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A MARKET ANALYSIS FOR ADULT OUTDOOR EDUCATION
IN FIVE WESTERN STATES

by

Karla Joy VanderZanden

A thesis submitted in partial fulfillment
of the requirements for the degree

of

MASTER OF SCIENCE

in

Recreation Resource Management

Approved:

UTAH STATE UNIVERSITY
Logan, Utah

1986

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This study, with its theme of meeting needs, has helped me view my own work and relationships from an other-oriented perspective. I have learned an important mental survival skill: to view such a sizable project as process rather than product. That joy must be taken from small accomplishments, from the people along the way and that there is satisfaction in the doing, not just in getting done.

Karla Joy VanderZanden

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ABSTRACT

A Market Analysis For Adult Outdoor Education

In Five Western States

by

Karla Joy VanderZanden, Master of Science

Utah State University, 1986

Major Professor: Dr. Richard Schreyer
Department: Forest Resources

Organizations that offer Outdoor Education programs for adults are concerned with how to best attract people to their programs. Effective program design begins with a clear understanding of the people to be served. A marketing orientation--meeting the needs of participants--has begun to pervade non-profit management; specific information on the adult market for Outdoor Education remains limited. The purpose of this study was to identify and characterize segments based upon the benefits people seek from such an experience. Secondly, this analysis describes current programs in a five state region and identifies discrepancies between available and needed services.

A mail survey of past participants of three residential programs (Audubon Camp of the West, National Wildlife Federation Summits and Teton Science School Seminars) was conducted in 1984. Participants were asked their reasons for attendance and their preferences for location, topic, accommodations and other program features. Demographic background such as age, sex, and income, was recorded. Thirty Outdoor Education organizations reported on their existing programs.

The proposed method of segmentation--cluster analysis--failed to yield identifiable market segments using the forty three benefit variables selected from similar studies in outdoor recreation. Subsequent work in this study was devoted to testing alternative means of segmentation in order to identify a restricted list of variables capable of differentiating the sample public, somewhat specialized at the outset by virtue of past participation in Outdoor Education programs. Vacation-oriented and development-oriented segments were shown to significantly differ and the preferences of each described.

Each organization appears to be serving slightly different types of people, with the clientele varying in the degree of comfort desired, concern for serious study and cost-consciousness. The overall market for adult Outdoor Education is primarily motivated by a desire to study and be close to nature. Social aspects, quest for knowledge and stimulation, and enjoyment of quiet beauty were also important considerations. Existing services and facilities in the five state region match expectations of participants with the exception of accommodations and meals provided. Many organizations continue to program for young adults even though the dominant age group is twenty-six to fifty-five years old with characteristic needs and interests.

This market study and literature review form the basis for recommending improvements in adult programming. A marketing point of view should enable Outdoor Educators to develop learning opportunities in the outdoor classroom that are not only inspirational, but attractive, convenient and affordable for selected target markets.

(149 pages)

CHAPTER I

INTRODUCTION

Non-profit organizations in the business of adult Outdoor Education are concerned with how to best attract people to their programs. Competition with other education and travel opportunities, diminishing financial support from traditional sources, or awareness that participants' attitudes and needs may be changing have led those responsible for the future of these organizations to turn to the private enterprise toolbox for help with strategic planning.

Smith wrote in 1972 that the demand for Outdoor Education will grow in part because of increased public expenditures for recreation and education. Fourteen years later, the boom in such public spending has come and gone. Even corporate and foundation gift dollars are more difficult to obtain; fundraisers must now have not only a viable cause, but also sophisticated tools and a well defined strategy before approaching corporations for support (Staub, 1983).

A marketing orientation, one that seeks to understand consumer characteristics and product preferences, is one way that a non-profit organization can adapt to the economic and social changes in our society (Lord, 1981). Marketing research has been shown to be useful for a number of educational or leisure service organizations (Kotler, 1982).

In determining participant characteristics, what they desire and how to best reach and attract them, Outdoor Education programs can better accomplish their mission of enhancing people's awareness and appreciation of the natural world.

This study attempts to apply the principles of market segmentation--dividing the population into groups--in order to better identify the potential participants of adult Outdoor Ed programs and to make recommendations for program planning in the 1980's and early 1990's.

Problem Statement

To assist in the definition of the research question, I conducted a brief needs assessment in the fall of 1984, interviewing the directors of five Outdoor Education centers. These Outdoor Ed programs varied in length, target audience, facilities offered and environmental setting. The findings indicated that almost no one in the organizations had any training in market analysis or advertising, that marketing is being done basically by intuition and trial and error, and that market studies and training are needed for such businesses.

Several Outdoor Ed centers reported that they have recently delved into more commercially-oriented services, thus finding themselves competing directly with tour, guest ranch or conference/seminar facilities.

The overall goal selected for this study then, is to develop a better understanding of the market for adult Outdoor Education by conducting a market segmentation study in an effort to contribute information that will be useful in designing attractive programs. The assumption is that different "types" of programs may be sought by different clients. A segmentation analysis would explore the extent of diversity in program preferences and the types of people seeking those various programs.

The research project consisted of two parts: a survey of past participants of adult Outdoor Ed programs offered by three different organizations and an inventory of existing programs and services in five western states.

The population for the survey was past participants of adult programs offered by the Teton Science School (site and office near Jackson, Wyoming), Audubon Camp of the West (site near Dubois, Wyoming, office in Boulder, Colorado) and the National Wildlife Federation Summits (alternate sites nationwide, office in Washington D.C.). The population for the inventory was all identified organizations that offer residential Outdoor Ed programs for adults in the states of Wyoming, Colorado, Utah, New Mexico and Arizona.

Specific objectives of the research project were:

- 1) To determine if the market for adult Outdoor Education could be divided into segments or groups based upon the benefits that participants seek from attending these programs.
- 2) Given that significantly different groups exist, to determine if the groups could be identified by their preferences for specific program characteristics.
- 3) Given that significantly different groups exist, to determine if groups could be identified by demographic characteristics such as age, sex, or income.
- 4) To compare responses from those attending programs from each of the three organizations to determine if participants significantly differ in the benefits they seek, their program preferences, or their demographic characteristics.
- 5) To inventory existing programs and services in adult residential

Outdoor Education in five western states.

6) To compare the survey results (benefits sought, program preferences, demographic characteristics) and inventory results (available programs and services) to identify possible gaps between the two as a basis for recommending future efforts.

Definitions, Assumptions and Limitations

For the purpose of this study, Outdoor Education is defined as natural history field courses that may include outdoor activity or some adventure component such as hiking, skiing or rafting. Such courses advertise the outdoor activity as secondary to the academic content. This definition excludes such Adventure Education or survival skills programs as Outward Bound. Though these programs can be rightfully defined as education in the outdoors, I have excluded them in an effort to limit the scope of my study. Field trips that supplement on-campus courses are also excluded, but university sponsored courses that take place primarily in the field for college students and other adults are covered by the definition. Teacher training programs in Outdoor/Environmental Education that take place on site (more than a one day program) are included.

A residential program is one that provides room and board at some facility for more than one day. Typically, sites are youth camps or guest ranches converted for Outdoor Ed use or rented for that purpose. University or commercial lodging is included if such accommodations are reserved by the sponsoring organization for participants. Visitor centers, community nature centers and other day use facilities are not included.

Several marketing terms merit definition . "Marketing" is the development and efficient distribution of services for chosen consumers (Boone and Kurtz, 1983). A "target market" is a relatively homogeneous group of people having similar preferences with whom an organization seeks to do business (Crompton, 1983). Finally, "benefit segmentation" is the technique of market research that identifies target markets who expect the same benefits from a program experience (Goodnow, 1981).

A major limitation of this study is the restricted nature of the sample. Two of the three organizations involved in the Survey (Teton Science School and Audubon Camp of the West) are similar in their Rocky Mountain settings. Inclusion of the National Wildlife Federation Summits provided a broader spectrum of respondent backgrounds; however, the total potential market for adult programs may be, in reality, far more diverse. The program that a respondent actually attended may have "shaped" his/her stated desire for certain benefits or program characteristics.

Perhaps the greatest limitation of this study is that the opinions of non-participants were not tapped. There potentially exists a significant group of people who could have certain unmet needs that could be fulfilled by a residential Outdoor Ed experience but did not participate. Either these people are not hearing about opportunities or the promotional messages they receive do not effectively communicate the desirable key benefits .

The inventory reports only those programs in a limited geographical region. It is intended that the comparison of Inventory and survey results should indicate possible gaps in services in these western states. At the very least, this study should shed some light on the

nature of our participants in this specific field and outline directions for future program development.

CHAPTER II
LITERATURE REVIEW

The purpose of this study is to identify and characterize markets for adult residential Outdoor Education programs.

The synthesis of marketing principles and Outdoor Education has required a diverse review of the literature. Outdoor Education as a field of study lacks clear definition and is variously described as a setting, a process or a subject area by different authors (Ford, 1981). The principles and practices of Outdoor Education have been mainly derived from education, recreation management and the natural sciences. Because my search of the literature has revealed that little work has been done on the nature of Outdoor Education participants--i.e. the market for Outdoor Education--I have concentrated on the existing methodologies for identifying market segments and examples of segmentation studies that have been completed in the fields of recreation and post secondary education.

Crossing disciplinary boundaries risks inappropriate extrapolation of concepts from one field to another. Yet if the concepts are valid descriptors of human behavior, they should be generalizable to related fields. Literature in educational psychology, marketing theory and recreation behavior yields a common theme: the process of successful management (classroom, park, or business) involves meeting human needs. A focus on the needs or wants of the consumer is the essence of the marketing concept (Boone and Kurtz, 1983).

This literature review begins with a brief discussion of human need

theory as the underpinning of the marketing concept. The introduction of marketing principles in non-profit organization management is discussed with emphasis on applications for Outdoor Education (also referred to as Environmental Education or Interpretation in the literature). A discussion of market segmentation, with special emphasis on the identification of target markets by expected "benefits", follows. Benefit studies in the related fields of Adult Education and Outdoor Recreation demonstrate the potential for benefit segmentation for Outdoor Education programs and applications for program planning.

Human Needs Theory

Proponents of need theory believe that human behavior may be best understood by examining the basic needs met by that behavior. A need is simply the lack of something useful or desirable. According to Boone and Kurtz (1983), a motive is an inner state that directs people toward the goal of satisfying a felt need. The individual is moved to take action to reduce a state of tension and to return to a condition of equilibrium.

Lasswell (1948) suggested a paradigm for understanding human behavior and culture. As a result of thirty years of cross-cultural research, he proposed eight categories of values sought by all human beings in all known cultures. Lasswell suggested the following universalities or categories of human needs and wants: respect, affection, skill, enlightenment, power, wealth, well-being, and integrity.

While Lasswell was one of the first to categorize needs, he made no mention of their relative importance to individuals. Abraham Maslow (1968) proposed that needs common to all persons are arranged in a

hierarchy. One level of needs must be met before the next "higher" level of needs can be addressed. Maslow's hierarchy consists of five levels of needs: physiological, safety and security, social, esteem and self-actualization. A marketing orientation to programming implies that the planner should take into account both the met and unmet needs of his audience.

Driver (1976) has made use of need-based models in studies on recreation behavior. He has identified major domains of motives for participation and developed scales to test the relative importance of each. Because my study utilizes Driver's approach, his work is reviewed more fully later in this chapter.

Marketing Concept for Non-Profit Organizations

The marketing concept is defined by Boone and Kurtz (1983) as a "company wide consumer orientation". A marketing orientation emphasizes consumer preferences in contrast to popular notions that marketing means merely selling or advertising. To Philip Kotler (1982:23), a marketing orientation means that,

... the main task of an organization is to determine the needs and wants of target markets and to satisfy them through the design, communication, pricing and delivery of appropriate and competitively viable products and services.

In this definition, Kotler refers to the four components (the four "P's") of the marketing mix: product, pricing, promotion and place (distribution). Once the needs and wants of the consumer are determined, the elements of the marketing mix can be manipulated to meet those needs.

In the late 1960's the marketing concept was "broadened" to include many areas not formerly concerned with profit-motive-based marketing

efforts (Boone and Kurtz, 1983). Kotler (1982) has been a strong proponent for the inclusion of marketing practices in the management of non-profit organizations; he believes that a marketing orientation will help these organizations achieve their objectives more effectively. He cites three benefits that non-profit organizations can gain from a marketing approach: improved participant satisfaction, effective solicitation of resources for operations, and efficient use of limited promotional dollars.

Those factors that differentiate non-profit organizations from private businesses merit special consideration when applying marketing principles. These organizations serve multiple publics and try to achieve multiple objectives. Most offer services rather than concrete products; the quality of services can be hard to track because they are partially intangible, variable and ephemeral. Finally, most non-profits are subject to the scrutiny of the general public in addition to a member constituency or board of trustees and may have to justify expenditures at length (Kotler, 1982). Without "profit" as the clear cut, overriding goal, non-profit management may be ambivalent in deciding exactly whose needs are to be met with program plans.

Mourning (1986) proposed changing the traditional four "P's" to better suit the non-profit situation. He uses the acronym, "SACC", to describe the elements: services, access, communication and costs. "Access" means making the program available or removing obstacles to participation. "Communication" replaces promotion--administrators need to communicate that a program meets certain needs.

Since the introduction of the broadening concept, other authors have called for the use of marketing in educational institutions and

less frequently, in park and recreation agencies (Howard, 1977; Howard and Crompton, 1980). Continuing education, and other forms of post-secondary education, must seek greater efficiency in developing programs to attract enrollments. A need orientation has begun to permeate recreation behavior theory. Recreation behavior may be defined as a means of helping users realize their "unmet needs" that could not be or for some reason were not met in non-recreational times or places (Driver, 1976). Howard and Crompton (1980) describe the primary goal of park and recreation agencies as the delivery of programs, facilities and services. They emphasize that, "It is imperative that the services to be delivered should be directly matched and linked to client group wants" (Howard and Crompton, 1980:331). The identification of appropriate needs to be met is the basis for shaping the product or service to be provided.

Outdoor Education and Marketing

Outdoor Education is most simply defined as education in, about and for the out of doors (Donaldson and Donaldson, 1958). The relative emphasis placed upon the "for", "about", and "in" in the definition has varied with the organizations and institutions that teach or train others to teach in the Outdoor Education field. "For" the outdoors implies for use and for understanding. Two primary views have emerged on the interpretation of education "about the outdoors." Smith (1972) and Freeburg and Taylor (1961) represent those who perceive Outdoor Education not as a separate discipline but rather a means of curriculum enrichment. The outdoors as is viewed as a a location and a theme useful in the study of "basic" subjects such as mathematics, science, or language arts. Others, notably the National Park Service (1972), believe

that the subject of study is the outdoor environment and that a sizeable body of knowledge exists worthy of disciplinary status.

In her review of the history of Outdoor Education, Ford (1981) makes clear the special mandate that underlies this field and differentiates it somewhat from other social and biological sciences.

She states it as:

The purpose of Outdoor Education is to develop lifelong knowledge, skills and attitudes for using, understanding and appreciating natural resources and for developing a sense of stewardship for the land (Ford, 1981:18).

Attitude and value change--the nurturing of a land ethic--is as much a part of Outdoor Education as the transfer of factual subject matter. Smith (1972) distinguishes Outdoor Education from other forms of education by eight characteristics: (1)direct experience (2)discovery, exploration and adventure (3) sensory learning (4) activities natural to growth (5) intense interest (6) reality (7) problems in context (8) active learning.

The term Outdoor Education is often used interchangeably with Environmental Education. Outdoor Education may be considered one component of the larger Environmental Education concept which encompasses teaching about the quality and quantity of all aspects of the environment, both urban and natural (Ford, 1981).

Outdoor Education often takes the form of workshops or courses that may be offered for any age group. Learning in, about and for the outdoors often occurs in a less structured setting through naturalist programs offered by County, State or National Parks or nature centers. This process of communication is referred to as Environmental Interpretation.

Interpretation may differ somewhat from other Outdoor Education

programs by its intent to artfully reveal broad concepts and relationships rather than to simply communicate factual information. Considered by many to be the "father of Interpretation", Freeman Tilden (1967:3) writes,

Interpreters engage in the work of revealing something of the beauty and wonder, the inspiration and spiritual meaning that lie behind what the visitor can perceive with the senses.

For the purposes of this project, courses that focus on the development of outdoor recreation and wilderness survival skills are referred to as Adventure Education. This term describes those physically vigorous programs which occur in educational settings and are based on the Outward Bound model (Rose and Rowe, 1980). These courses are primarily designed to increase self confidence, problem solving and leadership abilities in addition to skills in rock climbing, river running, winter camping and other forms of outdoor recreation. Adventure Education programs have been highly successful and although they are an important aspect of education in the outdoors, such programs have been excluded from this study. The benefits sought by participants in challenge courses appear sufficiently different from those who seek more nature-oriented experiences to warrant a separate study (Rose and Rowe, 1980).

Previous work reviewed thus far has emphasized Human Need Theory as a framework for designing educational, recreational or marketing programs. In similar fashion, writers in Outdoor Education and Interpretation have illustrated that learning is enhanced if communications are designed with the needs of the participants in mind. Tilden (1967) states that the participant's chief interest is in whatever touches his/her personality, experience or ideals.

His first "Principle of Interpretation" is consumer oriented:

Any interpretation that does not somehow relate what is being displayed or described to something within the personality or experience of the visitor will be sterile (1967:11).

Muriel More (1983) recognized the similarities between the marketing profession and Interpretation: each approach their services from the public's point of view.

More outlines how certain marketing principles can help the interpreter to convey ideas to visitors most effectively. Planning and evaluation of interpretive programs should incorporate analysis of the market structure.

Though More outlines the benefits of a marketing approach for Interpretive and Outdoor Education programs, actual market analyses in this field have been limited. McNeil (1971) examined the demographic characteristics of participants who took correspondence courses in natural resource conservation offered by New York State colleges from 1961 through 1967. Sex, age, education, occupation and outdoor activity preferences were tabulated from questionnaire and registration information. McNeil's analysis indicated that of the 1764 participants, a majority were male, between 26 and 45 years of age, had completed high school or had some college education, and were predominantly in white collar professions, service industries or were homemakers. Only five percent were students. Typical of early work in recreation, McNeil determined preferences by recording participation in activities rather than asking participants what benefits they were seeking from their educational experience.

Cummings (1976) examined the needs and preferences of teachers for Environmental Education curricula. He concluded that if a program is to

be adopted, curriculum development in Environmental Education should focus on teacher preferences rather than expert judgment of content. Such attributes of a program package as preparation time, approach and class time required were found to be more significant predictors of preference than subject matter.

Reyburn and Knudson (1975) studied the effect of advertising upon participation in state park naturalist programs but made no reference to customer needs other than reporting restroom doors as the most effective promotional sign location.

Planning any new venture, whether a one hour naturalist program or the establishment of a residential site for Outdoor Education, requires a sound market analysis as part of a business plan. In his proposal for the Spruce Canyon Outdoor Education center in northeast Washington state, Rose and Rowe (1980) provides an example of consumer and market structure analysis conducted to justify the feasibility of a new non-profit business. Spruce Canyon is a non-traditional, post-secondary program which integrates liberal and technical studies with Outdoor Education. Rose and Rowe's (1980) version of Outdoor Education might be more accurately termed Adventure Education; however, his business plan format, which assesses market size and trends, direct and indirect competition and outlines a detailed market plan to guide the organization's actions, may serve as a framework for utilizing market analyses in planning entrepreneurial efforts in Outdoor Education.

Market Segmentation

Though human beings can be characterized by common basic needs, not all persons are alike. Marketers no longer market for the average person

since he/she does not exist. To better understand a population, we identify groups of people with similar preferences and focus on the differences between the groups on the basis of particular criteria such as purchase behavior, attention to media, or census data. This process of market segmentation can reveal insights that averages often hide (Plummer, 1974). Market segmentation is defined by Howard and Crompton (1980:337) as:

The process of dividing the total potential clientele into groups consisting of people who have relatively similar service or program preferences.

The process of market segmentation and selection of client groups consists of three steps (Howard and Crompton, 1980; Wind, 1978):

1. Forming segments by sorting respondents into categories based on some criteria.
2. Developing a profile of each segment.
3. Selecting a segment as the target market.

Since people can be sorted on any basis, some means of identifying meaningful segments must exist. Kotler (1976) states that to be useful, segments should be sufficiently large to be worth distinctive programming, communication or pricing. Segments should also be measurable and accessible by media or other forms of communication. In the actual selection of a target market, one should take into account additional factors such as the nature of competition and the organization's ability to implement a strategy for a selected segment (Wind, 1978).

A number of researchers have shown that market segment studies benefit business (Johnson, 1975; Wind, 1978; Young et al., 1978). Market segmentation may not be appropriate or beneficial in some cases, however, particularly when a market is so small that a segment of it would not be profitable. Heavy users may also account for such a large

proportion of sales that they are the only relevant target group (Young et. al., 1978).

