to traditional adventure activities such as mountaineering.

Movement from urban areas to suburban and rural locations may serve to disrupt areas previously used for adventure recreation activities, by the emergence of housing tracts and other development activities. This trend will be more amplified with the micromovement

of people, as predicted by Lessinger (1987), from suburbia to nearby open spaces. In response, advocacy groups such as the climbing community's Access Fund have formed with the purpose of ensuring access to climbing areas is maintained despite development pressure.

#### Popularity of Adventure Recreation

There continues to be growth in outdoor recreation participation (ORCA 1993), although at a slower rate than in the 1960s and 1970s. Substantial increases, however, are predicted in the next several decades. A sample of some of these increases in outdoor recreation activities are listed in Table 2 (ORCA 1993). While some increase in adventure recreation participation can be directly linked to participation patterns in more traditional

enced users (e.g., Global Positioning Devices)

- Reductions in environmental impacts

Innovations in technology will result in dramatic increases in adventure recreation participation, primarily for three reasons. First, technology such as lightweight equipment has increased the ease of access to many adventure recreation sites. Second, technological innovations have enhanced the ability of the participant to deal with dangerous events or environments. Improvements in clothing and equipment, such as climbing ropes, have increased the margin of safety. Technological innovations for some participants, however, will create an "illusion of safety." For example, hand-held global positioning devices can provide navigational information but not knowledge

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Limiting or restricting access because ***the setting presents a dangerous situation overlooks the fact that risk and danger are the raison d'etre of the activity***

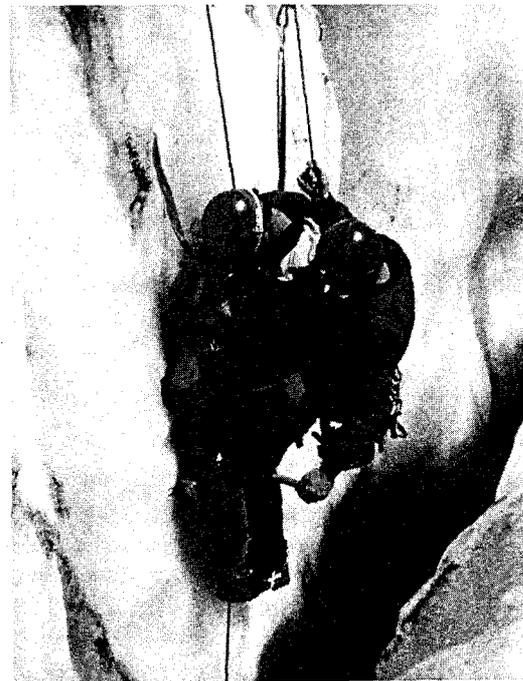
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outdoor recreation activities, such as day-hiking versus wilderness camping, the real connection lies in the growing public acceptance of all forms of outdoor recreational activities as legitimate forms of leisure pursuits. Ultimately what this implies is an overall lessening of the belief that adventure activities are only for the "daredevil" and "reckless." Rather, adventure recreation is increasingly seen as an alternative to the more traditional forms of leisure expression as portrayed through outdoor recreation.

#### Technological Innovations

Bengston and Xu (1993) report a number of changes in outdoor recreation from technological innovations including:

- New recreation markets and activities (e.g., cave-diving)
- Increased diversity and quality in equipment
- Opportunities for "new" or inexperienced users



A crevasse rescue exercise. Photo by A. W. Ewert.

**Table 3: Percent of Population of Selected Countries Reporting Participation in Adventure Recreation at least One Time Per Year.**

Country/ Activity	United States	Canada	Britain	France	Germany	Australia	Japan
Mountain Climbing	6.8	4.7	16.6	4.2	7.6	5.5	8.1
Scuba/ Skindiving	3	2.9	1.5	2.1	4	5.6	1.8
Hangliding/ Paragliding	1.1	0.9	0.9	0.2	0.8	1.1	0.1
Camping	23.5	34	13.6	18.7	9.8	27.8	7
Hiking	18	32.3	11.3	27.3	36.7	16.6	11.5'

Adapted from the Leisure Development Center. 1991. Leisure and Recreational Activities in Japan.

or safety about travel in rough or impassable terrain. Technology will also serve to increase the types and diversity of participation by providing for different experiences and accommodating differing levels of skill. Examples of this diversification through technological changes include mountain biking, snowboarding, hang-gliding, and heliskiing/hiking.

Third, technology will play an important role in providing information about potential opportunities, safety, costs, and other valuable knowledge components (Coates 1992). This infor-

mation explosion will apply to all forms of tourism including adventure travel and other similar endeavors (e.g., ecotourism). The input and output of this information will become increasingly sophisticated as adventure recreators become more experienced and knowledgeable. Providing for these "information bundles" will create a market niche for companies and consulting groups capable of understanding the adventure recreation experience and the information needs of these participants.