Historically, there have been two approaches to segmentation: grouping by characteristics of people or by the characteristics of the product/service. Demographic data (age, sex, occupation, income) are easy to collect and have been used with questionable effectiveness. Rinella (1977) indicates that census data can be useful in determining the place that educational programs should be offered but are of limited value for program development and promotion. Recent research has called for the use of demographics in combination with other forms of segmentation (Abbey, 1978; Wind, 1978; Kotler, 1982).

To avoid interjection of the program designer's own biases, it is important to obtain as complete a profile of a target market as possible (Abbey, 1978). Researchers are developing means of segmenting a populace that result in more life-like images of client groups than have been possible with demographic divisions. Howard (1981:42) summarizes the new emphasis on psychographics, "It is not age sex, education, or experience that best characterizes buyers, it is a state of mind" (Italics mine). Research that gathers strictly demographic information can answer "who" and "where" but fails to address the "why" behind participation.

Psychographic measurements are difficult to develop because they are designed to indirectly tap the value structure of respondents. The lack of generalizability of scales designed for specific studies and lack of skill in psychological testing limits more widespread use of these analyses. Development of published scales with broad applications such as VALS (Values, Attitudes and Lifestyles) by SRI International may make such segmentation easier in the future (Howard, 1981).

The market research division of Sunset Magazine successfully used the VALS system to characterize the western travel market. Travelers in the West were described as well educated, experiential and experimental, young in spirit not necessarily in years, who travel year round on shorter trips (often extended weekends). A large portion are young families--yesterday's backpackers--who are now climbing into the family car and recreational vehicles, or seeking comfortable tent camping and rustic lodges (Chrisman, 1985).

Educational seminar and tour opportunities for adults can be viewed as one of many ways to spend travel time and money. Sunset's market study has clear implications for the content, the location, timing and promotional message of Outdoor Education programs intent on effectively serving their publics.

The concept of benefit segmentation was introduced in 1968 by Haley who based his strategy upon the belief that the benefits which people seek form the foundation for true market segments. In benefit segmentation, statistical techniques are used to group respondents on the basis of the importance they attach to certain combinations of rational, sensory and emotional benefits expected from a product or service (Dhalla and Mahatoo, 1976). Wind (1978), in his review of several segmentation methods, prefers the benefits sought approach and finds it particularly useful for developing a general understanding of a market and for advertising decisions. Others have supported benefit segmentation as a great improvement over other methods (Dhalla and Mahatoo, 1976; Young et. al., 1978).

In a study of Michigan skiers, Stynes and Mahoney (1980) tested methods of segmentation and found the benefit approach to be superior.

Their research produced clusters of skiers that were distinguished by socio-economic characteristics, participation patterns and preference for certain ski area attributes. The information is being used to selectively market individual ski areas based upon what each uniquely has to offer.

Because individuals change over time, demographics of segments will also change. An individual may move onto another group that desires different benefits. Her/his former segment still exists perhaps with new membership characteristics. It is important to monitor benefit segments to determine if adjustments are needed in marketing strategies (Calantone and Sawyer, 1978).

Benefit Studies in Recreation and Education

Kotler (1976) describes education as an industry that has been product oriented rather than market oriented. The product has been defined in terms of the institution's definition of consumer needs rather than consumer demand. Park and recreation agencies have also been traditionally slow to recognize the importance of market analysis. Programs were directed at the "average user". Since an average merely represents a midpoint, participant groups that differ greatly are unlikely to be interested in an average offering (Crompton, 1983).

In the last two decades, there has been a shift in both education and recreation towards program design based on participant needs. Beginnings of a need orientation in Outdoor Education (viewed by this author as highly related to the former disciplines) were discussed in a previous section. Howard and Crompton (1980) in a recent text on recreation management outline the advantages of a benefit orientation

for an organization:

1. Avoids preoccupation with a particular program, service or the organizational structure itself.
2. Encourages innovation and creativity in searching for alternative ways to meet a need.
3. Keeps programs relevant by attending to changes in needs.
4. Defines a broader role for the organization: meeting types of needs rather than offering types of programs.

Identification of benefits sought must precede program design. Studies in recreation and higher education have been undertaken, either employing methodologies from social science (behavioral models) or less often, utilizing a market segmentation approach. The purpose of these studies has been to identify major domains of motives, to categorize users by the primary benefits they seek from an experience and to determine what aspects of the services provided most likely support the attainment of these benefits.

In an effort to monitor consumer demand and combat declining enrollments, Goodnow (1981) used benefit segmentation to identify target markets for the College of DuPage. Students were asked their reasons for participation, their program offering preferences and demographic characteristics. Goodnow identified the following motives: social, learning, altruism, improvement, compliance, advancement, academic, leisure, and desire for change.

B.L. Driver's (1976) behavioral approach to studying outdoor recreation participation is based upon the view that most human behavior is purposeful, that recreationists select particular activities because of the satisfactory experiences they expect and desire from that activity. The product of recreation is not the opportunity but rather what human experiences and benefits are derived from the opportunity. From participant surveys, Driver (1976) summarizes the following

categories of benefits: developing skills, competing/achieving, learning, being creative, exploring, being with friends, family or like-minded associates, experiencing nature, exercise, seeking thrills or stimulation, manipulating machines, privacy/solitude, reflection, escape from physical or social or family pressures (Driver, 1976).

Based on Driver's model, Brown and Haas (1980) and Matheusik (1983) have identified similar benefits for specific populations of outdoor recreationists. Brown and Haas used factor and cluster analyses to identify eight domains of benefits sought in wilderness users: relationship with nature, escape pressures, achievement, autonomy, reflection on personal values, sharing/recollection, risk taking, and meeting people.

Using similar statistical techniques within a marketing framework, Matheusik segmented sport diver users of underwater parks. His eight motive dimensions were virtually the same as for the Brown and Haas study.

Three different studies yield insight on the reasons why people attend interpretive programs. In a study of attendance and non-attendance at such programs in the California State Parks, Morse (1977) identified six broad categories of reasons for participation: education, inspiration, entertainment, socialness, regional information and for novelty. The primary reason given for attendance was educational--to understand the history, geology and relationships between plants and animals.

As part of his study on visitor motives, Veverka (1978) examined preferences for program topics for interpretive programs. Following Maslow's (1954) hierarchy of needs, Veverka tested the popularity of

program topics that met each of six categories of needs: safety, belongingness, esteem, enjoyment, curiosity and miscellaneous (which included responses such as "had to do it" or "no reason").

Veverka also identified topic preference groups by age and sex. As might be expected, some topics were preferred by females, others by males. For a selected topic, the motives for its selection often differed for each sex. This is consistent with findings in other outdoor recreation studies. Roggenbuck and Schreyer (1977) had previously shown that within a given activity, different groups differ significantly in their rating of importance of certain benefits.

In Veverka's study, topic preferences also varied with age. People in the 13 - 25 years old group were most interested in topics from the safety group such as "The Angry River - Flood Watch". Those 26 years and older were most interested in topics that met the belongingness need: "Turning Your Friends On to Ohio Songbirds" or "Nature Discovery for Family Outings".

A recently published work by Thomas More (1983) identifies many of the same motives mentioned in the previous studies. More measured the importance of seven motives for visiting a wildlife sanctuary with interpretive museum. Drawing from Driver's (1976) item pool, three statements were tested for each motive. Results indicated the following order of importance: aesthetics, socialness, education, escape, solitude, exercise and novelty.

These motive domains and the attributes mentioned by Cummings (1976) and Rose and Rowe (1980) (course length, cost, availability of credit, location, and content) may serve as a place to start in developing a benefit inventory specific for adult Outdoor Education.

Summary

My literature review has provided a basis for the selection of a methodology for characterizing the market for adult Outdoor Education. Recent works have demonstrated the value of a benefits sought orientation in the planning and evaluation of education and recreation services. Benefit segmentation has been shown to be a useful tool in identifying homogeneous groups with similar needs and interests. Demographic variables, though limited in their ability to yield truly insightful profiles of identified segments, can be reliably collected and lead to general understanding of segment members.

Limited application of marketing principles has been made in the fields of Outdoor/ Environmental Education and Interpretation though several researchers have outlined the potential and need for such work. The contribution of this study will be to determine if benefit segments exist in the adult Outdoor Education market. Preferences for specific program characteristics such as availability of credit, length, cost and demographic characteristics such as age, sex, income will be used to profile any identified benefit segments.

CHAPTER III

METHODOLOGY

A number of methods for identifying market segments were discussed in the previous chapter. Of these, benefit segmentation has been selected as potentially the best approach for identifying markets for adult Outdoor Education. The applicability of benefit segmentation for educational and recreational situations has been substantiated by a number of authors, as described in the literature review. The benefit segmentation process consists of two steps:

1. Dividing the population into groups and
2. Developing a profile of the groups based on characteristics of use to the researcher.

For this project, grouping is to be accomplished on the basis of benefits sought by participants, according to the three organizations sponsoring programs, and by the intended rationale for attending the program (i.e. Vacation versus Professional Development). Once established, groups or segments are profiled by significant differences in program preferences and demographic characteristics. Data for this study has been collected through survey research methods.

Two categories of benefits are tested: program attributes such as "Near National Park" or "Credit available" and reasons for attending such as "To be close to nature" or "To meet new people". Specific hypotheses to be tested for each of these types of variables are described in the next section.

Research Design

The following hypotheses form the bases of the research:

TOTAL SAMPLE

- H1a: Significant differences in the importance of benefits sought exist between identified benefit segments; at least 51% of the attributes and 51% of the reasons are significantly different.
- H1b: Each benefit segment can be significantly differentiated by program preferences; at least 51% of the preferences are significantly different.
- H1c: Each benefit segment can be significantly differentiated by demographics.

THREE ORGANIZATIONS

- H2a: Those attending programs offered by each of the three organizations will significantly differ in benefits sought; at least 51% of the attributes and 51% of the reasons are significantly different.
- H2b: Those attending programs offered by each of the three organizations will significantly differ in program preferences; at least 51% of the preferences are significantly different.
- H2c: Those attending programs offered by each of the three organizations will significantly differ in demographic characteristics.

The total sample has also been divided into two groups based upon response to one question in the survey. The question asks if respondents view their residential Outdoor Education experience primarily as "Vacation" or "Professional Development".

The Vacation and Development groups will be tested on the following hypotheses:

VACATION AND DEVELOPMENT GROUPS

H3a: Those in the Vacation group will significantly differ from the Development group in benefits sought; at least 51% of the attributes and 51% of the reasons will be significantly different.

H3b: Those in the Vacation group will significantly differ from the Development group in program preferences; at least 51% of the preferences will be significantly different.

H3c: Those in the Vacation group will significantly differ from the Development group in demographic characteristics.

Significant differences for the above hypotheses will be recognized at the .05 level. This is a less rigorous standard than used in most scientific work, but is often used in marketing research. The 51% criterion was selected as a minimum standard for determining if "most" variables of a certain type are significantly different. Marketing decisions can benefit from identified trends or tendencies, not requiring absolute proof of significant differences between groups, especially since there was no a priori reason to expect all aspects to differ.

Population

Three Outdoor Education organizations sponsoring residential programs for adults were involved in the study. The past participants of these programs served as the study population. Two of the organizations, Audubon Camp of the West (Audubon) and the Teton Science School (Teton), are located in Wyoming. The National Wildlife Federation Summits (NWF) take place at several nationwide locations.

The mailing lists of adult past participants served as the sampling frame. The National Wildlife Federation list contains participants from only the Snowbird, Utah Summit rather than from all the sites.

Survey Instrument Design

Given the framework of the hypotheses, specific questions were formalized to provide the necessary information from participants. The literature review and initial needs assessment that preceded this project provided guidelines for question strategy.

Following discussions with program directors of the sponsoring organizations, questions were added or altered. For example, information on media preferences and promotional channels was gathered but not incorporated into the statistical analysis of this study.

Benefits Sought

To identify groups based on benefits sought, it was necessary to create scales for measuring attributes and reasons for attendance. As a supplement to the academic literature, I examined ten travel articles on learning vacations in order to identify what attributes were being used to "sell" the programs. For each article, I noted phrases used to describe and promote the experience. I separated what I considered to be objective attributes (length, location, credit availability) from subjective reasons (to get away from the phone, good for the family).

Thirteen attributes were selected as variables for the survey:

- Adjacent to National Park/scenic attraction
- Adventure travel included (boating, horsebackriding, etc.)
- Amount of unscheduled "relax" time
- Comfort
- Cost
- Credit available
- Dates scheduled
- Distance from home
- Length
- Public transportation to site
- Reputation of instructor
- Reputation of sponsoring organization
- Topic/itinerary

The package of benefits sought was completed by utilizing Driver's (1977) pool of motive statements previously tested in outdoor recreation behavioral studies. Selection and adaptation of statements for my study were based upon previous work (Morse, 1977; Thomas More, 1983; and Veverka, 1978) that identified motives for attending a wide variety of interpretive programs. In particular, Thomas More's (1983) efforts in identifying the motives for sanctuary visitation demonstrated a useful approach. More used a four point rating scale to measure the importance of seven different motives for visiting an area, with comparisons made between users and non-users of an interpretive museum within the sanctuary. More's (1983) motives were:

- Escape
- Exercise
- Aesthetics
- Social contact
- Novelty
- Solitude
- Education

More tested each motive with three statements drawn from Driver (1977).

The review of travel articles and discussion with program directors led to the addition of two motive domains, Contribution (to a worthy cause) and Requirement (for work) not previously utilized by researchers. The final set of motive domains (reasons) selected was:

- Achievement
- Creativity
- Contribution
- Escape Physical Pressures
- Escape Personal/Social Pressures
- Escape Family
- Exercise
- Family Togetherness
- Leadership/Autonomy
- Learn/Explore
- Nature
- Reflect on personal values
- Requirement
- Rest

Security
Social

A Likert-type seven point rating scale was employed to measure the importance of these benefits in deciding to attend an Outdoor Education program. Participants were asked to rate each variable, on a scale from extremely important to extremely unimportant. The scale was reduced to six points following the pretest.

Program Preferences

The selection of program preference variables was based upon discussions with program directors, travel article review and perusal of program brochures from Outdoor Education organizations. Included in the analysis were:

- Topics in natural and cultural resources
- Topics in related areas (humanities, solar, environmental issues, environmental education etc.)
- Favorite topic overall
- Length of program
- Size of group
- Adventure travel (rafting, horseback riding, hiking, etc.)
- Recreation/entertainment
- Housing
- Bath/shower facility
- Meal type and plan

Respondents ranked different options under each category from 1 through 4. One multiple choice question (Question 4) asked respondents to select a "Program Choice" from five scenarios that described a certain package of program characteristics.

Demographics

Demographic information--sex, age, education, life stage, and income--was asked using a multiple choice format. An open ended question asking Occupation was coded into "position" and "field of work" categories.

Pretest

Construction of the survey booklet followed principles outlined by Dillman (1978) and is contained in Appendix A. The pretest form of the survey was reviewed by directors of the three sponsoring organizations, by my committee members and by ten professionals in the interpretive field. A survey evaluation form was completed by each reviewer. Forty pretests were sent to past participants of an adult Outdoor Education program not participating in the main study. Twenty five pretests were returned.

Based upon the results of the pretest, the sixteen motive domains and thirteen attributes were retained. Each motive domain was then represented by two statements, unless so little variability existed within the domain that one statement was adequate. Three statements were used in the revision for the Escape physical pressures/open space, Nature and Social domains, following Driver's (1977) recommendation. Each of the three statements measures a slightly different aspect of these domains. The list of reason statements by motive domain categories is contained in Appendix B.

The Likert rating scale was changed from seven to six points with elimination of the neutral point. The pretest indicated that respondents confused "extremely unimportant" with the idea of neutral or no opinion.

Procedures

The survey mailing was conducted in the summer of 1984 by each organization's staff following provided guidelines. Two hundred surveys were mailed by two organizations to every third name on the participant lists (starting the count at the beginning of the lists) and by the

third organization to all 200 adult names on their much smaller master list. A cover letter and return envelope with first class postage accompanied each survey. Surveys were identified by a letter code for the organization and a number.

Three weeks following the initial mail-out, a reminder postcard was sent to all on the list, thanking them for returning the survey if they had, or requesting that they do so. Six weeks following the first mailing, those who had not responded were identified. The organizations retained their master mailing list throughout the process, thus ensuring anonymity for respondents during the analysis at Utah State. These people were then mailed a second cover letter, with replacement survey and return envelope.

A total of 419 surveys out of 600 were returned for a 70% response rate. See Appendix A for cover letters and reminder card samples.

Inventory of Existing Services in the West

A companion inventory of existing Outdoor Education opportunities for adults was conducted. As described in Chapter I, the inventory was designed to identify possible gaps in services--to compare what is currently available with the desired benefits and program characteristics reported by the survey.

The population for the inventory project was the directors of all organizations offering adult programs in a five state area: Wyoming, Utah, Colorado, Arizona and New Mexico.

Inventory design followed the return of the surveys. A review of program brochures provided by organizations assisted in identifying categories of questions. Most inventory questions matched those in the

survey to facilitate comparison of participant and director responses. Rank order, multiple choice and open ended questions were employed in a booklet format. A pretest was reviewed by three Outdoor Education professionals.

Letters inviting participation were sent to organization directors six months prior to the mailing of the inventory. These directors were also asked for additions to the five state list of adult programs in order to make to make the census as thorough as possible.

A personalized cover letter and return envelope accompanied the inventory forms sent to the directors of forty two organizations. The response rate was 71.42%. See Appendix C for inventory form and cover letter.

Statistical Analysis

The basic objective of this study was to determine if the market for adult residential Outdoor Education could be divided into useful segments. It was theorized that the sample, representing the market at large, could be divided into groups based upon the respondents' rating of benefits they seek from their experience. A variety of statistical methods were employed to identify and characterize groups.

The selection of statistical tests was based upon methods used in similar studies such as Stynes and Mahoney (1980) in their segmentation efforts with Michigan skiers. Clustering routines were employed by Tatham and Dornoff (1971) to segment participants in a variety of outdoor recreation activities. Thomas More (1983) used the Chi-square statistic to differentiate users and non-users of an interpretive museum in their motives for visiting a sanctuary. In the Brown and Haas

(1980) study of wilderness users, analysis of variance and T-tests compared the means of motive variables.

The various types of questions employed in the survey also determined the tests employed. The data base included three levels of data: interval (benefit variables), ordinal (program preferences) and nominal (program preferences and demographics such as age and sex). Benefit variables used in the Likert scale were treated as interval data because the scale used symbols to indicate equal distances between the six points on the scale.

Cluster analysis used the CLUSTAR computer program (Romesburg and Marshall, 1984). It was performed on the total sample (419 cases) using the thirteen attribute and thirty reason variables.

The Vacation and Development groups were established by splitting the population on response to the "Vacation/Development" question as previously described. Significant differences in benefits sought were determined using a two-tailed T test as there was no apriori prediction of direction of difference.

Each of the three organizations were also treated as "groups" to identify significant differences. Benefits sought were compared using analysis of variance (ANOVA) tests at the .05 level.

Chi-square tests were used to determine if significant differences existed between those attending programs offered by each of the three organizations for program preference and demographic variables.

In order to determine which variables among the many truly had a strong effect in characterizing groups, additional tests were considered. The Multiple Discriminant Function Analysis was selected for its ability not only to identify groups if they exist within the sample,

but also to indicate which variables are the best determinants of that group. Once it has identified these variables, the analysis then "predicts" the membership a particular case (person) should have had in a group. The success rate of these predictions indicates the usefulness of these variables.

The Multiple Discriminant Function Analysis was performed on the Vacation/Development groups and for organization membership. For organization membership, the Multiple Discriminant Function Analysis (MDFA) used survey responses to predict which organization a particular case (person) belonged. Such testing indicated if each organization had a particular "type" of participant.

Additional bases for segmenting the population were considered. The standard deviations for the benefit variables were examined. Those showing the largest variation in response were found to be those representing two motive domains: Family togetherness and Spiritual values. The Contribution motive, one of the "new" motives selected for this study, also showed relatively higher variation in response. "High" and "Low" groups were created for each of these three domains. Grouping was based upon the respondent giving an important rating (1,2, or 3) or unimportant rating (4,5, or 6) to the statements representing each domain.

Comparison of High and Low groups involved two-tailed T-tests (comparison of means) for benefit variables and the Chi-square statistic for program preference and demographic variables.

Data from the inventory of existing services in adult residential outdoor education were summarized, with total response reported as frequencies and averages. Only those questions that matched those on the

survey were included in the formal results.

A summary of statistical methods used to test each of the nine hypotheses for this study is presented in Appendix D.

CHAPTER IV

RESULTS

This study examines the market for adult Outdoor Education. Groups within the total market are identified and differentiated according to the benefits participants seek from an Outdoor Education experience. Benefit variables consist of program attributes such as dates scheduled or availability of credit and reasons for attending programs. Program preference patterns and demographic backgrounds are also described for identified market segments. This section concludes by summarizing existing services in five western states. To present the character of the overall adult market, current opportunities are compared with data drawn from the participant survey.

Three organizations sponsoring adult programs were involved in the study. In reporting results, the organizations will not be referred to by name but as Organization 1,2, or 3. A summary of the overall response from the total sample (419 respondents) was not a primary objective of this research project. A brief discussion of overall ranking of important variables is contained at the end of this chapter. Responses for all questions in the survey are contained in Appendices E and F (total sample and for the three organizations). Study hypotheses are restated below with results presented for each test.

Segments in the Total SampleBenefits

H1a: Significant differences in the importance of benefits sought exist between identified benefit segments; at least 51 % of the

attributes and 51% of the reasons are significantly different at the .05 level.

Cluster analysis was performed on the total sample. The test, somewhat subjective in nature as to whether segments exist or not, did not show any definite grouping using all forty three benefit variables. Clusters are "identified" by visual inspection of a data tree. The tree produced by the CLUSTAR program showed almost all cases falling along the same tree axis.

Table 1.--Results of Cluster Analysis Using All Benefit Variables

INDIVIDUALS WITH CLUSTER MEMBERSHIP			INDIVIDUALS NOT IN ANY CLUSTER	
CLUSTER	NUMBER	%	NUMBER	%
1	330	78.76	66	15.75
2	23	5.49		

As shown in Table 1, most individuals fell into one group and since there was no predetermined legitimate cluster size, assigned by the clustering program or the researcher, it was concluded that true segments were not identifiable. This conclusion was verified by Romesburg (1986), designer of the CLUSTAR program.

The inability to identify segments using this approach may be due to the large number of variables used for the clustering process or may be an inherent difficulty with the CLUSTAR program. In either case, Hypothesis H1a was not supported.

Program Preferences and Demographics

H1b: Each benefit segment can be significantly differentiated by

program preferences; at least 51% of the characteristics are significantly different at the .05 level.

H1c: Each benefit segment can be significantly differentiated by demographics at the .05 level.

Because no benefit clusters were identified, no further analyses on program characteristics or demographics were initiated.

Because identifiable segments did not result from the clustering program using all forty three benefit variables, additional efforts were directed at determining if a more restricted list of variables could produce significant differences within the adult Outdoor Ed market. The original list of forty three variables was drawn from outdoor recreation behavior studies with the addition of several new variables based upon review of promotional materials and magazine articles on Outdoor Education experiences. The results of the cluster analysis made it clear that this broad-based list of variables needed refinement to be appropriate for Outdoor Education market studies. People who attend these programs are already a select type of "outdoor recreationist" and thus show consensus on many of the variables used in other recreation studies.

It became clear at this point in my research, that the project would be more exploratory than initially outlined, due to the necessity of identifying the right "tools" with which to conduct future market analyses for this select clientele.

In order to shed light on which of the many variables had the greatest potential for differentiating the Outdoor Education audience, I examined benefit variables for variation in response as indicated by standard deviation scores greater than 1.3. For certain variables, mean scores falling on the "unimportant" end of the scale obscured actual

variation in response. Two sets of variables with large standard deviations were found to be positively correlated and to represent two motive domains (Reflect on Personal Values and Family Togetherness). See Appendix G for Pearson Product Correlations for benefit variables.

The Contribution domain, one of the new domains added to this study, also had a standard deviation greater than 1.3. It was included for further analysis because of program design and promotion implications. See Table 2.

Though not stated in the original hypothesis, "HIGH" and "LOW" groups were established in the total sample for these three motive domains (Reflect on Personal Values, Family Togetherness and Contribution). Respondents were placed in HIGH or LOW groups depending on how they rated both variables in each domain (only one variable for Contribution). Significant differences were measured between groups on benefits sought, program preferences, demographics and by organization sponsoring the program. Results for the Reflect on personal values domain are summarized in Tables 3 through 6; results for the Family togetherness domain are contained in Tables 7 through 10; results for the Contribution domain are summarized in Tables 11 through 13.

Table 2.--Variables Showing Variation in Response from Three Motive Domains

DOMAIN	MEAN	S.D.*	%RATED 1-3 (Important)	%RATED 4-6 (Unimportant)
<u>Reflect on personal values</u>				
Because of spiritual values	3.225	1.382	61.0%	39.0%
Think about who I am	3.461	1.443	52.2%	47.8%
<u>Family togetherness</u>				
Family do something together	4.273	1.654	32.0%	68.0%
Be with spouse or friend	3.754	1.404	42.7%	57.3%
<u>Contribution</u>				
To contribute to worthy cause	3.753	1.332	47.7%	52.3%

*S.D.= Standard Deviation

The HIGH/LOW analyses indicated that those people who value the opportunity for reflection in their Outdoor Ed experience elect to participate for different reasons than those who do not view this opportunity as important. The ability to contribute to a worthy cause also significantly differentiates one segment of clientele. For both the Reflect on personal values and Contribution motives, program preference and demographic data for HIGH and LOW groups were more similar than different. The reasons given as important in deciding to attend a program proved a better means of describing these groups. Approximately seventy percent of the benefit variables differed between HIGH and LOW groups for both motive domains.

Those who consider the opportunity to reflect on personal values as important in their Outdoor Ed experience are concerned about the reputation of the organization, enjoy getting away from civilization and experiencing the quiet and peacefulness of the natural world. Improving skills and knowledge, doing something exciting and socializing with others of similar interests are also important to them. Rustic cabin housing in a residential setting is preferred. This group is predominantly 26 to 40 years of age, primarily single with no dependents and has slightly lower incomes (\$10,000 - \$24,900 range) than those who reported that reflecting on personal values was not important to them.

Those who consider the opportunity to contribute to a worthy cause important as part of attending an Outdoor Ed program were very similar to the Reflect on Personal Values group in benefits sought, but expressed greater concern on the cost of the program. Demographic data indicated that most were single with no dependents and in the \$10,000 to \$24,900 income bracket.

Those groups rating Family togetherness as important or unimportant differed on fewer than 51% of the benefits sought or specific program preferences, but did differ on nearly all (85.71%) of the demographic characteristics. Family togetherness is a vital issue for about one-third of the total sample. This segment is primarily 25 - 40 years of age, with children living at home.

Table 3.--Significant Differences between the "High" and "Low" Groups
 Reflect on Personal Values Domain Benefits Sought

HIGH (IMPORTANT) GROUP SAMPLE SIZE - 161 (38.42%)
 LOW (UNIMPORTANT) GROUP SAMPLE SIZE - 109 (26.01%)
 NUMBER OF CASES NOT IN EITHER GROUP - 149 (35.57%)

Values represent ratings on 1 (extremely important) to 6 (extremely unimportant) scale.

ATTRIBUTE	HIGH MEAN	LOW MEAN	T-SCORE	SIGNIFICANCE
Nat'l Park	2.969	3.385	-2.94	.00
Public transport to site	3.689	4.055	-2.24	.03
Comfort	3.789	3.459	2.41	.02
Amount of relax time	3.443	3.771	-2.46	.01
Reputation of organization	2.286	2.550	-2.10	.04
Five variables (38.46%) proved significant at the .05 level				
REASONS	HIGH MEAN	LOW MEAN	T-SCORE	SIGNIFICANCE
Do something creative	2.907	3.385	-2.91	.00
For exercise	2.932	3.565	-4.63	.00
Enjoy the scenery	2.062	2.394	-2.84	.01
Relax physically	2.913	3.243	-2.15	.03
Change from routine	2.352	2.870	-3.55	.00
Meet new people	2.407	3.238	-6.05	.00
Feel like better person	2.500	3.982	-9.85	.00
Direct activities of others	4.031	4.670	-3.93	.00
Enjoy quiet and serenity	2.086	2.963	-6.48	.00
Learn to be secure outdoors	3.019	3.826	-5.27	.00
Get away from civilization	2.206	3.018	-5.59	.00
Develop skills and knowledge	1.770	2.064	-2.14	.03
Contribute to worthy cause	3.396	4.101	-4.47	.00
Get away from people	3.503	4.111	-3.99	.00
Be close to nature	1.784	2.449	-5.28	.00

Table 3-Continued.

REASONS	HIGH MEAN	LOW MEAN	T-SCORE	SIGNIFICANCE
Improve physical health	2.876	4.000	-8.00	.00
Stimulating and exciting	1.925	2.367	-3.79	.00
Views/open space	2.037	2.592	-4.53	.00
Share skill and knowledge	3.342	3.917	-3.69	.00
Be with others who enjoy same things	2.235	2.954	-5.91	.00
Reduce tension	2.839	3.899	-6.72	.00
Be without family for awhile	4.154	4.963	-4.54	.00

Twenty two variables (73.33%) proved significant at the .05 level.

Table 4.--Significant Differences between "High" and "Low" Groups
Personal Values Domain Program Preferences

PROGRAM PREFERENCE VARIABLE	HIGH(Important)		LOW(Unimportant)	
	N	%	N	%
Program Choice				
-\$50.00/day	55	34.47	22	20.37
\$85.00	37	23.13	34	31.48
\$30.00	34	21.25	26	24.08
\$130.00	8	5.0	1	.92
\$100.00	12	7.5	8	7.41
None above	14	8.75	17	15.74
Total	160	100.00	108	100.00

Chi Square=12.24

Significance=.03

Housing -	Resort-like for 2 people	41	26.14	47	47.47
	Cabin, 4-8 people	76	48.41	31	31.31
	Platform tents	11	7.01	3	3.03
	Dorm bunkhouse	7	4.41	7	7.07
	Own tents	19	12.10	8	8.08
	Resort-like for single	3	1.93	3	3.03
	Total	157	100.00	99	100.00

Chi Square=22.20

Significance=.00

Two variables (18.18%) proved significant at the .05 level.

Table 5.--Significant Differences in the "High" and "Low" Groups
Personal Values Domain Demographic Characteristics

DEMOGRAPHIC VARIABLE	HIGH(Important)		LOW(Unimportant)	
	N	%	N	%
Age - 18-25 years of age	22	13.67	4	3.70
	71	44.01	50	46.30
	48	29.81	32	29.62
	9	5.59	18	16.68
	11	6.83	4	3.70
Total	161	100.00	108	100.00
Chi Square=15.74	Significance .00			

Life stage - Single, no dependents	78	49.06	31	28.97
	11	6.92	2	1.87
	15	9.43	16	14.95
	39	24.57	34	31.78
	15	9.43	24	22.43
Total	159	100.00	107	100.00
Chi Square=20.57	Significance=.00			

Income - \$10,000	20	12.82	4	3.88
	52	33.33	25	24.27
	45	28.85	30	29.13
	21	13.46	25	24.27
	6	3.85	7	6.80
	12	7.69	12	6.80
Total	156	100.00	103	100.00
Chi Square=13.27	Significance=.02			

Three variables (42.86%) proved significant at the .05 level.

Table 6.--Membership in "High" and "Low" Groups for Each Organization
Based on Reflect on Personal Values Domain

VARIABLE	HIGH(Important)		LOW(Unimportant)		NEITHER		TOTAL	
	N	%	N	%	N	%	N	%
Organization sponsoring program - # 1	73	46.79	28	17.95	55	35.25	156	100.
# 2	39	28.06	35	25.18	65	46.76	139	100.
# 3	50	40.32	46	37.10	28	22.58	124	100.

Chi Square=10.47

Significance=.01

Table 7.--Significant Differences between the "High" and "Low" Groups
Family Togetherness Domain Benefits Sought

HIGH (IMPORTANT) GROUP SAMPLE SIZE - 92 (21.96%)

LOW (UNIMPORTANT) GROUP SAMPLE SIZE - 197 (47.02%)

NUMBER OF CASES NOT IN EITHER GROUP - 130 (31.03%)

Values represent ratings on a 1(extremely important) through 6(extremely unimportant) scale.

ATTRIBUTE	HIGH MEAN	LOW MEAN	T-SCORE	SIGNIFICANCE
Dates	2.261	2.569	-2.43	.02
Near Nat'l Park	2.744	3.335	-3.78	.00
Comfort	3.272	3.785	-3.72	.00
Relax time	3.163	3.636	-3.42	.00
Adventure travel	2.956	3.576	-4.15	.00
Reputation of organization	2.110	2.439	-2.48	.01

Six variables (46.15%) were significant at the .05 level.

REASONS	HIGH MEAN	LOW MEAN	T-SCORE	SIGNIFICANCE
For exercise	2.880	3.210	-2.84	.01
Enjoy the scenery	1.857	2.264	-3.32	.00
Relax physically	2.736	3.352	-3.81	.00
Change from routine	2.315	2.821	-3.12	.00
Feel like better person	2.846	3.474	-3.53	.00
Spouse/associate wanted me to	4.393	5.663	-9.13	.00
Learn to be secure outdoors	2.967	3.518	-3.44	.00
Get away from civilization	2.264	2.709	-2.75	.00
Contribute to worthy cause	3.308	3.964	-3.74	.00
Get away from people	3.428	3.934	-3.13	.00
Improve physical health	3.110	3.520	-2.54	.01
Reduce tension	3.099	3.660	-3.30	.00

Twelve variables (40.0%) proved significant at the .05 level.

Table 8.--Significant Differences between the "High" and "Low" Groups
Family Togetherness Domain Program Preferences

PROGRAM PREFERENCE VARIABLE	HIGH(Important)		LOW(Unimportant)	
	N	%	N	%
*Program Choice - \$50.00/Day	22	27.5	68	37.16
\$85.00	31	38.75	41	22.40
\$30.00	18	22.50	43	23.50
\$130.00	3	3.75	4	2.18
\$100.00	6	7.50	27	14.76
Total	80	100.00	183	100.00

Chi Square=13.85 Significance=.02

One variable (9.09%) proved significant at the .05 level.

Table 9.--Significant Differences between "High" and "Low" Groups
Family Togetherness Domain Demographic Characteristics

DEMOGRAPHIC VARIABLE	HIGH(Important)		LOW(Unimportant)	
	N	%	N	%
Sex - Male	40	43.48	53	26.90
Female	52	56.52	144	73.10
Total	92	100.00	197	100.00
Chi Square=7.15	Significance=.01			

Age - 18-25 years of age	2	2.17	21	10.66
26-40	38	41.30	87	44.16
41-55	34	36.96	58	29.44
56-65	11	11.96	25	12.69
Over 65	7	7.61	6	3.05
Total	92	100.00	197	100.00
Chi Square=9.84	Significance=.04			

Education - Attended High School	0	0.	2	1.02
Graduated High School	3	3.26	5	2.55
Attended College	3	3.26	25	12.76
Graduated College	27	29.35	53	27.04
Graduate work	13	14.13	47	23.98

Table 9-Continued.

DEMOGRAPHIC VARIABLE	HIGH(Important)		LOW(Unimportant)	
Education				
Graduate degree	46	50.00	64	32.65
Total	92	100.00	196	100.00
Chi Square=14.83	Significance=.01			

Life stage - Single, no dependents	12	13.33	110	56.41
Single, child at home	2	2.22	12	6.15
Married, no children	8	8.89	20	10.26
Married, child at home	49	54.45	29	14.87
Married, grown children	19	21.11	24	12.31
Total	90	100.00	195	100.00
Chi Square=67.15	Significance=.00			

Position - Teacher K-12	31	34.07	68	34.69
Director/manager	10	10.99	10	5.10
Naturalist/ranger	6	6.59	13	6.63
Homemaker	4	4.40	8	4.08
Other	40	56.05	97	50.50
Total	91	100.00	196	100.00
Chi Square=68.81	Significance=.05			

Income - <\$10,000	3	3.41	18	9.52
\$10,-24,900	15	17.05	73	38.62
\$25,-39,900	27	30.68	55	29.10
\$40,-59,900	21	23.86	25	13.24
\$60,-79,900	7	7.95	6	3.17
>\$80,000	15	17.05	12	6.35
Total	88	100.00	189	100.00
Chi Square=25.87	Significance=.00			

Six variables (85.71%) proved significant.

Table 10.--Membership in "High" and "Low" Groups for the Family Togetherness Domain for Each Organization

VARIABLE	HIGH(Important)		LOW(Unimportant)		NEITHER		TOTAL	
	N	%	N	%	N	%	N	%
Organization sponsoring programs - # 1	22	14.10	83	53.21	51	32.69	156	100.
# 2	41	29.50	44	31.65	54	38.85	139	100.
# 3	29	23.39	70	56.45	25	20.16	124	100.

Chi Square=16.56

Significance=.00

Table 11.--Significant Differences between "High" and "Low" Groups Contribution Domain Benefits Sought

HIGH (IMPORTANT) GROUP SAMPLE SIZE - 194 (46.30%)

LOW (UNIMPORTANT) GROUP SAMPLE SIZE - 213 (50.83%)

NUMBER OF CASES NOT IN EITHER GROUP - 12 (2.86%)

Values represent ratings on a 1(extremely important) through 6 (extremely unimportant) scale.

ATTRIBUTE	HIGH MEAN	LOW MEAN	T-SCORE	SIGNIFICANCE
Cost	2.350	2.638	-3.01	.00
Near Nat'l Park	3.016	3.288	-2.28	.02
Credit	4.104	4.645	-3.75	.00
Reputation of instructor	2.870	3.226	-3.33	.00
Public transport to site	3.565	3.976	-3.04	.00
Adventure travel	3.275	3.575	-2.51	.01
Reputation of organization	2.227	2.460	-2.35	.02

Seven variables (53.85%) proved significant at the .05 level

REASONS	HIGH MEAN	LOW MEAN	T-SCORE	SIGNIFICANCE
To be creative	2.866	3.317	-3.39	.00
For exercise	2.948	3.304	-3.23	.00
Spiritual values	2.995	3.467	-3.48	.00
Meet new people	2.533	2.981	-4.03	.00
To study nature	1.569	1.794	-2.76	.01
Feel like better person	2.782	3.600	-6.24	.00

Table 11-Continued.

REASON	HIGH	LOW	T-SCORE	SIGNIFICANCE
Enjoy quiet and serenity	2.241	2.603	-3.34	.00
Learn to be secure outdoors	3.139	3.607	-3.74	.00
Get away from civilization	2.347	2.742	-3.28	.00
Develop skills and knowledge	1.747	2.023	-2.67	.01
Family do something together	3.963	4.552	-3.63	.00
Get away from people	3.461	4.024	-4.64	.00
Required for work	4.698	5.137	-3.37	.00
Close to nature	1.867	2.187	-3.17	.00
Think about who I am	3.186	3.732	-3.89	.00
Improve physical health	3.062	3.626	-4.64	.00
Views and open space	2.135	2.390	-2.49	.01
Share skills and knowledge	3.254	3.981	-5.94	.00
Be with others who enjoy same things	2.359	2.696	-3.32	.00
Reduce tension	3.093	3.667	-4.34	.00
Be without family for awhile	4.381	4.815	-3.08	.00

Twenty one variables (70.0%) proved significant at the .05 level

Table 12.--Significant Differences between "High" and "Low" Groups
Contribution Domain Demographic Characteristics

DEMOGRAPHIC VARIABLE	HIGH(Important)		LOW(Unimportant)	
	N	%	N	%
Life stage - Single, no child	90	47.37	81	37.85
Single, child at home	9	4.74	11	5.19
Married, no children	23	12.11	19	8.89
Married, child at home	48	25.26	57	26.64
Married, grown children	20	10.53	45	21.03
Total	190	100.00	219	100.00
Chi Square=11.05	Significance=.05			

Income - <\$10,000	23	12.17	11	5.42
\$10,-24,900	59	31.22	56	27.58
\$25,-39,900	51	26.98	71	34.98
\$40,-59,900	37	19.58	29	14.29
\$60,-79,900	7	3.70	13	6.40
>\$80,000	12	6.35	23	11.33
Total	189	100.00	203	100.00
Chi Square=13.34	Significance=.02			

Two variables (28.57%) proved significant at the .05 level.

Table 13.--Membership in "High" and "Low" Groups for Each Organization
Contribution Domain

VARIABLE	HIGH(Important)		LOW(Unimportant)		NEITHER		TOTAL	
	N	%	N	%	N	%	N	%
Organization sponsoring programs - # 1	86	55.13	64	41.02	6	3.85	156	100.
# 2	58	41.72	65	46.76	16	11.52	139	100.
# 3	51	41.13	85	52.42	8	6.45	124	100.

Chi Square=11.27

Significance=.00

Three Organizations

Benefits

H2a: Those attending programs offered by each of the Three Organizations will significantly differ in benefits sought; at least 51% of the attributes and 51% of the reasons are significantly different at the .05 level.