## Global Participation Patterns

The continued globalization of the world economy, combined with the growth of the alternative travel component of the international tourism industry, will have a positive influence on adventure participation. Indeed, adventure recreation activities have enjoyed substantial and continued support throughout the world, particularly in North America, parts of Europe, Eurasia, and in the coastal areas of South America and Japan. From a global perspective, the overall popularity of adventure recreation is shown in Table 3.

As can be seen, there is substantial variance in participation levels as a function of country and activity. Even acknowledging this variance, however, adventure recreation activities represent important recreational endeavors for significant segments of each population.

## Major Trends and Implications

Major trends within the field of adventure recreation include efforts toward internal regulation, growing concern over risk management and liability, diversification of activities, and issues related to markets and delivery of opportunities (see Figure 1).

### *Internal Regulation*

Programs, instructors, and commonly used techniques, such as belaying procedures, will become more standardized and subject to "peer review." Moreover, the accreditation and licensing of individuals and programs according to some accepted set of procedures, such as the peer practices through the Association of Experiential Education, the American Mountain Guide, and International Mountain Guide Association certifications, will become widely accepted. This change has already occurred in Europe and Canada where certified mountain guides have become the norm.

### **Risk Management/ Liability Concerns**

Overall, there will be a continued and increasing need for insurance for both programs and individuals, and insurance schemes will be complemented by the use

**Figure I-Major Trends in Adventure Recreation**

Variable	Trends	Implications
Internal Regulation	Accreditation	Licensure Certifications Equipment/Procedures
Risk Management/ Liability Concerns	Reduction in Cases in the United States Increases in Canada	<b>Bonding, Pay</b> for Services, SAR Higher Percentage of Accidents Personal Assumption of Risk
Market	Reduction in Weight "User Friendly"	Emphasis on Service, "Green Marketing" "Selectable Danger" Family Orientation Teaching Adults in Specialty Courses

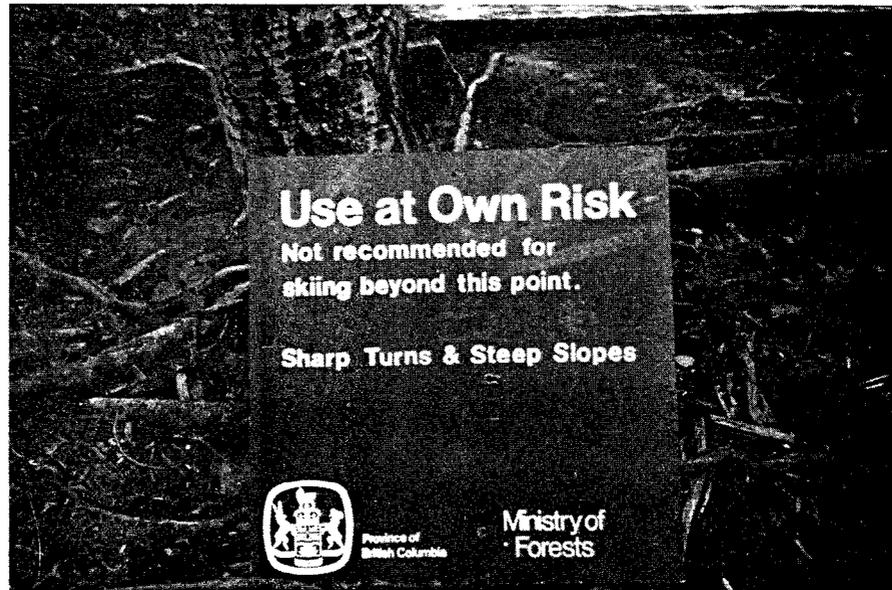
of bonding and pay-for-services in the event of search and rescue or need for medical attention with programs increasingly opting for "personal assumption of risk" protocols. This approach will lead to varying degrees of "protection" dependent on overall risk management planning (Hanna 1991).

#### *Diversification and Specialization of Activities*

Increased diversification has led to exponential growth in the number of adventure experience types. For example, increasing specialization in mountaineering has resulted in spinoff activities such as: ice climbing, rock climbing, sport climbing, big wall climbing, backcountry skiing, extreme skiing, telemarking, and snowboarding and whitewater boating, with activities such as whitewater canoeing, kayaking, rafting, inflatable kayaking, rodeo boating, squirt boating, and steep creeking.