Ten attribute variables (76.92%) showed significant differences between the Three Organizations at the .05 level. They are:

Topic
 Reputation of organization
 Cost
 Reputation of instructor
 Near National Park/scenic attraction
 Adventure travel included
 Amount of unscheduled "relax" time
 Comfort
 Credit available
 Public transportation to site

Topic, cost and dates were listed as primary concerns for selecting a program by most respondents. Comfort, credibility and intensity of academic focus were factors that differentiated the participants from each organization. Additional discussion of each organization's "type" of participant is presented in the following chapter.

The comparison of the three organizations showed that twenty one (70%) of the reasons for attending proved significant at the .05 level. These statements, organized by motive domain, are:

Achievement

Develop my skills and knowledge
 Feel like a better person

Contribute to worthy cause

Contribute to worthy cause

Leadership/Autonomy

Share skill and knowledge with others
 Direct activities of others

Family Togetherness

Family do something together

Requirement

Required for work

Security

Learn to be safe outdoors

Escape Physical Pressures/Open Space

Enjoy quiet and serenity
Get away from other people

Escape Personal/Social Pressures

Reduce tension
Change in routine

Rest

Physically relax

Reflect on personal values

Think about who I am

Social

Be with others who enjoy same things
Chance to meet new people

Learn/Explore

Learn about region

Nature

Enjoy the scenery
Study nature

Hypothesis H2a was supported. Mean scores for importance ratings and rank order of importance of these variables for each organization is contained in Appendix F.

Program Preferences

H2b: Those attending programs offered by each of the Three Organizations will significantly differ in program preferences; at least 51% of the preferences are significantly different.

Nine program preference variables (81.82%) showed significant differences between Three Organizations at the .05 level. They are:

Program choice (program packages)
Topic 1 (natural and cultural resources)
Topic 2 (environmental issues, humanities, teaching methods)
Favorite topic
Length

Adventure travel
Recreation/entertainment
Housing
Bath/shower facility

Hypothesis H2b was supported. Results on rank order of specific preferences for each variable (for each organization) is contained in Appendix F. Though similar in their preferences for many items, participants from one organization in particular favored private and more comfortable accommodations as well as activities that involved less rigorous exercise. Those from the other two organizations showed a preference for rusticity in accommodations, and travel requiring personal exertion.

Demographics

H2c: Those attending programs offered by each of the Three Organizations will significantly differ in demographic characteristics.

Five demographic variables (71.43%) showed significant differences between organizations. These variables are:

Age
Education
Life stage
Position
Field of work

Hypothesis H2c was supported. Responses for each option under these variables is presented for each organization in Appendix F.

Organization 2 served an older clientele from diverse occupational backgrounds while the other two organizations served younger adults (26 - 40 year olds) from predominantly teaching and ranger/interpretive fields. It was reported at a later date that free registration in Organization 3's seminars was offered to National Park Service personnel affecting the proportion of occupations represented in this study.

Multiple Discriminant Function Analysis

The MDFA analysis performed on the organization "groups" identified a total of twenty six benefit variables that characterize each organization. The first five variables, selected for best elucidating differences among participants from the three organizations, were:

Comfort
 Required for work
 Be with others who enjoy same things
 Topic/itinerary
 Family do something together

Coefficients for each variable indicate strength of predictability. All eleven program preference variables and five demographic variables proved to be predictors of group membership. Results of the MDFA analysis are contained in Table 14.

As previously described in the methodology chapter, the MDFA tests the usefulness of selected variables by predicting group membership based upon how a person responds on each variable. It then "checks" itself to see if a given person's response on a selected variable is a reliable way to place that person in one segment or another. The percent of correctly predicted cases (persons) is an indication of how well a certain variable can predict group membership. This process is most helpful in identifying which variables actually can differentiate segments within the market for adult Outdoor Education.

For the Three Organizations, the prediction tests showed the abilities of the three categories of variables to predict whether a given person was likely to have attended a program offered by one of the three organizations. The results were:

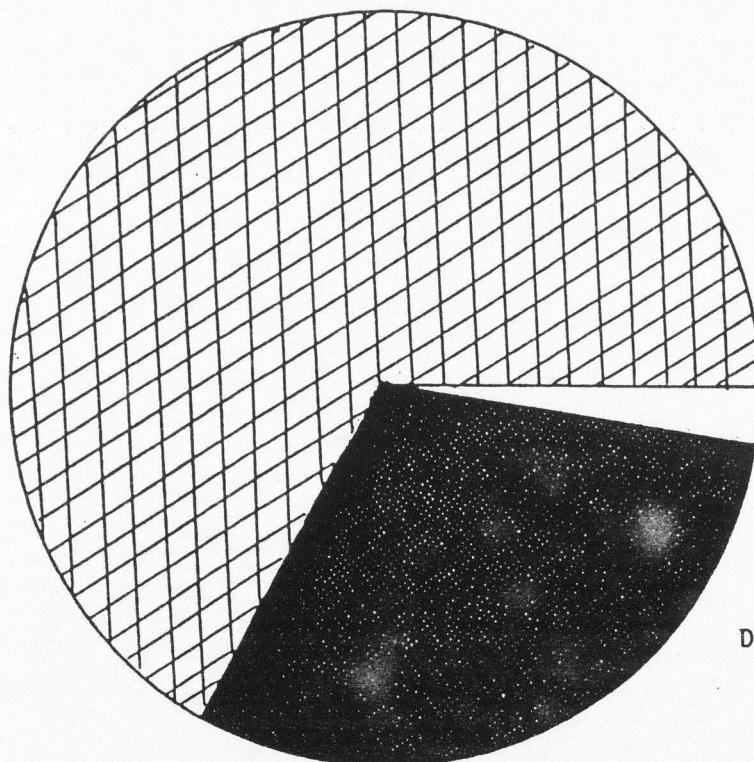
TOTAL SAMPLE PREDICTOR VARIABLES	PERCENT OF CORRECTLY PREDICTED CASES
<u>Benefits</u>	64.20%
<u>Program Preferences</u>	65.16%
<u>Demographics</u>	51.07%

Benefit and program preference variables showed the greatest ability to differentiate who attended which organization. All tests indicate that a number of significant differences exist between the three groups of people attending different programs. Overall patterns are discussed further in the next chapter.

Vacation and Development Groups

The total sample was divided into Vacation and Development groups based upon how respondents primarily viewed their Outdoor Education experience (See Figure 1).

VACATION - 66.7%



OTHER - 2.4%

DEVELOPMENT - 30.9%

Figure 1. Membership in Vacation and Development Groups

Table 14.--Variables that Predict Membership in Each of the Three Organizations (People Attending Programs Offered by the Three Organizations) as Identified by the Multi-Discriminant Function Analysis

PREDICTORS OF GROUP MEMBERSHIP	DISCRIMINANT FUNCTION COEFFICIENT	F SCORE
<u>Benefits</u>		
*Topic(4)	-.19248	1.8040
Cost	.02114	2.9172
Dates	-.18220	1.9276
Distance from home	.12438	2.5937
Near National Park	.15101	4.0660
Reputation of instructor	-.31145	7.8042
Public transportation to site	.23850	3.3801
*Comfort(1)	.48448	11.1500
Amount of relax time	-.10977	4.6677
Adventure travel included	.14197	2.4771
Reputation of organization	.27995	3.6007
Do something creative	.06022	3.9117
Be with friends or spouse	-.18635	1.6476
Learn about region	-.15725	1.5521
Change from routine	.20547	2.8275
Study nature	.04678	1.1251
Learn to be secure outdoors	.14996	1.7463
Develop skills and knowledge	-.25076	2.3772
*Family do something together(5)	.38932	7.7051
Contribute to worthy cause	.04947	6.2065
Required for workG(2)	-.43129	9.6741
Close to nature	.17425	1.2832
Think about who I am	-.22738	2.9792
Views and open space	-.25270	2.9890
*Be with others who enjoy same things(3)	.25727	5.1554
Reduce tension	.18795	1.4737
Be without family for awhile	-.15240	1.4011
*(#) Indicates those variables which were selected as first five predictors of group membership (large coefficients indicate strength of predictability)		
<u>Program Preferenes</u>		
Program Choice (Question 4)	.41480	9.0514
Topic 1	.01627	2.1000
Topic 2	-.01177	1.0105
Favorite Topic	.07813	1.1932
Length	-.82641	38.3280
Group size	.01727	1.7478
Adventure travel	.04233	4.1680
Recreation/entertainment	.19377	1.7044
Housing	.02091	1.4106

Table 14--Continued.

PREDICTORS OF GROUP MEMBERSHIP	DISCRIMINANT FUNCTION COEFFICIENT	F SCORE
<u>Program Preferences</u>		
Bath/Shower facility	-.01455	5.5956
Meal type/plan	.15560	3.1229
<u>Demograhics</u>		
Sex	.35679	2.8806
Age	.54886	8.2800
Life stage	.21675	2.6474
Position	-.70277	11.7170
Field of work	-.26724	6.0372

Benefits

H3a: Those in the Vacation group will significantly differ from the Development group in benefits sought; at least 51% of the attributes and 51% of the reasons will be significantly different at the .05 level.

Seven attributes (53.85%) and 16 reasons (53.33%) proved significantly different between the Vacation and Development groups. Mean response and rank order of importance of these variables is reported in Table 15. Hypothesis H3a was supported.

H3b: Those in the Vacation group will differ significantly from the Development group in program preferences; at least 51% of the preferences will be significantly different at the .05 level.

Six program preference variables (54.54%) proved significantly different between Vacation and Development groups. Options for each significant variable are reported in Table 16. Hypothesis H3b was supported.

Demographics

H3c: Those in the Vacation group will significantly differ from the Development group in demographic characteristics.

Three (42.86%) demographic variables--age, income and field of work--showed significant differences. Hypothesis H3c was supported. Results are shown in Table 17.

Table 15.--Significant Differences between "Vacation" and "Development"
Groups Based upon the Benefits Sought from the Experience

VACATION GROUP SAMPLE SIZE - 274 (66.7% of Total Cases)
DEVELOPMENT GROUP SAMPLE SIZE - 127 (30.9% of Total Cases)

ATTRIBUTE	VACATION		DEVELOPMENT		T-SCORE	SIGNIFICANCE
	MEAN	RANK	MEAN	RANK		
Topic	1.702	1	1.362	1	4.23	.00
Credit	4.915	13	3.323	9	11.59	.00
Rep. of Instructor	3.210	7	2.740	5	4.12	.00
Public transport	3.630	12	4.000	13	-2.52	.01
Comfort	3.410	10	3.952	12	-4.65	.00
Relax time	3.425	11	3.672	11	-2.10	.04
Adv travel	3.335	9	3.630	10	-2.28	.02

Seven variables (53.85%) proved significantly different at the .05 level.

REASONS	VACATION		DEVELOPMENT		T-SCORE	SIGNIFICANCE
	MEAN	RANK	MEAN	RANK		
Exercise	3.004	14	3.352	16	-2.90	.00
Enjoy scenery	2.034	3	2.365	7	-3.33	.00
Be with friends/ spouse	3.596	23	4.016	24	-2.78	.00
Learn about region	2.413	9	2.127	5	2.94	.00
Relax physically	2.914	13	3.390	18	-3.54	.00
Change from routine	2.342	8	2.984	13	-5.16	.00
Study nature	1.782	1	1.456	2	3.79	.00
Direct activities of others	4.684	28	3.730	23	7.34	.00
Quiet & serenity	2.299	7	2.624	8	-2.75	.01
Get away from civilization	2.446	10	2.707	10	-1.99	.05
Develop skills & knowledge	2.167	5	1.357	1	7.72	.00
Family do together	4.115	26	4.597	26	-2.69	.01
Contribute to cause	3.932	25	3.360	17	4.00	.00
Required for work	5.413	30	4.016	24	11.48	.00
Share skill & knowledge	3.363	21	2.896	11	8.31	.00
Be with others enjoy same things	2.607	11	2.344	6	2.41	.02

Sixteen variables (53.33%) were significantly different at .05 level.

Multiple Discriminant Function Analysis

The MDFA analysis performed on the Vacation/Development groups identified a total of sixteen discriminating variables. The first five discriminators were:

- Required for work
- Develop skills and knowledge
- Credit available
- Change in routine
- Spouse/associate wanted me to attend

Nine program preference variables and all seven demographic characteristics were selected by the MDFA as predictors of group membership. Results of the MDFA tests for the Vacation/Development groups are contained in Table 18.

The predictor variables showed a strong ability to place individuals in either Vacation or Development groups as shown:

PREDICTOR VARIABLES	PERCENT OF CORRECTLY PREDICTED CASES
<u>Benefits</u>	86.87
<u>Program Preferences</u>	65.62
<u>Demographics</u>	69.69

The Vacation/Development approach to segmenting the market for adult Outdoor Education showed differences in benefits sought and specific program preferences. Vacation and Development groups show more similarities than differences in demographic background. This suggests that the benefit approach to segmentation in this situation is able to develop group profiles otherwise uncovered by traditional demographic segmentation methodology.

Table 16.--Significant Differences between "Vacation" and "Development" Groups in Program Preferences

Program Choice*	VACATION	N	%	RANK	DEVELOPMENT	N	%	RANK
	\$85.00/day	93	34.4	1	\$85.00/day	12	9.6	4
	\$50.00/day	73	27.0	2	\$50.00/day	44	35.2	2
	None of above	46	17.0	3	None of above	7	5.6	5
	\$30.00/day	34	12.6	4	\$30.00/day	45	36.0	1
	\$100.00/day	18	6.7	5	\$100.00/day	13	10.4	3
	\$130.00/day	6	2.2	6	\$130.00/day	4	3.2	6
Chi Square=59.65				Significance=.00				

*FULL RESPONSES:

\$85.00/day - A residential program, 20 people on site, quality lodging, private or double occupancy, private bath, family-style meals, local natural history excursions, includes a 3-day adventure trip (horse or boat or jeep).

\$50.00/day - A residential program, 30 people on site, share bunkhouse with 6-8 people, shared bathroom, family style meals, local natural history excursions.

None of the above

\$30.00/day - Day program at semi-remote site, 15 people in study group, local natural history, provide own lodging and meals in nearby town or campground.

\$100.00/day - Tour, 20 people, by horseback or boat with some hiking, with expert in natural history, tent camping, cookout meals.

\$130.00/day - Tour, 8 people by van, horsepacking and boating combinations, instruction on natural history of areas visited, some tent camping, first class motels, restaurant and cookout meals, all details and extras arranged.

Topic 2	RANK	VACATION	N	%	DEVELOPMENT	N	%
1		Environ. Issues	74	27.0	Environ. Educ	51	40.2
2		Photography	65	23.7	Environ. Issues	30	23.6
3		Humanities	34	12.4	Photography	15	11.8
4		Environ. Educ	23	8.4	Humanities	10	7.9
		Teach Methods					

Chi Square= 75.67 Significance=.00

Table 16-Continued.

Length	RANK VACATION	N	%	DEVELOPMENT	N	%
	1 5-8 days	174	63.5	5-8 days	51	40.1
	2 9-14 days	61	22.3	9-14 days	45	35.4
	3 2-3 days	27	9.9	2-3 days	22	17.3
	4 1 day	4	1.5	3-5 days	4	3.1
Chi Square=33.09		Significance=.00				

Group Size	RANK VACATION	N	%	DEVELOPMENT	N	%
	1 6-8 people	122	44.5	6-8 people	50	39.4
	2 9-15 people	98	35.7	9-15 people	43	33.9
	3 1-5 people	35	12.8	1-5 people	31	24.4
	4 16-25 people	17	6.2	16-25 people	2	1.6
Chi Square=16.43		Significance=.04				

Housing	RANK VACATION	N	%	DEVELOPMENT	N	%
	1 Resort-like for 2	119	43.4	Cabin for 4-8	70	55.1
	2 Cabin for 4-8	89	32.5	Own tents	18	14.2
	3 Own tents	18	6.6	Resort-like	14	11.0
	4 Dorm for 6-12	16	5.8	Canvas tents on platforms	10	7.9
Chi Square=53.76		Significance=.00				

Bath/ Shower	RANK VACATION	N	%	DEVELOPMENT	N	%
	1 Attached priv bath	173	63.1	Attached private bath	51	40.2
	2 Attached shared bath	49	17.9	Separate shared bathhouse	33	26.0
	3 Separate bathhouse	33	12.0	Attached shared bath	28	22.0
	4 Privy	11	4.0	Privy	7	5.5
Chi Square=25.46		Significance=.00				

Meal Plan	RANK VACATION	N	%	DEVELOPMENT	N	%
	1 Meal prepared whole grains/low cholesterol/ mostly vegetarian/ some meat	132	48.2	Meal prepared/ whole grains/low cholesterol/ mostly vegetarian/ some meat	56	44.1
	2 Meal prepared casseroles/stews	95	34.7	Meal prepared casseroles/stews	33	25.9
	3 Meals prepared/ gourmet dishes	27	9.8	Purchase & prepare own meals	25	19.7
	4 Purchase & prepare own meals	12	4.4	Meals prepared/ gourmet dishes	6	4.7
Chi Square=37.89		Significance=.00				

Table 17.--Significant Differences between "Vacation" and "Development"
Groups in Demographic Characteristics

Age	VACATION	N	%	RANK	DEVELOPMENT	N	%	RANK
	26-40 years	101	37.1	1	26-40 years	67	52.8	1
	41-55 years	95	34.9	2	41-55 years	29	22.8	2
	56-65 years	38	14.0	3	56-65 years	9	7.1	4
	Over 65	26	9.6	4	Over 65	2	1.6	5
	18-25 years	12	4.4	5	18-25 years	20	15.7	3
Chi Square = 36.64		Significance=.00						

Field of Work	VACATION	N	%	RANK	DEVELOPMENT	N	%	RANK
	Elem Teach	42	15.8	1	Elem Teach	28	23.1	1
	Medicine	31	11.7	2	Science	24	19.8	2
	Business	19	7.2	3	Environ Ed	19	15.7	3
	Science	9	3.4	4	Student/intern	11	9.1	4
Chi Square= 186.33		Significance= .00						

Income	VACATION	N	%	RANK	DEVELOPMENT	N	%	RANK
	25-39,900	88	33.5	1	25 -39,900	32	25.2	2
	10-24,900	70	26.6	2	10-24,900	44	34.6	1
	40-59,900	434	16.3	3	40-59,900	20	15.7	3
	`80,000	30	11.4	4	`80,000	5	3.9	5
	`10,000	16	6.1	5	`10,000	16	6.1	4
	60-79,000	16	6.1	5	60-79,900	4	3.1	6
Chi Square= 19.36		Significance=.05						

Table 18.--Variables that Predict Membership in "Vacation" and "Development" Groups Identified by the Multi-Discriminant Function Analysis

VACATION/DEVELOPMENT GROUPS		
PREDICTORS OF GROUP MEMBERSHIP	DISCRIMINANT FUNCTION COEFFICIENT	F SCORE
<u>Benefits</u>		
Topic	.18379	6.3095
Distance from home	-.18769	6.2784
*Credit (3)	.46169	36.7480
Public transport to site	-.24928	11.0720
Reputation of organization	-.11589	2.7897
Spiritual values	.11703	2.7259
Be with friends or spouse	-.18026	5.1635
*Change in routine(4)	-.24796	11.2390
Direct activities of others	.26587	17.6010
*Spouse/associate wanted me to(5)	-.22891	7.6705
Learn to be secure outdoors	-.12363	1.9563
*Develop skills and knowledge(2)	.38000	27.364
*Required for work(1)	.59962	59.6950
Improve physical health	-.12261	1.9400
Share skills and knowledge	.11224	1.5288
Be without family for awhile	-.10483	1.6848

* (#) Indicates first five predictors selected (large coefficients indicate strength of predictability)

<u>Program Preferences</u>		
Program Choice (Question 4)	-.24368	1.5028
Topic 2	-.30949	2.4524
Favorite Topic	.30599	2.3644
Length	.27696	1.9559
Group size	-.42634	4.7294
Recreation/entertainment	-.19987	1.0105
Housing	.22004	1.0096
Bath/shower facility	.32486	2.1357
Meal type/plan	.31346	2.2243
<u>Demographics</u>		
Sex	.28958	4.4094
Age	.67222	24.2360
Education	.21119	2.1149
Life stage	-.24574	2.4114
Position	-.54737	16.2030
Field of work	.17952	1.6763
Income	.42017	6.9042

Variable Ratings from Total Sample

Program planners need to know what overall variables are important to their potential participants. A look at the demographic trends for the total sample helps to predict possible changes in participants' needs over time. This section presents data from the total sample consisting of 419 people.

Topic, cost and scheduled dates, in that order, are the three attributes of most importance in deciding to attend an educational seminar or tour. The ten most important reasons for attending are:

1. Study nature
2. Develop skills and knowledge
3. Close to nature
4. Stimulating and exciting
5. Enjoy the scenery
6. Enjoy distant views and open space
7. Learn about region
8. Enjoy quietness and serenity
9. Be with others who enjoy same things
10. Get away from civilization

Mean scores for the total sample on all questions in the survey is contained in Appendix E.