The American wilderness system has often been criticized as containing mostly "rock and ice," and this means that some of the most spectacular mountaineering in the United States can be found within wilderness. This is in stark contrast to the Alps where most peaks are accessible by train or cable car. Mountaineering and other climbing-related wilderness use continues to grow. For example, climbers of Mount McKinley in Denali National Park, Alaska, increased from 935 in 1991 to 1,200 in 1994 (American *Alpine Journal*, 1991-1994). Diversification includes the quest for speed ascents and especially new, previously unclimbed routes. Media coverage of climbing deaths on Mount Everest appear to have actually increased business for adventure travel providers.

Diversification within wilderness recreation happens at slower rates than in adventure recreation because wilderness recreation is steeped in tradition, mores, and normative codes that have a stabilizing affect on change. In contrast, adventure recreationists often tend to reject tradition and behavior norms in favor of unique and novel experiences. The tendency of adventure seekers to disregard wilderness norms and etiquette (e.g., using bolts on rock climbs) poses a tremen-



High altitude wild country brings special challenges. Photo by A. W. Ewert.

dous challenge for wilderness managers charged with protecting those traditions.

#### *Marketing the Adventure Mystique*

Market-related issues revolve around three components. (1) addressing the different "images" held by potential consumers of adventure recreation activities and equipment; (2) developing equipment and training packages suitable for specific targeted groups; and (3) emphasizing service and opportunities. As can be seen in Figure 1, program designs such as "family orientations," green marketing" (i.e., environmentally friendly programs), and specialty courses are increasingly popular.

In studying commercial whitewater rafting, Arnould and Price (1993) identify three organizing themes associated with satisfying adventure experiences: (1) opportunity for communion or connection with nature; (2) opportunity to build community and connect with others outside of one's normal circles; and (3) opportunity for extension and renewal of self.

Use of adventure recreation images to evoke these archetypal themes is common in the marketing of a diverse amount of services and products. While it seems paradoxical to link adventure recreation's promise of renewed self with automobile sales, award-winning advertisers have done just that (Arnould and Price 1993),

which thereby may also increase demand for adventure recreation services.

## **Wilderness Management and Research Challenges**

Wilderness management implications for adventure recreation includes, first, limiting or restricting access. But since risk and danger are the *raison d'être* for adventure recreation "safeguarding participants," either physical modification of the resource or limitation of access will diminish or even destroy the very attraction of the setting.

Second, since adventure recreationists have a spectrum of preferences ranging from pristine remote wilderness on one end to "activity focused" experiences on the other (where a pristine remote setting is superfluous to the experience), providing nonwilderness adventure settings may be a means of reducing pressure on wilderness.

Third, adventure recreation is coming under increasing criticism for environmental degradation, such as from placement of permanent anchor bolts by rock climbers, and devegetation, soil compaction, and erosion on steep approach trails used by mountain climbers.

Other issues include search and rescue policy and funding, the development of partnerships between managing agen-

cies, and a growing diversity of specific interest groups, in addition to how to preserve both wilderness and adventure recreation experiences under growing use. For example, should adventure guidebooks be curtailed or restructured to preserve both natural conditions and the social/psychological atmosphere?

From a research perspective several issues seem important for study. What is behind the attraction of risk-taking experiences? Is participation in an adventure recreation experience a result of personality factors, such as sensation-seeking, or from some other attributes, such as setting and opportunity (Bromiley and Curley 1992)? Are adventure recreation benefits substantially different from wilderness recreation benefits? What factors influence participation patterns in adventure recreation? Are these patterns predictable?

## In Conclusion

While adventure recreation and wilderness experiences are often closely inter-related, the adventure recreation generally involves a deliberate seeking-out of risk and danger and may or may not be wilderness dependent. One cannot assume that adventure recreationists automatically require a wilderness setting or that participants are even wilderness advocates. Indeed, access to suitable locations for adventure recreation may be more important to some adventure seekers than the presence of wilderness.

Participation in adventure recreation activities is expected to continue to grow at a faster rate than other outdoor activities (ORCA 1993), and this growth will become a more important issue for wilderness managers as participants seek greater access to wilderness locations. A better understanding of wilderness visitors

seeking adventure and risk in their wilderness outings will be helpful in developing a reasoned response to the adventure phenomenon in protecting wilderness. IJW

ALAN W. EWERT is professor and program chair of the resource recreation and tourism program at the University of Northern British Columbia. He can be reached at the University of Northern British Columbia, 3333 University Way, Prince George, BC V2N 4Z9, Canada. Telephone: (250) 960-5863; e-mail: ewert@unbc.edu.

STEVEN J. HOUEHORST is associate professor in the division of forestry at West Virginia University. He can be reached at West Virginia University, P.O. Box 625, Morgantown, WV 26506-6125, USA. Telephone: (304) 293-3721; e-mail: sjh@wvnm.wvnet.edu.

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