The variable "Mix of learning methods" covered in Question 9 of the survey was not included in any of the comparative analyses. Overall results indicate that adults strongly prefer to learn through field instruction in Outdoor Education settings.

Age distribution for the total sample indicates that the market for adult Outdoor Education follows national trends. The largest segments are the 26 to 40 year olds with 41 to 55 year olds in second place.

Participants are also highly educated, with nearly 40 percent having graduate degrees. Respondents were "frequent attenders" of such programs with 54.3% having attended two to five programs in the past.

Friends or colleagues (25.5%) and brochures received in the mail (20.3%) were the common ways that people found out about their last educational seminar or tour. Table 19 lists the most preferred program characteristics for the total sample.

Existing Services in Five Western States

Directors of Outdoor Education programs completed the inventory of existing services. Results for the complete inventory are contained in Appendix H. Inventory questions that matched the survey provide a basis for comparing what is currently offered with what participants say they want in a residential experience.

In regards to age of participants, program directors completing the form were not asked to check official registration records but rather to indicate which age group that they thought they predominantly served. Organizations list "college age" and "41-55 years old" as most frequently served with the 25-40 year old group fourth on the list.

Figure 2 compares participant age distribution from both the survey and the inventory. Inventory percentages represent the organizations reporting service to that age group. Survey age statistics represent percentages of individuals in the total sample that fall into those age categories.

Summary of Results

Of the nine proposed hypotheses, six were supported. Benefit segmentation through cluster analysis did not prove fruitful for this study sample. A number of alternative methods were examined as methods for dividing the overall market for residential Outdoor Ed into segments. Close examination of the data and additional testing resulted

in identifying those variables or factors that the Outdoor Ed public as a whole is not likely to be in complete agreement. These variables can be used as a basis for further segmentation studies.

Significant differences were noted among groups attending programs from each of the three organizations and between identified "Vacation" or "Professional development" market segments.

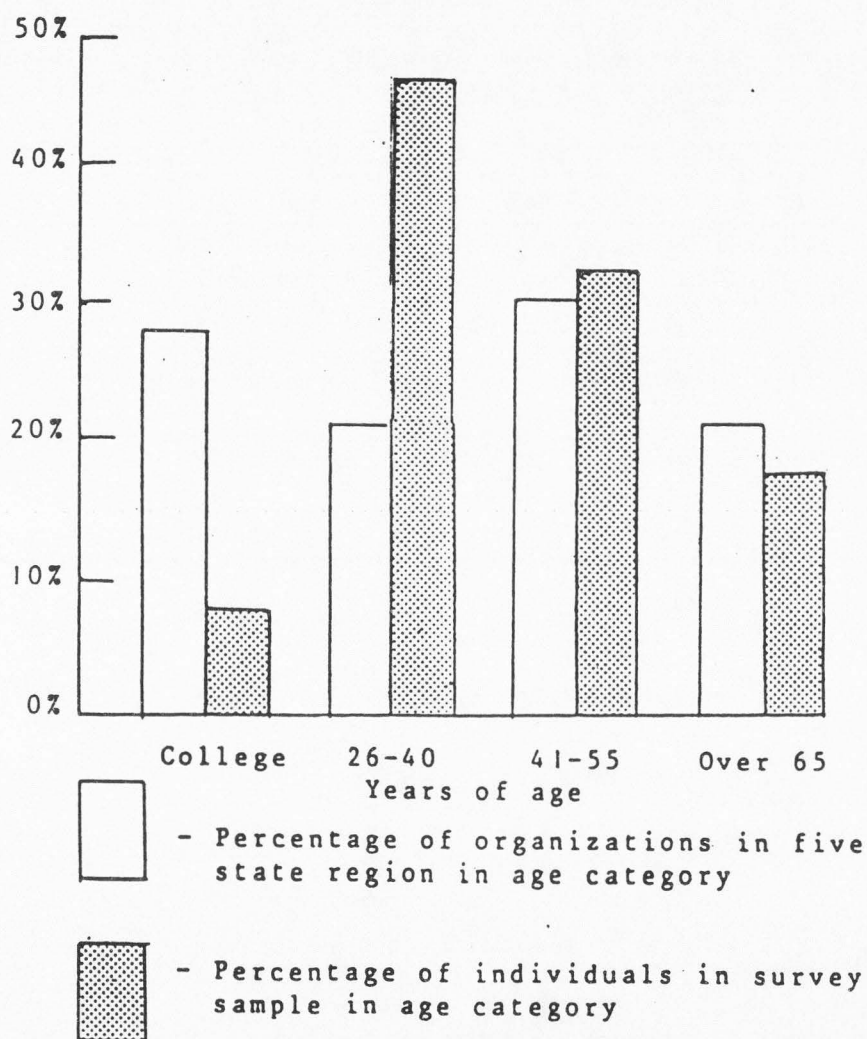


Figure 2.--Participant Age Distribution as Reported in Survey and Inventory

Table 19.--Program Characteristics--Greatest Preferences of Participants as Reported in Survey and Most Common Types of Programs Offered in Five States as Reported in Inventory

<u>SURVEY</u> (Total Sample) (Percentages represent numbers of participants)	<u>INVENTORY</u> (Total Sample) (Percentages represent numbers of organizations offering that type of service)
TOPIC IN NATURAL OR CULTURAL RESOURCES	
General Ecology (41.1%)	General Ecology (90.0%)
TOPIC IN RELATED AREAS	
Environmental Issues (25.5%)	Environmental Issues (60.0%) Photography (60.0%)
LENGTH	
5 - 8 Days (55.8%)	5 - 8 Days (40.28%)
ADVENTURE TRAVEL	
Backpacking (30.1%)	Backpacking (60.0%) Canoe, rafting, kayaking (60.0%)
RECREATION	
Walks, fishing, horsebackriding (52.7%)	Walks and hikes (86.7%) Fishing (30.0%)
HOUSING	
Cabin for 4-8 (39.9%) Motel-like for 2 (32.9%)	Sleep under stars/tent (60.0%) Rustic cabin for 4-8 (36.7%)
BATH/SHOWER FACILITY	
Attached private bath (55.6%)	Attached shared bath (50.0%)
MEAL TYPE/PLAN	
Meals prepared, use of whole grains, low cholesterol and fat, mostly vegetarian, some meat dishes (55.6%)	Meals prepared, casseroles, stews, hamburgers (53.0%)
SEASON	
1. Summer (75.0%) 2. Fall (24.8%)	1. Summer (34.8%) 2. Fall (22.5%)

CHAPTER V

DISCUSSION, CONCLUSIONS AND RECOMMENDATIONS

Outdoor Education seeks to nurture an ecological perspective: our role as human beings as members of the earth system. This theme, profoundly stirring national conscience two decades ago, has lost its mass appeal. Those who view ecological understanding as essential, basic education are charged to find ways to popularize and successfully fund such education. Effective program design for Outdoor Education is built upon improved understanding of participant needs. Meeting the needs of a selected target market makes Outdoor Education naturally attractive.

This study, working towards better understanding of the adult market for Outdoor Education, queried past participants of residential programs using survey research techniques. Respondents indicated important reasons for attendance, their preference for specific program features and indicated their demographic background. The overall objective was to determine if statistically significant groups or segments could be identified.

Statistical differences should translate into useful information for program design and promotion. This section will discuss the results of the hypotheses tests, outline the nature of both the overall adult market and identified segments for Outdoor Education and make recommendations for programming. Limitations and methodological problems of this research project are reviewed. A call for future research, particularly small projects conducted by individual Outdoor Education organizations, concludes the chapter.

Major Findings and Conclusions

The overall market for adult Outdoor Education is motivated by a desire to be close to and study nature. Achievement, escaping physical pressures, a desire for enriching experiences and a chance to be with other people with similar interests are also prime motivators for attending educational trips and seminars. Participants are highly educated (most of them having graduate degrees), are primarily female, and predominantly in the 26 - 40 year old age group. They are interested in a wide variety of topics, activities and accommodations. College credit, though offered for many seminars, is not an important factor for participant attendance, even for those interested in professional development.

The initial approach taken for identifying market segments--a cluster analysis using all forty three benefit variables--did not work. Other methods produced significant differences between identified segments. As previously discussed, the clustering process may not have been successful in this case due to either the large number of variables drawn from a related field or may be due from an inherent difficulty with the CLUSTAR computer program.

Two motive domains proved useful in differentiating the total sample into HIGH and LOW groups based on the rated importance of these motives. The HIGH group for Reflect on Personal Values was interested in all aspects of self improvement, social interaction with others, and preferred rustic accommodations. This group was younger and most often single with no dependents compared to those in the LOW group.

The Contribution motive also produced HIGH and LOW groups. Those who desire to contribute to a worthy cause in their Outdoor Education

experience were motivated by a desire for self improvement and creativity. They were concerned about the reputation of the seminar instructor, were often single but otherwise diverse in background.

The Family Togetherness motive did not show substantial differences between HIGH and LOW groups in the benefits that people in each group sought from their experience. Not surprisingly, a strong pattern of demographic differences indicated that those who view being with the family as important are in the 26 - 40 year old age group, re married with children at home and are in the middle income brackets (\$25,000 to \$59,9000).

The Vacation/Development segmentation approach identified significant differences between the groups in benefits sought, program preferences and some demographic characteristics. Additional tests showed a strong ability to predict group membership on these bases, indicating that the two segments are indeed different. Those benefits most clearly tied to professional development were those that differentiated that group in this study: development and sharing of skills and knowledge, fulfillment of work requirement, and learning with a reputable instructor. Interest in earning credit was associated with the Development group, but surprisingly received a low mean score indicating that, for most respondents, it was not an important factor in deciding to attend. The Development group varied on preferred length of program and group size. Rustic accommodations were favored.

The Vacation segment, the largest, placed value on a change in routine, comfort and the ability to relax physically. This group prefers nicer accommodations with some privacy. The Vacation segment was more likely to prefer motorized means of getting to study sites

though still indicates first preference for active adventure travel.

The key differences between these two segments, and thus to accessing them, is not in who they are but rather why they attend. Those in the Development group may be in the early stages of career development as evidenced by slightly younger ages, lower incomes and greater percentage with graduate work rather than graduate degrees compared to the Vacation group. The teaching and naturalist fields are strongly represented. The teaching profession requires on-going coursework in many states and this teacher market has been successfully tapped by various Outdoor Education organizations. Professionals, students or volunteers in the naturalist/ranger fields are attracted by natural history seminars that directly improve their work skills.

The three organizations involved in the study showed significant differences among participants in benefits sought, specific program preferences and demographic background indicating that each organization is serving a somewhat different clientele.

Organization 1 can be described as "middle of the road" on many accounts, with 53.0% viewing their experience as a vacation and 41.0% as professional development. The educational, social and rejuvenative aspects of a residential Outdoor Education experience are important. This group wants to be physically close to the natural world as indicated by a willingness to exert physical effort to get to wild places, a preference for rustic on-site accommodations and opportunity for reflecting on personal values. Participants are cost-conscious but also desire a degree of comfort and privacy. A health-conscious diet is preferred.

Past participants from Organization 2 almost strictly view their

experience as a vacation (96.7%). The concept of such a vacation includes nearness to a National Park or other scenic attraction, a chance to relax, to socialize and in general, "get away" from civilization and a fast paced routine. Comfort is important with a preference for motel-like accommodations. This group shows less interest in physically demanding activities as a means to explore and study nature. Participants are older with diverse occupations. For this study, they came mainly from the East and Midwest states as contrasted with a western residence for those from the other two organizations.

Organization 3 draws people equally seeking a vacation or professional development. Similar to Organization 1 in many respects, this group is set apart by being the most cost conscious. They are willing to "rough it" to keep the cost down, i.e., setting up their own backpacking tent for housing, and showing less interest in travel for exploration that entails higher fees. Participants of Organization 3's programs are the most seriously study-oriented. Reputation of instructor and topic are of utmost importance. There is less concern than the other organizations for relaxing or free time, being near a National Park, or getting away from their day to day environment.

Comparing the results from the inventory of existing services and the participant survey indicates that what is being offered corresponds closely with client expectations. The few differences noted earmark possible changes in future programming. Most organizations offer shorter, less expensive programs and provide very rustic accommodations. Survey respondents indicated a willingness to buy amenities in residential living.

Of particular note, all groups studied indicated a strong

preference for more health-conscious meals involving low cholesterol, low fats, mostly vegetarian with some meat dishes. Most organizations are still offering the traditional fare: casseroles, hamburgers and stews.

Directors completing the inventory indicated that they primarily served a college age clientele. As survey figures show, the predominant age of participants is now 26 - 40 years old.

Limitations of Study

Initial limitations such as the nature of the sample were addressed in the first chapters. Conclusions drawn from a geographically limited study should not be applied universally without caution. Though some balance in geographical and demographic background was provided by Organization 2, there were still a large percentage of people in the sample that attended very similar programs. The results do identify trends that were not previously described in the literature on Outdoor Education and Interpretation. The real test will be increasing participation as a direct result of putting this information to work.

People who did not attend programs sponsored by the study organizations were not sampled. It would be helpful tap those who were potentially interested but did not register. Why did they not attend-- the wrong topic, scheduled dates or cost? Did the person perceive that the experience would not meet his/her needs? Such a study would help to validate the findings here.

A form of response bias may be present in this study. It is likely that our respondents (actual past participants) merely based their answers for specific choices for program topic, length, group size,

housing, etc. upon what was offered at their organization site because they had an overall positive experience and had no basis for comparison.

The statistical analysis raised two concerns. Significant differences were indeed noted between the HIGH/LOW groups. However, an examination of the mean scores on significant items showed that almost every item was given a lower mean score by the LOW group. This means that the HIGH/LOW groups may not just exist on the basis of a motive domain such as Contribution but they may exist because the LOW people have a propensity for rating everything lower than a HIGH group.

Finally, questions are raised in regards to the lack of identifiable groups using the Clustering routine. Strong grouping did result using different methods and one wonders why such trends did not appear in the cluster analysis. The combination of a large number of variables and a large sample size may have resulted in masking of the valence of individual benefits. Further work could have been initiated in identifying the most salient variables followed by investigative cluster routines.

Implications for Program Design and Promotion

Setting aside formal hypotheses and concern for statistical significance, the program planner can take one simple step to improve Outdoor Education: focus on meeting participant needs. By adopting this marketing orientation, the planner will first determine what his/her target group wants, then proceed to create an opportunity that provides those benefits. He/she will realize at the outset, that, although there are general trends in the Outdoor Education market, there is no such thing as the "average" person. Market segments do exist as shown by this

study, and effective programs will address these groups' concerns.

Topic, cost and dates scheduled are the three aspects of a seminar or trip that most clearly determine whether a person can or will attend. These three attributes correspond directly to three of the four "P's" of marketing: product, price and place (also referred to as distribution/timing). Mourning (1986) revised the "P's" for non-profits to be: services, costs and access. Any one of these factors, or several at a time, can be manipulated in program design and promotion to improve registrations. The critical issue is, for a given organization, which element to alter in what direction. Small scale market research may prove helpful. Marketers stress that market research differs from traditional scientific research in that it needs to be indicative, not necessarily conclusive to be useful (Mourning, 1986). The trends shown in this report provide such input and the questions employed serve as examples of what Outdoor Educators could ask their own potential or past participants.

We sell benefits, not facts. The benefits identified as important in this study can serve as a reservoir of promotional phrases. It is a mistake to describe an Outdoor Ed experience merely in terms of location, cost, number of days or dates. The inquirer may be willing to pay more, travel a greater distance or alter a schedule if he/she perceives that the program will meet his/her needs.

Future programs may better serve those seeking a Vacation oriented Outdoor Education experience. Most Outdoor Education organizations have traditionally focused on providing field studies to meet professional development needs. Clearly, the Vacation group is now the largest--nearly 67% as reported in this study. Efforts should be directed towards

increasing residential or base-camp seminars with some comforts, some unscheduled time and other arrangements that encourage the re-creative processes.

Outdoor Education organizations must quickly adapt to serving the dominant age groups. Yesterday's college backpackers have grown up. Many still have strong desires to experience and learn about the natural world, but their needs have changed. Many have young children and prefer rustic cabins or other easy means of "basecamping". Child care or "Nature Youth" programs offered simultaneously with adult seminars could make adult programming more accessible.

As described in related research (Chrisman, 1985) this middle-age group has increased spending power and is willing to spend money on experiences, not just things. Staying physically healthy through activity and diet and being intellectually stimulated are trademark values. Outdoor Education programs targeted at this group should reflect these standards.

As the dominant population group gets older, there may be increased demand for a good bed and a shower at night. Programming should incorporate a moderate amount of exercise rather than the very strenuous in nature. Combinations of four wheel drive with day hikes, hiking-with-packstock, raft and canoe trips, or bush flights to base camps allow people to explore remote country without "carrying it all on their back".

The high level of education among all participants in the study means that we work with a very discriminating audience. They want information--not only upon which to base a decision to attend, but also in high quality, thought-provoking seminars. Instructors must be top

notch both in subject area and their ability to communicate effectively. Advance descriptions and itineraries should be to the point and complete. Balance must be struck, however, between appearing too "slick" in promotional messages and retaining a "down to earth" image attractive to those wishing a change from their technological world.

Recommendations for Further Research

As previously mentioned, future work on the Outdoor Education market would be enhanced through a broader based sample than that used for this project. The benefits identified in this study provided a starting point for a more refined examination of motive patterns in this market. Though correlations between benefits sought were noted, the next step would be to conduct a factor analysis to determine the major underlying constructs that characterize the overall market. Such analysis would perhaps provide a clearer picture of participant "types" than the Vacation/Development approach.

Applying the information in program design and promotion will provide the real validation of this work. I would appreciate hearing about such efforts as well as the perceived usefulness of this approach from practitioners in the field. I myself am employed as the Program Director of an Outdoor Education organization involved in adult programming. The benefit approach has merit, but the testing of adjusted offerings and advertising strategies takes time and effort in monitoring. One cannot expect instant results.

Organizations are encouraged to conduct their own "mini-market" analyses. It is not necessary to utilize complicated mail survey methods. Speaking with potential participants on the phone provides a chance to

discern what interests them. Carefully asked questions may help to draw out of them what benefits they seek, not just queries on dates and cost. Asking, "What did you do last year?" "What did you like about the experience?" should produce descriptors such as "Great people..." "I felt so refreshed when I returned ..." "The instructor really challenged me...". Listening carefully, it is possible to then describe those aspects of your offerings that meet these needs.

Informal conversations with participants in programs as well as carefully worded evaluations aid in better identifying concerns. These procedures assist in dividing the overall clientele into segments that can be better served with tailored experiences.

Finally, borrowing a method and a list of variables from a closely related field and putting them to work on new ground does not always work. This study became exploratory in nature when it was realized that better tailored hypotheses were necessary to characterize the Outdoor Education market. Future market research in this field can use the Vacation/Development approach or attempt to segment using a smaller list of benefit variables outlined here, particularly those that examine the importance of reflecting on personal values, contributing to a worthy cause and family togetherness.

Marketing the Future

Outdoor Education organizations embody the societal marketing concept, an orientation that emerged in the "cause-conscious" '60's and early '70's. Justifying the existence of non-profit organizations stems from the satisfaction not only of client wants and needs but also the preservation of the long-term interests of the community. A balance must

be sought between the interests of the individual and society (Howard and Crompton, 1980). The idea that one must market the outdoors to people may seem like a cold approach to getting us in touch with our relationship to the land.

If we as Outdoor Educators adopt a marketing orientation, do we, as Aldo Leopold warned, view the world as commodity not community? Are we using the natural environment solely to meet the needs of wanting human beings? Perhaps our task is also to market the needs of the environment to its dominant species. Our role as educators, as interpreters, as connectors, is to find the paths by which understanding can take place.

As we apply the principles of marketing, it is important to bear in mind that any such work is directed towards recognizing and establishing paths. The Senate Report explaining the Environmental Education Act of 1970 describes Environmental Education as,

Intended to promote among citizens the awareness and understanding of the environment, our relationship to it and the concern and responsible action necessary to assure our survival and to improve the quality of life (Ford, 1981:14).

Marketing is but one means of preserving the long term interests of our "community " in its most encompassing sense.

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APPENDICES

Appendix A

Survey Booklet and Letters Requesting Participant Involvement

SURVEY COVER LETTER

Date

Dear Friend of [Organization]

Outdoor Education organizations, such as the [organization] provide opportunities for us to enjoy and appreciate the natural world. At present, there is a lack of information on what exactly appeals to adults with an interest in exploring and learning about natural environments.

Utah State University, and [organizations] are cosponsoring a study to determine what types of field seminar or natural history tour programs and accommodations are of interest to an adult clientele. Such information will help to create attractive, convenient and affordable opportunities. Successful programs will mean increased self-sufficiency for these non-profit organizations.

Having participated in a natural history program, you are one of a select group of people who are being asked why you choose to attend certain programs. Former participants of several conservation and education organizations are included in the study in order to see if different groups of people prefer certain types of experiences. Thus, it is important that each questionnaire be completed and returned.

You may be assured of complete confidentiality. The questionnaire has an identification number for mailing purposes only. This is so that we may check your name off the mailing list when your questionnaire is returned. Your name will never be placed on the questionnaire or transferred to another group.

The results from the survey will be made available to the staff of the [organization] to use in their program plans. Generalized recommendations and conclusions will be available to all interested Environmental Educators and other citizens.

A stamped, addressed envelope has been enclosed for returning the questionnaire. If you would like to receive a copy of the results, please write your name and address on the back of the return envelope, not the questionnaire. Your timely response is greatly appreciated and will contribute to greater understanding of what draws us to the natural world. Thank you.

Karla VanderZanden,
Project Coordinator

REMINDER POST CARD SENT TO ALL PARTICIPANTS WHO RECEIVED SURVEY

Date

Dear Friend,

In a joint effort by [organizations] and Utah State University, a questionnaire was recently mailed to you to ask your preferences for adult LEARNING VACATIONS. We would like to thank you for your time and effort in completing and returning the questionnaire if you have already done so.

If you haven't yet returned the questionnaire, we urge you to do so today. Your opinions are important to the success of this study which will help to improve opportunities for exploring our natural and cultural heritage. If for some reason you did not receive the survey, please contact [organization address]. Thank you.

Karla VanderZanden,
Project Coordinator, Utah State University

SECOND REMINDER LETTER SENT WITH REPLACEMENT SURVEY

Date

Dear Friend of [organization]

About six weeks ago, I wrote to you seeking your opinions on the kinds of "Learning Vacation" opportunities that you find of interest. As of today, we have not received your completed questionnaire.

[Organization] and Utah State University have undertaken this study to better understand why people attend educational programs and tours so that specific recommendations can be made for improving our services to the public.

I am writing to you again because of the significance each questionnaire has to the usefulness of the study. Only a very small number of names was drawn randomly from the [organization] mailing list and thus it is essential that each person in the sample return the survey in order for the results to be representative of all adult participants.

We realize that you may not have received the survey in the first mailing or that it did not arrive at a convenient time for you to complete it. In the event that your questionnaire was misplaced, a replacement is enclosed.

Your cooperation is very greatly appreciated. We look forward to hearing from you in the next week.

Thank you.

Sincerely,

Karla VanderZanden,
Project Coordinator

Learning Vacations:

What Brings You To the Outdoor Classroom?

We are trying to better understand what adults in the 1980's are looking for in the way of outdoor field study and educational travel opportunities. Because we value your opinion, we hope you take 15 minutes to complete this survey. The questions inside refer to multi-day programs that provide the chance to learn about the special natural and cultural resources of a region either while staying at a scenic residential facility such as an inn, guest ranch or seminar center or while touring by vehicle, boat, horseback or on foot with camping and/or motel accommodations.



Please answer all the questions. If you wish to comment on any questions or qualify your answers please use the margins or a separate sheet of paper.

Thank you for your help.

Return this questionnaire to:

Karla VanderZanden
USU Research
Box 1437
Moab, Utah 84532

SECTION 1

Questions in this section will help us to better understand the reasons people attend field seminars and educational tours.

- Q1. When selecting a field study or educational tour program, how important are the following factors in making your decision?

Please circle the number which corresponds to the level of importance you assign to each item in deciding which program to attend. For example, a circle around a "1" would indicate that this factor is extremely important, whereas a circle around a "6" would mean that this factor is extremely unimportant.

Factors	Extremely Unimportant (-)	Very Unimportant (-)	Unimportant (-)	Important (+)	Very Important (++)	Extremely Important (+++)
A. Topic/itinerary	6	5	4	3	2	1
B. Cost	6	5	4	3	2	1
C. Dates scheduled	6	5	4	3	2	1
D. Length	6	5	4	3	2	1
E. Distance from home	6	5	4	3	2	1
F. Adjacent to National Park or other scenic attraction	6	5	4	3	2	1
G. Credit available	6	5	4	3	2	1
H. Reputation of instructor	6	5	4	3	2	1
I. Public transportation/shuttle service to site	6	5	4	3	2	1
J. Comfort of accommodations	6	5	4	3	2	1
K. Amount of unscheduled, "relax" time	6	5	4	3	2	1
L. Adventure travel included (boating, horseback riding, etc.)	6	5	4	3	2	1
M. Reputation of sponsoring organization	6	5	4	3	2	1

- Q2. Which of the attributes listed in Question 1 would be most important to you in selecting a program or tour? (Put the letter of the attributes in the appropriate blank.)

_____ MOST IMPORTANT
 _____ SECOND MOST IMPORTANT
 _____ THIRD MOST IMPORTANT

Next, circle the number corresponding to the phrase that best describes your situation. Circle only one number for each question.

Q3. Do you select natural history programs primarily for: (circle one number)

- 1 AN ENJOYABLE VACATION
- 2 ELECTED OR REQUIRED PROFESSIONAL DEVELOPMENT

Q4. Which type of summer program would you most likely select? (circle one number only)

- 1 A residential program, 30 people on site, share bunkhouse with 6-8 people, shared bathroom, family style meals, local natural history excursions, \$50.00/day.
- 2 A residential program, 20 people on site, quality lodging, private or double occupancy, private bath, family-style meals, local natural history excursions, includes a 3-day adventure trip (horse or boat or jeep), \$85.00/day.
- 3 Day program at semi-remote site, 15 people in study group, local natural history, provide own lodging and meals in nearby town or campground, \$30.00/day.
- 4 Tour, 8 people only, by van, horsepacking and boating combinations, instruction on natural history of areas visited, some tent camping, first class motels, restaurant and cookout meals, all details and "extras" arranged, \$130.00/day.
- 5 Tour, 20 people, by horseback or boat with some hiking, with expert in natural history, tent camping, cookout meals, \$100.00/day.
6. None of the above.

Q5. Why did you choose the program in Question 4? (If you selected none, please also explain.)

Q6. There are many different reasons why people participate in field seminars or educational tours. How important to you is each of the following reasons in deciding to attend such a program?

Circle the number that corresponds with how important each reason is with "1" being extremely important and "6" being extremely unimportant.

Reasons	Extremely Unimportant (1)	Very Unimportant (2)	Unimportant (3)	Important (4)	Very Important (5)	Extremely Important (6)
A. To do something creative such as sketch, take photographs, etc.	6	5	4	3	2	1
B. For the exercise	6	5	4	3	2	1
C. To enjoy the scenery	6	5	4	3	2	1
D. Because of personal spiritual values	6	5	4	3	2	1
E. To be with my friends or spouse	6	5	4	3	2	1
F. To learn more about the region	6	5	4	3	2	1
G. To relax physically	6	5	4	3	2	1
H. For a change from my daily routine	6	5	4	3	2	1
I. For a chance to meet new people	6	5	4	3	2	1
J. To study nature	6	5	4	3	2	1
K. To help me feel like a better person	6	5	4	3	2	1
L. For a chance to help direct the activities of others	6	5	4	3	2	1
M. Because my spouse or associate wanted me to	6	5	4	3	2	1
N. To enjoy the quietness and serenity	6	5	4	3	2	1
O. To learn how to be secure in the outdoors	6	5	4	3	2	1
P. To get away from civilization for awhile	6	5	4	3	2	1
Q. To develop my skills and knowledge	6	5	4	3	2	1
R. So the family can do something together	6	5	4	3	2	1
S. To contribute to a worthy cause	6	5	4	3	2	1

	Extremely Unimportant (1-)	Very Unimportant (-)	Unimportant (.)	Important (+)	Very Important (++)	Extremely Important (+++)
T. To spend some time away from other people	6	5	4	3	2	1
U. Because it is required for my work	6	5	4	3	2	1
V. To be close to nature	6	5	4	3	2	1
W. For the chance to think about who I am	6	5	4	3	2	1
X. To improve my physical health	6	5	4	3	2	1
Y. Because it is stimulating and exciting	6	5	4	3	2	1
Z. To enjoy distant views and open space	6	5	4	3	2	1
AA. To share my skill and knowledge with others	6	5	4	3	2	1
BB. To be with others who enjoy the same things I do	6	5	4	3	2	1
CC. To help release or reduce some built-up tensions	6	5	4	3	2	1
DD. To be without the rest of the family for awhile	6	5	4	3	2	1

SECTION II

To assist with the design of future programs that are affordable, attractive and convenient, we would like to ask your specific preferences for types of programs and accommodations.

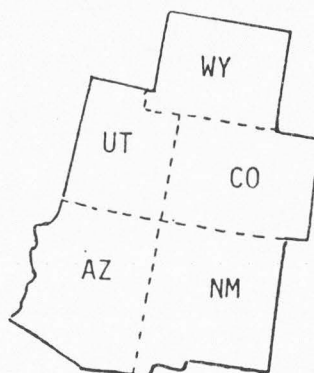
Q7. During what two seasons of the year do you usually travel and what geographic regions do you visit during these seasons? (Write name of season and location in the appropriate spaces)

1. (MOST OFTEN) SEASON: _____
LOCATION: _____

2. (NEXT OFTEN) SEASON: _____
LOCATION: _____

Q8. Given your own financial and time constraints, when & where would you like to take your next field seminar or educational tour within the five state region of New Mexico, Arizona, Colorado, Utah and Wyoming. (Write the name of the season and geographic region in the appropriate spaces)

SEASON: _____
LOCATION: _____



Q9. What mix of learning methods do you prefer for field seminar or educational travel programs?

Divide 100 points among the following methods to indicate what percent each should be used. (Zero -0%- can be assigned)

A five-day learning vacation should consist of:

- _____ % FIELD INSTRUCTION
- _____ % GROUP DISCUSSION
- _____ % LIBRARY AND LAB TIME
- _____ % INDEPENDENT FIELD PROJECTS
- _____ % AUDIO/VISUAL PRESENTATION
- _____ % OTHER - SPECIFY

On the following questions, please identify your first four preferences in each question. Rank four alternatives with 1 being the most preferred; 4 being the least preferred. Do not use the same number twice.

Q10. In what specific topics in natural and cultural resources are you interested (number 1 through 4 in order of preference):

- GENERAL ECOLOGY OF AREA
- GEOLOGY
- ARCHEOLOGY AND INDIAN CULTURE
- PIONEER HISTORY
- BOTANY (WILDFLOWERS)
- ORNITHOLOGY (BIRDS)
- ANIMAL BEHAVIOR
- OTHER - SPECIFY _____

Q11. In what other related course topics are you interested? (number 1 through 4 in order of preference):

- SOLAR AND RENEWABLE ENERGY
- ENVIRONMENTAL ISSUES
- ORGANIC GARDENING AND CROPS
- ENVIRONMENTAL EDUCATION TEACHING METHODS
- PHOTOGRAPHY
- HUMANITIES AND THE ENVIRONMENT (LITERATURE, ART)
- OUTDOOR SKILLS DEVELOPMENT - SPECIFY: _____
- OTHER - SPECIFY: _____

Q12. Of all the topics listed in Questions 10 and 11 please circle the one topic of greatest interest. (circle one above topic).

Q13. What length of program or tour do you prefer? (number 1 through 4 in order of preference):

- 1 DAY
- 2 - 3 DAYS
- 5 - 8 DAYS
- 9 - 14 DAYS
- OTHER - SPECIFY _____

Q14. What is the maximum size of group with which you wish to study and travel outdoors with 1 guide/instructor? (number 1 through 4 in order of preference):

- 1 - 5
- 6 - 8
- 9 - 15
- 16 - 25

Q15. What type of adventure travel do you prefer as a means to explore remote places? (number 1 through 4 in order of preference):

- CANOEING, RAFTING, KAYAKING
- HORSEBACK RIDING
- CROSS COUNTRY SKIING
- SAILING
- BACKPACKING
- JET BOAT
- FOUR WHEEL DRIVE JEEP
- SCENIC FLIGHT

Q16. What forms of entertainment/recreation would you like to see offered at a residential seminar center? (number 1 through 4 in order of preference):

- WALKS, FISHING, BOATING, HORSEBACK RIDING
- TENNIS, VOLLEYBALL, SOFTBALL
- COCKTAIL HOUR AND SOCIAL PARTIES
- EVENING LECTURES, SLIDE PROGRAMS AND MOVIES
- FOLK AND SQUARE DANCING
- SWIMMING POOL, SAUNA, HOT TUB

Q17. What type of housing do you prefer? (number 1 through 4 in order of preference)

- MOTEL OR RESORT-LIKE GUEST LODGING, DOUBLE
- RUSTIC CABIN, SLEEPS 4-8
- SPACIOUS CANVAS TENTS ON WOODEN PLATFORM, SLEEPS 4
- DORM STYLE BUNKHOUSE, SLEEPS 6-12
- OTHER - SPECIFY

Q18. What type of bath and shower facility do you prefer? (number 1 through 4 in order of preference)

- ATTACHED PRIVATE BATH
- ATTACHED SHARED BATH
- SEPARATE SHARED BATHHOUSE
- CHEMICAL PRIVY, RUNNING WATER AVAILABLE

Q19. What type of meal plan do you prefer? (number 1 through 4 in order of preference)

- MEALS PREPARED, GOURMET DISHES AND FINE DINING
- MEALS PREPARED, CASSEROLES, STEWS, HAMBURGERS, ETC.
- MEALS PREPARED, USE OF WHOLE GRAINS, LOW CHOLESTEROL AND FAT, MOSTLY VEGETARIAN, SOME MEAT DISHES
- PURCHASE AND PREPARE YOUR OWN MEALS
- OTHER - SPECIFY

SECTION III

In order to better reach and serve the public interested in educational study and travel opportunities, we would like to ask several questions on how you find out about such programs.

Q20. To which magazines do you personally refer for ideas on what to do in your leisure time? (circle as many as apply.)

- 1 NATURAL HISTORY MAGAZINE
- 2 AUDUBON MAGAZINE
- 3 NATIONAL WILDLIFE
- 4 NATIONAL GEOGRAPHIC
- 5 SIERRA CLUB BULLETIN
- 6 OUTSIDE MAGAZINE
- 7 SUNSET MAGAZINE
- 8 TRAVEL-HOLIDAY
- 9 NEW YORK TIMES
- 10 BETTER HOMES AND GARDENS
- 11 OTHER - SPECIFY _____

Q21. Which, if any, journals, newsletters or magazines do you read for professional interests and development?

Q22. How many times have you attended a multi-day field study or educational travel program? (circle one number)

- 1 ONE PROGRAM
- 2 TWO - FIVE PROGRAMS
- 3 SIX OR MORE PROGRAMS

Q23. How did you find out about the most recent field seminar or tour that you attended? (circle one number only)

- 1 WORKPLACE
- 2 FRIENDS OR COLLEAGUES
- 3 TRAVEL AGENT
- 4 ADVERTISEMENTS IN CONSERVATION/OUTDOOR MAGAZINES
- 5 ADVERTISEMENTS IN BUSINESS, NEWS OR GENERAL INTEREST MAGAZINES
- 6 CLUB, MUSEUM OR ORGANIZATION IN WHICH YOU ARE A MEMBER
- 7 BROCHURE RECEIVED IN MAIL
- 8 OTHER - SPECIFY _____

SECTION IV

Finally, we would like to ask a few questions that will be used to help interpret the results. Please circle the number of the appropriate response. Your answers will remain confidential.

Q24. What is your sex? (circle number)

- 1 MALE
- 2 FEMALE

Q25. Your present age group? (circle number)

- 1 18 - 25 YEARS OF AGE
- 2 26 - 40
- 3 41 - 55
- 4 56 - 65
- 5 65 AND OVER

Q26. Which is the highest level of education that you have completed? (circle number)

- 1 GRADUATED GRADE SCHOOL
- 2 ATTENDED HIGH SCHOOL
- 3 GRADUATED HIGH SCHOOL
- 4 ATTENDED COLLEGE
- 5 GRADUATED COLLEGE
- 6 GRADUATE WORK
- 7 GRADUATE DEGREE

Q27. Which category best describes you?

- 1 SINGLE, NO DEPENDENTS
- 2 SINGLE, WITH CHILDREN AT HOME
- 3 MARRIED, NO CHILDREN
- 4 MARRIED, WITH CHILDREN AT HOME
- 5 MARRIED, WITH GROWN CHILDREN, NO DEPENDENTS

Q28. Please describe your usual occupation. (If retired, describe the usual occupation before retirement.)

POSITION TITLE: _____
TYPE OF WORK YOU DO: _____

Q29. What was your approximate gross family income, before taxes, in 1983? (circle number)

- 1 LESS THAN \$10,000
- 2 10,000 - 24,999
- 3 25,000 - 39,999
- 4 40,000 - 59,999
- 5 60,000 - 79,999
- 6 OVER 80,000

Q30. What is your zipcode?

ZIPCODE _____

Please feel free to make any additional comments that will help us better understand why people choose field study or nature tours for vacation or training purposes.

Any suggestions you may have for future programs and/or facilities would also be welcomed.

Your contribution to this study is very greatly appreciated.

Thank you.

(Illustration by Lee Goodman, Moab, Utah)

Appendix B

Variable Statements Categorized by Motive Domain

Motive Domains Selected to Test Reasons for Attending
Adult Residential Outdoor Education Programs
as Adapted from B.L. Driver (1977)

Achievement

To develop my skills and knowledge
Because it is stimulating and exciting
To help me feel like a better person

Contribution

To contribute to a worthy cause

Creativity

To do something creative such as sketch, take photos, etc.

Escape Physical Pressures

To enjoy quietness and serenity
To get away from other people
To get away from civilization for awhile

Escape Personal/Social Pressures

To help release or reduce some built up tensions
For a change from my daily routine

Exercise

For the exercise
To improve my physical health

Family Togetherness

So the family could do something together
Because my spouse or associate wanted me to
To be with my spouse or friend

Leadership/Autonomy

To share my skill and knowledge with others
For a chance to help direct the activities of others

Learn/Explore

To learn more about the region

Nature

To enjoy the scenery
To be close to nature
To study nature

Reflect on personal values

Because of personal spiritual values
For the chance to think about who I am

Requirement

Because it is required for my work

Rest

To relax physically

Security

To learn how to be safe outdoors

Social

To be with others who enjoy the same things I do
For a chance to meet new people

Appendix C

Inventory Booklet and Cover Letter

INVENTORY COVER LETTER

Date

Dear [Director of organization]

Outdoor Education organizations, such as [organization] provide opportunities for people of all ages to explore and enjoy the natural world. In planning these opportunities, many Outdoor Educators have expressed a need for information on the current market for adult programs and services.

Utah State University is examining both the existing services and the potential market for residential adult programs in the five state region of Wyoming, Utah, Colorado, New Mexico and Arizona. The project consists of two phases. Phase I involved a survey of 600 past participants of natural history programs in cooperation with three conservation organizations. These participants were queried on their reasons for attending Outdoor Ed programs and their preferences for program features and accommodations. While Phase I asked what people want, Phase II inventories what is currently available.

Having been identified as an organization that offers residential programs for adults, we hope you will kindly consent to complete the enclosed questionnaire. For the purposes of this study, "adult" is defined as post high school and "residential" as accommodations provided or arranged (on-site cabins, bunkhouse, tents or campus dorms, motels or combinations thereof). In that we hope to compile a rather complete listing of programs and services in the five state region, it is important that each questionnaire be returned.

Those organizations that complete and return the questionnaire will receive a summary of the study results that will include both a directory of residential natural and cultural history programs and the market analysis derived from the participant survey.

A stamped addressed envelope is enclosed for returning the questionnaire. Your timely response is greatly appreciated and will contribute to a greater understanding of how to draw adults to the natural world. Thank you.

Sincerely,
Karla VanderZanden
Project Coordinator

What's happening for Adults In the Outdoor Classroom?



This is an inventory of organizations that offer adult residential programs in natural and cultural history in selected states. This effort will provide better knowledge of the existing programs in outdoor education and will help to identify services not currently provided. Residential programs are those that provide overnight facilities or arrange combinations of camping and motel accommodations.

Please take 20 minutes to complete this survey to represent your organization. Except for those questions that refer to various age groups, please answer questions in reference to your adult clientele. If registration or attendance statistics are not readily available, your best estimate of these figures will suffice.

THANK YOU FOR YOUR HELP.

Please return this form to:
Karla VanderZanden
USU Research
Box 1437
Moab, Utah 84532

SECTION I

Q1 NAME OF ORGANIZATION:

Q2 MAILING ADDRESS:

Q3 CITY, STATE, ZIPCODE:

Q4 TELEPHONE NUMBER:

Q5 CURRENT DIRECTOR/ADMINISTRATOR:

Q6 NAME OF PERSON COMPLETING THIS FORM:

SECTION II
PROGRAMS

Program Setting

Q7 Please describe the environmental setting of your programs (i.e. life zones, proximity to National Park or other scenic attraction)

Program Topics

Q8 Please indicate what topics in natural and cultural resources that your programs cover. Check as many as apply.

- _____ GENERAL ECOLOGY OF AREA
- _____ GEOLOGY
- _____ ARCHEOLOGY AND INDIAN CULTURE
- _____ PIONEER HISTORY
- _____ BOTANY (WILDFLOWER ID AND OTHERS)
- _____ ORNITHOLOGY
- _____ ANIMAL BEHAVIOR
- _____ OTHER - SPECIFY:

Q9 Please indicate what other related course topics that your organization offers. Please check as many as apply.

- SOLAR AND RENEWABLE ENERGY
- ENVIRONMENTAL ISSUES
- ORGANIC GARDENING AND CROPS
- ENVIRONMENTAL EDUCATION TEACHING METHODS
- PHOTOGRAPHY
- HUMANITIES
- OUTDOOR SKILLS DEVELOPMENT- SPECIFY:
- OTHER- SPECIFY:

Q10 What types of adventure travel, if any, do your programs employ as a means to explore remote places? Please check as many as apply.

- CANOEING, RAFTING, KAYAKING
- HORSEBACK RIDING
- CROSS COUNTRY SKIING
- SAILING
- BACKPACKING
- JETBOAT
- FOUR WHEEL DRIVE JEEP
- SCENIC FLIGHT
- OTHER - SPECIFY:

Q11 What forms of entertainment/recreation does your organization offer for residential programs? Please check as many as apply.

- WALKS AND HIKES
- FISHING
- BOATING
- HORSEBACK RIDING
- TENNIS, VOLLEYBALL, SOFTBALL
- COCKTAIL HOUR AND SOCIAL PARTIES
- EVENING LECTURES, SLIDE PROGRAMS AND MOVIES
- FOLK AND SQUARE DANCING
- SWIMMING POOL
- HOT TUB OR SAUNA
- OTHER - SPECIFY:

Types of programs

Please give the names of the major types of programs that your organization offers and briefly describe the program features for each category in the space provided. (Example of programs: evening seminars, 1/2 day naturalist hikes, 5 day field courses, etc.)

These questions refer to programs offered by your organization; leasing facility for use by outside groups is addressed elsewhere.

Q12 A. TYPE OF PROGRAM:

B. SEASON:

C. LENGTH:

D. COST PER DAY:

E. CREDIT AVAILABLE (circle one): YES OR NO

F. ADVENTURE TRAVEL INCLUDED (circle one): YES OR NO

G. DESCRIPTION:

Q13 A. TYPE OF PROGRAM:

B. SEASON:

C. LENGTH:

D. COST PER DAY:

E. CREDIT AVAILABLE (circle one) YES OR NO

F. ADVENTURE TRAVEL INCLUDED (circle one) YES OR NO

G. DESCRIPTION:

Q14 A. TYPE OF PROGRAM:

B. SEASON:

C. LENGTH:

D. COST PER DAY:

E. CREDIT AVAILABLE (circle one) YES OR NO

F. ADVENTURE TRAVEL INCLUDED (circle one) YES OR NO

G. DESCRIPTION:

Q15 A. TYPE OF PROGRAM:

B. SEASON:

C. LENGTH:

D. COST PER DAY:

E. CREDIT AVAILABLE (circle one) YES OR NO

F. ADVENTURE TRAVEL INCLUDED (circle one) YES OR NO

G. DESCRIPTION:

Q16 A. TYPE OF PROGRAM:

B. SEASON:

C. LENGTH:

D. COST PER DAY:

E. CREDIT AVAILABLE (circle one) YES OR NO

F. ADVENTURE TRAVEL INCLUDED (circle one) YES OR NO

G. DESCRIPTION:

Q17 A. TYPE OF PROGRAM:

B. SEASON:

C. LENGTH:

D. COST PER DAY:

E. CREDIT AVAILABLE (circle one) YES OR NO

F. ADVENTURE TRAVEL INCLUDED (circle one) YES OR NO

G. DESCRIPTION:

SECTION III
FACILITY

Q18 What type of overnight accommodations does your organization provide?
Please check as many as apply.

- MOTEL
- RESORT-LIKE QUALITY GUEST LODGING
- RUSTIC CABIN
- CANVAS TENTS ON WOODEN PLATFORM
- DORM STYLE BUNKHOUSE
- SLEEP UNDER THE STARS OR IN BACKPACK TENTS
- OTHER - SPECIFY:

Q19 What is your guest capacity on site?

PERSONS

Q20 What is your capacity for housing staff and guest instructors on site?

PERSONS

Q21 What type of shower and bath facility is provided for guests?
Please check as many as apply.

- ATTACHED PRIVATE BATH
- ATTACHED SHARED BATH
- SEPARATE SHARED BATHHOUSE
- CHEMICAL PRIVY, RUNNING WATER AVAILABLE
- OTHER - SPECIFY:

Q22 What type of meal plan is provided for guests?

- MEALS PREPARED, GOURMET DISHES AND FINE DINING
- MEALS PREPARED, CASSEROLES, STEWS, HAMBURGERS
- MEALS PREPARED, USE OF WHOLE GRAINS, LOW
CHOLESTEROL AND FAT, MOSTLY VEGETARIAN, SOME
MEAT DISHES
- PURCHASE AND PREPARE OWN MEALS
- OTHER - SPECIFY:

Q23 Which indoor instructional facilities does your organization provide?
Please check as many as apply.

- MULTI-PURPOSE DINING HALL
- MEETING/CLASSROOM SEPARATE FROM DINING AREA
- LIBRARY
- MUSEUM
- DARKROOM
- LAB/WORKSHOP - SPECIFY:
- OTHER - SPECIFY:

Q24 Do you lease any of your facilities for seminar or retreat use by
outside groups? (circle answer)

- 1 YES
- 2 NO

PARTICIPANTS

Q24 What percent of your participants would fall in each age category?
(divide 100 points among the categories; zero percent-0%- can be assigned)

_____ PRE-SCHOOL AND GRADE SCHOOL
 _____ HIGH SCHOOL
 _____ COLLEGE
 _____ 26-40 YEARS OF AGE
 _____ 41-55
 _____ 55 AND OVER

Q25 What is your estimate of number adult participants served in a 12 month year?

_____ PERSONS

Q26 Can you describe a "typical" adult participant in terms of sex, interests, occupation and income?

Q27 What percent of your adult participants attend as: (divide 100 points among the categories; zero percent-0%-can be assigned)

_____ SINGLE ADULTS
 _____ COUPLES
 _____ ADULTS WITH CHILDREN (FAMILIES)

Q28 What percent of your organization's income is derived from the following sources? (divide 100 points among the categories; zero percent-0%- can be assigned)

_____ PARTICIPATION IN YOUR PROGRAMS
 _____ LEASING OF FACILITIES TO OUTSIDE GROUPS
 _____ PRIVATE DONATIONS
 _____ SUPPORT FROM GOVERNMENT ORGANIZATIONS (federal, state, local, school)
 _____ OTHER

Please add any additional comments that will help us to better understand the nature of your organization and clientele.

Appendix D

Statistical Tests for Each Hypothesis

STATISTICAL TESTS FOR EACH STUDY HYPOTHESES

TOTAL SAMPLE

- H1a: Significant differences in the importance of benefits sought exist between identified benefit segments; at least 51% of the attributes and 51% of the reasons are significantly different.
TEST: CLUSTAR Cluster analysis (Romesburg and Marshall, 1984) used to identify benefit segments
Analysis of Variance (ANOVA) with least significant difference test would test differences between segments
- H1b: Each benefit segment can be significantly differentiated by program preferences; at least 51% of the preferences are significantly different.
TEST: Chi Square
- H1c: Each benefit segment can be significantly differentiated by demographics.
TEST: Chi Square

THREE ORGANIZATIONS

- H2a: Those attending programs offered by each of the three organizations will significantly differ in benefits sought; at least 51% of the attributes and 51% of the reasons are significantly different.
TEST: ANOVA
- H2b: Those attending programs offered by each of the three organizations will significantly differ in program preferences; at least 51% of the preferences are significantly different.
TEST: Chi Square
- H2c: Those attending programs offered by each of the three organizations will significantly differ in demographic characteristics.
TEST: Chi Square

PROGRAM ORIENTATION (VACATION/DEVELOPMENT)

- H3a: Those in the Vacation group will significantly differ from the Development group in benefits sought; at least 51% of the attributes and 51% of the reasons will be significantly different.
TEST: Two-tailed T Test
- H3b: Those in the Vacation group will significantly differ from the Development group in program preferences; at least 51% of the preferences will be significantly different.
TEST: Chi Square
- H3c: Those attending programs offered by each of the three organizations will significantly differ in demographic characteristics.
TEST: Chi Square

Appendix E

Survey Results for Total Sample

SURVEY RESULTS FOR TOTAL SAMPLE

419 RESPONDENTS

Section I

Questions in this section will help us to better understand the reasons people attend field seminars and educational tours.

Q1 When selecting a field study or educational tour program, how important are the following factors [BENEFITS] in making your decision?

Please circle the number which corresponds to the level of importance you assign to each item with "1" being extremely important and "6" being extremely unimportant.

RESPONSE:

TOTAL SAMPLE		
RANK	PROGRAM ATTRIBUTE (BENEFITS)	MEAN
1	Topic	1.584
2	Reputation of Organization	2.337
3	Cost and Dates	2.501
4	Length	2.868
5	Reputation of Instructor	3.055
6	Near National Park/ scenic attraction	3.164
7	Distance From Home	3.264
8	Adventure Travel included	3.425
9	Amount of unscheduled "relax" time	3.499
10	Comfort	3.603
11	Public Transportation to site	3.779
12	Credit available	4.399

Q2 Which of the attributes listed in Q1 would be most important to you in selecting a program or tour?

RESPONSE:

TOTAL SAMPLE		
RANK	PROGRAM ATTRIBUTE	N
1	Topic	286
2	Cost	114
3	Dates	80

Q3 Do you select natural history programs primarily for
Vacation or Development?

RESPONSE:

RANK	SELECTION	TOTAL SAMPLE	
		N	%
1	Vacation	274	66.7
2	Development	127	30.9
3	(write in) Both	10	2.4

Q4 Which type of summer program would you most likely select?

RESPONSE:

RANK	PROGRAM CHOICE**	N	%
1	\$50.00/day	121	29.9
2	\$85.00/day	110	26.8
3	\$30.00/day	83	20.2
4	None of above	54	13.1
5	\$100.00/day	32	7.8
6	\$130.00/day	11	2.7

** PROGRAM CHOICE

\$50.00/day - A residential program, 30 people on site, share bunkhouse with 6-8 people, shared bathroom, family style meals, local natural history excursions.

\$85.00/day - A residential program, 20 people on site, quality lodging, private or double occupancy, private bath, family style meals, local natural history excursions, includes a 3 day adventure trip.

\$30.00/day - Day program at semi-remote site, 15 people in study group, local natural history, provide own lodging and meals in nearby town or campground.

\$100.00/day - Tour, 20 people, by horseback or boat, with some hiking, with expert in natural history, tent camping, cookout meals.

\$130.00/day - Tour, 8 people only, by van, horsepacking and boating combinations, instruction on natural history of areas visited, some tent camping, first class motels, restaurant and cookout meals, all details and extras arranged.

Q5 Why did you chose the program in Question 4?
 RESPONSE: (Open ended responses coded into categories)

RANK	TOTAL SAMPLE		
	PROGRAM REASON	N	Z
1	Cost was right	122	29.1
2	Program content	72	17.2
3	Comfort	57	13.6
4	Group size right	56	13.4
5	Residential	55	13.1
	Trips/adventure	55	13.1

Q6 There are many different reasons why people participate in field seminars or educational tours. How important to you is each of the following reasons [BENEFITS] in deciding to attend such a program? Circle the number that corresponds with how each reason is with "1" being extremely important and "6" being extremely unimportant. (30 statements total)
 RESPONSE:

RANK	REASONS (BENEFITS)	MEAN
Most Important		
1	To study nature	1.686
2	To develop my skills and knowledge	1.901
3	To be close to nature	2.029
4	Because it is stimulating and exciting	2.058
5	To enjoy the scenery	2.159
6	To enjoy distant views and open space	2.258
7	To learn more about the region	2.337
8	To enjoy the quietness and serenity	2.423
9	To be with others who enjoy the same things I do	2.535
10	To get away from civilization for awhile	2.549

Question 6. Continued

	TOTAL SAMPLE REASONS	MEAN
Least Important		
26	So the family can do something together	4.273
27	For a chance to help direct the activities of others	4.369
28	To be without the rest of the family for awhile	4.617
29	Because it is required for my work	4.929
30	Because my spouse or associate wanted me to	5.185

Section II

To assist with the design of future programs that are affordable, attractive and convenient, we would like to ask your specific preferences for types of programs and accommodations. [PROGRAM PREFERENCES]

Q7 During what two seasons of the year do you usually travel and what geographic regions do you visit during these seasons?
 RESPONSE:

RANK	MOST OFTEN SEASON	N	Z
1	Summer	306	75.0
RANK	LOCATION	N	Z
1	Rockies	97	23.2
RANK	NEXT OFTEN SEASON	N	Z
1	Fall	103	29.8
RANK	NEXT OFTEN LOCATION	N	Z
1	Rockies	63	18.8

Q8 Given your own financial and time constraints, when and where would you like to take your next field seminar or educational tour within the five state region of New Mexico, Arizona, Colorado, Utah and Wyoming?

RESPONSE:

TOTAL SAMPLE			
RANK	SEASON	N	%
1	Summer	254	65.3
TOTAL SAMPLE			
RANK	STATE	N	%
1	Colorado	115	28.8
2	Wyoming	110	27.6
3	Arizona	68	17.0
4	Utah	48	12.0
5	New Mexico	33	8.0

Q9 What mix of learning methods do you prefer for field seminar or educational tour programs?

Divide 100 points among the following methods to indicate what percent each should be used.

A five day learning vacation should consist of :

RESPONSE:

RANK	LEARNING METHOD	MEAN PERCENT (%)
1	Field instruction	53.57
2	Group discussion	18.45
3	Audio/visual presentations	14.81
4	Independent field projects	11.88
5	Library/Lab time	10.33
6	Free time/Recreation	8.19
7	Lecture/Other	7.22

On the following questions, please identify your first four preferences in each question. Rank four alternatives, with 1 being the most preferred; 4 being the least preferred. Do not use the same number twice. [Order shown, as "RESPONSE" was determined by showing total number of people selecting an item as their first "1" choice].

Q10 In what specific topics in natural and cultural resources are interested?

RESPONSE:

RANK	TOPIC 1	N	%
1	General Ecology	172	41.1
2	Animal Behavior	67	16.0
3	Ornithology	45	10.7
4	Botany	42	10.0

Q11 In what other related course topics are you interested?
RESPONSE:

TOTAL SAMPLE			
RANK	TOPIC 2	N	%
1	Environmental Issues	107	25.5
2	Photography	83	19.8
3	Environmental Educ Teaching Methods	80	19.1
4	Humanities	45	10.7

Q12 Of all the topics listed in Questions 10 and 11, please select the one topic of greatest interest.

RESPONSE:

RANK	FAVORITE TOPIC	N	%
1	General Ecology	112	29.3
2	Environmental Educ Teaching Methods	33	8.6
3	Ornithology	32	8.4
3	Animal Behavior	32	8.4
4	Photography	27	7.1

Q13 What length of program or tour do you prefer?

RESPONSE:

RANK	LENGTH	N	%
1	5-8 days	234	55.8
2	9-14 days	111	26.5
3	2-3 days	49	11.7
4	1 day	7	1.7

Q14 What is the maximum size group with which you wish to study and travel outdoors with 1 guide/instructor?

RESPONSE:

RANK	GROUP SIZE	N	%
1	6-8 people	178	42.5
2	9-15 people	149	35.6
3	1-5 people	68	16.2
4	16-25 people	21	5.0

Q15 What type of adventure travel do you prefer as means to explore remote places?

RESPONSE:

RANK	TOTAL SAMPLE		
	ADVENTURE TRAVEL	N	Z
1	Backpacking	126	30.1
2	Canoe/raft/kayak	108	25.8
3	Four wheel drive	66	15.8
4	Horseback riding	48	11.5

Q16 What forms of entertainment/recreation would you like to see offered at a residential seminar center?

RESPONSE:

RANK	RECREATION		
		N	Z
1	Walks/fishing/boat/horseback ride	221	52.7
2	Evening lecture/slides/movies	112	26.7
3	Swim pool/sauna/hot tub	27	6.4
4	Folk & Square Dance	25	6.0

Q17 What type of housing do you prefer?

RESPONSE:

RANK	HOUSING		
		N	Z
1	Cabin 4-8 people	167	39.9
2	Resort-like for 2 people	138	32.9
3	Provide own tents	37	8.8
4	Canvas tents on platforms	26	6.2

Q18 What type of bath and shower facility do you prefer?

RESPONSE:

RANK	BATH		
		N	Z
1	Attached private bath	233	55.6
2	Attached shared bath	79	18.9
3	Separate shared bathhouse	70	16.7
4	Privy	20	4.8

Q19 What type of meal plan do you prefer?

RESPONSE:

RANK	TOTAL SAMPLE		
	MEAL	N	Z
1	Meals prepared/whole grains/low cholesterol/mostly vegetarian/some meat	197	47.0
2	Meals prepared/casseroles/stews/hamburgers, etc.	133	31.7
3	Purchase & prepare own meals	39	9.3
4	Meals prepared/gourmet dishes	34	8.1

Section III

In order to better reach and serve the public interested in educational study and travel opportunities, we would like to ask several questions on how you find out about such programs.

Q20 To which magazines do you personally refer for ideas on what to do in your leisure time? (Select as many as apply)

RESPONSE:

RANK	MAGAZINES		
		N	Z
1	National Wildlife	211	50.6
2	National Geographic	207	49.6
3	Audubon Magazine	191	45.8
4	Natural History	120	28.8
5	Sierra	99	23.7

Also mentioned: Better Homes and Gardens, Outside, New York Times Magazine.

Q21 - Not in statistical analysis.

Q22 How many times have you attended a multi-day field study or educational travel program?

RESPONSE:

RANK	ATTENDANCE		
		N	Z
1	2-5 programs	223	54.3
2	1 program	116	28.2
3	6 or more programs	72	17.5

Q23 How did you find out about the most recent field seminar or tour that you attended ? (select one only)

RESPONSE:

TOTAL SAMPLE			
RANK	PROMOTION	N	%
1	Friends/colleagues	107	25.5
2	Brochure in mail	85	20.3
3	Club in which a member	82	19.6
4	Ads in outdoor/conservation magazines	75	17.9

Section IV

Finally, we would like to ask a few questions that will be used to help interpret the results.

Q24 What is your sex?

RESPONSE:

RANK	SEX	N	%
1	Female	277	66.4
2	Male	140	33.6

Q25 Your present age group?

RESPONSE:

RANK	AGE	N	%
1	26-40 years	174	41.7
2	41-55 years	130	31.2
3	56-65 years	48	11.5
4	18-25 years	35	8.4
5	Over 65	30	7.2

Q26 Which is the highest level of education that you have completed?

RESPONSE:

RANK	EDUCATION	N	%
1	Graduate degree	164	39.3
2	Graduated college	108	25.9
3	Graduate work	83	19.9
4	Attended college	45	10.8

Q27 Which life stage category best describes you?

RESPONSE:

TOTAL SAMPLE			
RANK	LIFE STAGE	N	%
1	Single, no dependents	176	42.5
2	Married, with children at home	106	25.6
3	Married with grown children	67	16.2
4	Married with no children	44	10.6

Q28 Please describe your usual occupation (If retired, describe usual occupation before retirement).

RESPONSE:

RANK	A. POSITION	N	%
1	Teacher K-12	144	34.8
2	Director/manager	33	8.0
3	Naturalist/ranger	25	6.0
4	Student/intern/volunteer	19	4.6

Q28 continued

RANK	B. FIELD OF WORK	N	%
1	Elementary Teaching	76	18.9
2	Science	34	8.4
3	Medicine	31	7.7
4	Environmental/Outdoor Education	29	7.2

Q29 What was your approximate gross family income, before taxes, in 1983?

RESPONSE:

RANK	INCOME	N	%
1	25-39,900	126	31.3
2	10-24,900	117	29.1
3	40-59,900	67	16.0
4	> 80,000	36	9.0
5	< 10,000	35	8.7
6	60-79,000	21	5.2

Q30 What is your zipcode?

		TOTAL SAMPLE	
RESPONSE: (grouped by first digit)			
RANK	ZIPCODE GROUP	N	Z
1	8	92	22.5
2	9	74	18.1
3	4	49	12.0
4	1	38	9.3
5	0	32	7.8
6	5	29	7.1
7	3	27	6.6
8	2	26	6.3
9	6	24	5.9
10	7	18	4.4

ZIPCODE GROUPS - IDENTIFIED BY STATES:

GROUP	STATES
0	Maine, New Hampshire, Vermont, Massachussetts, Rhode Island Connecticut, Puerto Rico, Virgin Islands
1	Pennsylvania, New York, Delaware
2	Maryland, West Virginia, Virginia, North Carolina, South Carolina, District of Columbia
3	Georgia, Alabamba, , Tennesee, Florida, Mississippi
4	Michigan, Ohio, Indiana, Kentucky
5	Wisconsin, Michigan, Missouri, North Dakota, South Dakota Iowa, Montana
6	Kansas, Nebraska, Illinois, Missouri
7	Texas, Oklahoma, Louisiana, Arkansas
8	Colorado, Utah, Arizona, New Mexico, Wyoming, Idaho, Nevada
9	Washington, Oregon, California, Alaska, Hawaii

Appendix F

Survey Results for Three Organizations

SURVEY RESPONSES FOR EACH OF THE THREE ORGANIZATIONS

ORGANIZATION 1 - 156 RESPONDENTS

ORGANIZATION 2 - 139 RESPONDENTS

ORGANIZATION 3 - 124 RESPONDENTS

Section I

Questions in this section will help us to better understand the reasons people why attend field seminars and educational tours.

Q1 When selecting a field study or educational tour program, how important are the following factors [BENEFITS] in making your decision?

Please circle the number which corresponds to the level of importance you assign to each item with "1" being extremely important and "6" being extremely unimportant.

RESPONSE:

RANK	ORGANIZATION 1		ORGANIZATION 2		ORGANIZATION 3	
	ATTRIBUTE (BENEFITS)	MEAN	ATTRIBUTE (BENEFITS)	MEAN	ATTRIBUTE (BENEFITS)	MEAN
1	*Topic	1.583	*Topic	1.811	*Topic	1.384
2	*Cost	2.295	*Reputation of organization	2.218	Dates	2.394
3	*Reputation of organization	2.303	*Cost	2.548	*Reputation of organization	2.394
4	Dates	2.506	Dates	2.613	*Cost	2.693
5	Length	2.877	*Near National Park/ scenic attraction	2.893	*Reputation of Instructor	2.812
6	*Reputation of instructor	3.136	Length	2.895	Length	2.833
7	*Adventure travel	3.250	*Comfort	2.984	*Near National Park/scenic attraction	3.162
8	*Amount of relax time	3.329	Distance from home	3.177	Distance from home	3.217
9	Distance from home	3.374	*Reputation of instructor	3.228	*Adventure travel	3.635
10	*Near National Park/scenic attraction	3.378	*Amount of relax time	3.363	*Relax time	3.816
11	*Public transportation to site	3.628	*Adventure travel	3.415	*Comfort	4.000
12	*Comfort	3.750	*Public transportation to site	3.423	*Credit available	4.167
13	*Credit available	4.213	*Credit	4.894	*Public transportation to site	4.270

*Indicates that these variables showed significant differences between organizations at the .05 level

Q5 Why did you chose the program in Question 4?

ORGANIZATION 1

RESPONSE: (Open ended responses coded into categories)

RANK	PROGRAM REASON	N
1	Cost was right	52
2	Residential	35
3	Family like setting	22
	Meet people with my interests	22
4	Trips/adventure	21
5	Close to nature/wilderness	19

ORGANIZATION 2

RANK	PROGRAM REASON	N
1	Comfort	36
2	Residential	24
3	Trips/adventure	21
4	Privacy	20
5	Study nature	18

ORGANIZATION 3

RANK	PROGRAM REASON	N
1	Cost was right	46
2	Group size right	32
3	Natural History emphasis	31
4	Can provide own housing & meals	18
5	Reputation of instructor	13

Q6 There are many different reasons why people participate in field seminars or educational tours. How important to you is each of the following reasons [BENEFITS] in deciding to attend such a program? Circle the number that corresponds with how each reason is with "1" being extremely important and "6 " being extremely unimportant. (30 statements total)

RESPONSE:

RANK	REASONS (BENEFITS)	MEAN	REASONS (BENEFITS)	MEAN	REASONS (BENEFITS)	MEAN
1	*To study nature	1.569	*To study nature	1.823	*To develop my skills and knowledge	1.667
2	*To develop my skills and knowledge	1.804	*To enjoy the scenery	1.944	*To study nature	1.693
3	To be close to nature	1.935	To be close to nature	2.008	Because it is stimulating and exciting	2.058
4	Because it is stimulating and exciting	2.058	Because it is stimulating and exciting	2.129	To be close to nature	2.153
5	*To enjoy the scenery	2.112	To enjoy distant views and open space	2.246	*To learn more about the region	2.239
6	To enjoy distant views and open space	2.203	*For a change from my daily routine	2.250	To enjoy distant views and open space	2.331
7	*To be with others who enjoy the same things I do	2.255	*To develop my skills and knowledge	2.285	*To enjoy the scenery	2.406
8	*To enjoy the quietness and serenity	2.261	*To enjoy the quietness and serenity	2.323	*To enjoy the quietness and serenity	2.693
9	*To learn about the region	2.281	*To learn about the region	2.516	To get away from civilization	2.793
10	*To get away from civilization	2.362	*To be with others who enjoy the same things I do	2.565	*To be with others who enjoy the same things I do	2.824

Question 6. Continued.

ORGANIZATION 1		ORGANIZATION 2		ORGANIZATION 3	
REASONS	MEAN	REASONS	MEAN	REASONS	MEAN
Least Important					
26 *For a chance to direct activities of others	4.160	*To share my skill and knowledge with others	4.139	*For a chance to direct activities of others	4.313
27 To be without the rest of the family for awhile	4.562	*For a chance to direct the activities of others	4.689	*So the family can do something together	4.333
28 *So the family can do something together	4.655	To be without the rest of the family for awhile	4.697	*Because it is required for my work	4.563
29 *Because it is required for my work	4.809	Because my spouse or associate wanted me to	5.126	To be without the rest of the family for awhile	4.604
30 Because my spouse/associate wanted me to	5.293	*Because it is required for work	5.492	Because my spouse/associate wanted me to	5.118

*Indicates variables that showed significant differences between organizations at the .05 level

Section II

To assist with the design of future programs that are affordable, attractive and convenient, we would like to ask your specific preferences for types of programs and accommodations. [PROGRAM PREFERENCES]

Q7 During what two seasons of the year do you usually travel and what geographic regions do you visit during these seasons?

RESPONSE:

RANK	MOST OFTEN SEASON	N	%	MOST OFTEN SEASON	N	%	MOST OFTEN SEASON	N	%
1	Summer	116	74.4	Summer	100	82.6	Summer	90	64.7
	MOST OFTEN LOCATION			LOCATION			LOCATION		
1	Rockies	21	13.5	Anywhere	31	25.0	Rockies	64	46.0
RANK	NEXT OFTEN SEASON	N	%	NEXT OFTEN SEASON	N	%	NEXT OFTEN SEASON	N	%
1	Winter	40	30.5	Fall	32	32.0	Fall	34	29.6
RANK	NEXT OFTEN LOCATION	N	%	NEXT OFTEN LOCATION	N	%	NEXT OFTEN LOCATION	N	%
1	Rockies	21	16.7	Northeast	22	22.4	Rockies	34	30.4

Q8 Given your own financial and time constraints, when and where would you like to take your next field seminar or educational tour within the five state region of New Mexico, Arizona, Colorado, Utah and Wyoming?

RESPONSE:

RANK	SEASON	N	%	SEASON	N	%	SEASON	N	%
1	Summer	89	59.7	Summer	82	72.3	Summer	83	64.8
RANK	STATE	N	%	STATE	N	%	STATE	N	%
1	Colorado	50	33.3	Colorado	44	37.3	Wyoming	58	44.0

Q9 What mix of learning methods do you prefer for field seminar or educational tour programs?

Divide 100 points among the following methods to indicate what percent each should be used.

A five day learning vacation should consist of :

RESPONSE:

ORGANIZATION 1			ORGANIZATION 2			ORGANIZATION 3		
RANK	LEARNING METHOD	MEAN PERCENT	LEARNING METHOD	MEAN PERCENT	LEARNING METHOD	MEAN PERCENT		
1	Field instruction	52.36	Field instruction	51.97	Field instruction	56.36		
2	Group discussion	17.80	AV presentation	20.75	Group discussion	19.63		
3	Independent field projects	12.53	Group discussion	18.03	Audio/visual presentations	12.61		
4	AV presentations	12.04	Independent field projects	10.30	Independent field projects	12.57		
5	Library/Lab time	11.68	Free time/recreation	8.64	Library/Lab time	11.10		
6	Free time/recreation	7.91	Lecture/other	8.10	Lecture/other	8.25		
7	Lecture/other	5.62	Library/Lab time	7.76	Free time/Recreation	8.12		

On the following questions, please identify your first four preferences in each question. Rank four alternatives, with 1 being the most preferred; 4 being the least preferred. Do not use the same number twice. [Order shown as "RESPONSE" was determined by showing total number of people selecting an item as their first "1" choice.]

Q10 In what specific topics in natural and cultural resources are you interested?

RESPONSE:

RANK	**TOPIC 1	N	%	**TOPIC 1	N	%	**TOPIC 1	N	%
1	General Ecology	85	59.5	General Ecology	41	33.1	General Ecology	46	33.1
2	Animal Behavior	22	14.1	Animal Behavior	26	21.0	Animal Behavior	19	13.7
3	Ornithology	16	7.7	Ornithology	17	13.7	Botany	18	12.9
4	Botany	12	10.3	Archaeology	15	12.1	Geology	17	12.2

**Indicates that Topic 1 showed significant difference between organizations at the .01 level

Q11 In what other related course topics are you interested?

RESPONSE:

RANK	**TOPIC 2	N	%	**TOPIC 2	N	%	**TOPIC 2	N	%
1	Environmental Issues	47	30.1	Photography	33	26.6	Environmental Issues	33	23.7
2	Environmental Educ Teaching Methods	41	26.3	Environmental issues	27	21.8	Environmental Educ Teaching Methods	32	23.0
3	Photography	28	17.9	Humanities	23	18.5	Photography	22	15.8
4	Humanities	8	5.1	Teach Methods	11	8.9	Humanities	14	10.1

Q12 Of all the topics listed in Questions 10 and 11, please select the one topic of greatest interest.

RESPONSE:

RANK	ORGANIZATION 1			ORGANIZATION 2			ORGANIZATION 3		
	**FAVORITE TOPIC	N	%	FAVORITE TOPIC	N	%	**FAVORITE TOPIC	N	%
1	General Ecology	51	35.4	General Ecology	30	26.8	General Ecology	31	24.6
2	Environmental Issues	16	11.1	Ornithology	16	14.3	Environmental Educ		
3	Environmental Educ			Animal Behavior	13	11.6	Teaching Methods	15	11.9
	Teaching Methods	15	10.4	Archaeology	9	8.0	Geology	13	10.3
4	Ornithology	13	9.0	Photography	7	6.3	Photography	13	10.3
5	Animal Behavior	12	8.3				Botany	11	8.7
							Environmental Issues	9	7.1

**Indicates that Favorite Topic showed significant differences between organizations at the .01 level

Q13 What length of program or tour do you prefer?

RESPONSE:

RANK	**LENGTH	N	%	**LENGTH	N	%	**LENGTH	N	%
1	9-14 days	90	57.7	5-8 days	111	89.5	5-8 days	74	53.2
2	5-8 days	49	31.4	9-14 days	6	4.8	2-3 days	41	29.5
3	2-3 days	4	2.6	2-3 days	4	3.2	9-14 days	15	10.8
4	1 day	3	1.9	3-5 days	1	.8	1 day	4	2.9

**Indicates that Length showed significant differences between organizations at the .01 level

Q14 What is the maximum size group with which you wish to study and travel outdoors with 1 guide/instructor?

RESPONSE:

RANK	GROUP SIZE	N	%	GROUP SIZE	N	%	GROUP SIZE	N	%
1	6-8 people	74	47.4	9-15 people	51	41.1	6-8 people	56	40.3
2	9-15 people	48	30.8	6-8 people	48	38.7	9-15 people	50	36.0
3	1-5 people	27	17.3	1-5 people	16	12.9	1-5 people	25	18.0
4	16-25 people	5	3.2	16-25 people	8	6.5	16-25 people	8	5.8

Q15 What type of adventure travel do you prefer as means to explore remote places?

RESPONSE:

RANK	**ADVENTURE TRAVEL	N	%	**ADVENTURE TRAVEL	N	%	**ADVENTURE TRAVEL	N	%
1	Backpacking	56	35.9	Four wheel drive	32	25.8	Backpacking	47	33.8
2	Canoe/raft/kayak	50	32.1	Canoe/raft/kayak	26	21	Canoe/raft/kayak	32	23.0
3	Four wheel drive	19	12.2	Backpacking	23	18.5	Horseback riding	18	12.9
4	Horseback riding	16	10.3	Horseback riding	14	11.3	Cross Country ski	13	9.4

** Indicates that Adventure Travel showed significant differences between organizations at the .01 level

Q16 What forms of entertainment/recreation would you like to see offered at a residential seminar center?

RESPONSE:

RANK	ORGANIZATION 1			ORGANIZATION 2			ORGANIZATION 3		
	**RECREATION	N	%	**RECREATION	N	%	**RECREATION	N	%
1	Walks/fishing/boat/horseback ride	96	61.5	Walks/fishing/boat/horseback ride	63	50.8	Walks/fishing/boat/horseback ride	62	44.6
2	Evening lecture/slides/movies	27	17.3	Evening lecture/slides/movies	42	33.9	Evening lecture/slides/movies	43	30.9
3	Folk and square dance	14	9.0	Folk & square dance	8	6.5	Swim pool/sauna/hot tub	13	9.4
4	Volleyball/tennis/softball	9	5.8	Swimming/hot tub/sauna	5	4.0	Cocktail hour/social parties	8	5.8

**Indicates that Entertainment/Recreation showed significant differences between organizations at the .01 level

Q17 What type of housing do you prefer?

RESPONSE:

RANK	ORGANIZATION 1			ORGANIZATION 2			ORGANIZATION 3		
	**HOUSING	N	%	**HOUSING	N	%	**HOUSING	N	%
1	Cabin 4-8 people	92	59.0	Resort-like for 2 people	79	63.7	Cabin 4-8 people	53	38.1
2	Resort like for 2 people	30	19.2	Cabin 4-8 people	22	17.7	Own tent	30	21.6
3	Canvas tents on platforms	10	6.4	Dorm style bunkhouse 6-12 people	9	7.3	Resort-like for 2 people	29	20.9
4	Dorm style bunkhouse 6-12 people	6	3.8	Canvas tents on platforms	4	3.2	Canvas tents on platforms	12	8.6

**Indicates that Housing showed significant differences between organizations at the .01 level

Q18 What type of bath and shower facility do you prefer?

RESPONSE:

RANK	ORGANIZATION 1			ORGANIZATION 2			ORGANIZATION 3		
	**BATH	N	%	**BATH	N	%	**BATH	N	%
1	Attached private bath	79	50.6	Attached private bath	95	76.6	Attached private bath	59	42.4
2	Attached shared bath	40	25.6	Attached shared bath	16	12.9	Separate shared bathhouse	32	23.0
3	Separate shared bathhouse	29	18.6	Separate shared bathhouse	9	7.3	Attached shared bath	23	16.5
4	Privy	5	3.2	Privy	0	0.0	Privy	15	10.8

**Indicates that Bath/Shower facility showed significant differences between organizations at the .01 level.

Q19 What type of meal plan do you prefer?
RESPONSE:

RANK	ORGANIZATION 1			ORGANIZATION 2			ORGANIZATION 3		
	MEAL	N	%	MEAL	N	%	MEAL	N	%
1	Meals prepared/ whole grains/low cholesterol/ mostly vegetarian/ some meat	89	57.1	Meals prepared/ casseroles/stews/ hamburgers, etc.	55	44.4	Meals prepared/ whole grains/low cholesterol/mostly vegetarian/ some meat	56	40.3
2	Meals prepared/ casseroles/stews/ hamburgers, etc.	52	33.3	Meals prepared/ whole grains/low cholesterol/ mostly vegetarian/ some meat	52	41.9	Purchase & prepare own meals	38	27.3
3	Meals prepared/ gourmet dishes	11	7.1	Meals prepared/ gourmet dishes	12	9.7	Meals prepared/ casseroles/stews/ hamburgers, etc.	26	18.7
4	Purchase and prepare own meals	2	1.3	Choice from menu	2	1.6	Meals prepared/ gourmet dishes	11	7.9

Section III

In order to better reach and serve the public interested in educational study and travel opportunities, we would like to ask several questions on how you find out about such programs.

Q20 To which magazines do you personally refer for ideas on what to do in your leisure time? (Select as many as apply)

RESPONSE:

RANK	MAGAZINES	N	%	MAGAZINES	N	%	MAGAZINES	N	%
1	Audubon Magazine	101	64.7	National Wildlife	111	89.5	National Geographic	67	48.9
2	National Geographic	73	46.8	National Geographic	67	54.0	Audubon Magazine	54	39.4
3	National Wildlife	56	35.9	Audubon Magazine	36	29.0	National Wildlife	44	32.1
4	Natural History	53	34.0	Better Homes & Gardens	29	23.4	Natural History	40	29.2
5	Sierra	48	30.8	Natural History	27	21.8	Outside	33	24.1

Also mentioned: Sunset Magazine, New York Times

: Sierra, Travel Holiday

: Sierra, Sunset Magazine

Q21 - Not in statistical analysis.

Q22 How many times have you attended a multi-day field study or educational travel program?

RESPONSE:

RANK	ATTENDANCE	N	%	ATTENDANCE	N	%	ATTENDANCE	N	%
1	2-5 programs	88	57.1	2-5 programs	63	52.1	2-5 programs	72	52.9
2	1 program	46	27.9	1 program	40	33.1	6 or more programs	34	25.0
3	6 or more programs	20	13.0	6 or more programs	18	14.9	1 program	30	22.1

Q23 How did you find out about the most recent field seminar or tour that you attended ? (select one only)

RESPONSE:

RANK	ORGANIZATION 1			ORGANIZATION 2			ORGANIZATION 3		
	PROMOTION	N	%	PROMOTION	N	%	PROMOTION	N	%
1	Club in which a member	47	30.1	Ads in conservation magazines	58	47.5	Friends/colleagues	41	29.7
2	Friends	45	28.8	Friends	21	17.2	Brochure in mail	40	29.0
3	Brochure in mail	26	16.7	Club	21	17.2	Club in which a member	14	10.1
4	Workplace	15	9.8	Brochure in mail	19	15.6	Workplace	12	8.7
				Newspaper	3	2.5			

Section IV

Finally, we would like to ask a few questions that will be used to help interpret the results.

Q24 What is your sex?

RESPONSE:

RANK	SEX	N	%	SEX	N	%	SEX	N	%
1	Female	98	62.8	Female	91	74.0	Female	88	63.8
2	Male	58	37.2	Male	32	26.0	Male	50	36.2

Q25 Your present age group?

RESPONSE:

RANK	**AGE	N	%	**AGE	N	%	**AGE	N	%
1	26-40 years	69	44.2	41-55 years	43	35.0	26-40 years	68	49.3
2	41-55 years	43	27.6	26-40 years	37	30.1	41-55 years	44	31.9
3	18-25 years	21	13.5	56-65 years	26	21.1	18-25 years	10	7.2
4	56-65 years	15	9.6	Over 65 years	13	10.6	Over 65 years	9	6.5
5	Over 65 years	8	5.1	18-25 years	4	3.3	56-65 years	7	5.1

**Indicates that Age showed significant differences between organizations at the .01 level

Q26 Which is the highest level of education that you have completed?

RESPONSE:

RANK	**EDUCATION	N	%	**EDUCATION	N	%	**EDUCATION	N	%
1	Graduate degree	63	40.6	Graduate degree	51	41.1	Graduate degree	50	36.2
2	Graduated college	44	28.4	Graduated college	29	23.4	Graduated work	39	28.3
3	Graduate work	25	16.1	Graduate work	19	15.3	Graduated college	35	25.0
4	Attended college	20	12.9	Attended college	13	10.5	Attended college	12	8.7

**Indicates that Education showed significant differences between organizations at the .01 level

Q27 Which life stage category best describes you?
RESPONSE:

RANK	ORGANIZATION 1			ORGANIZATION 2			ORGANIZATION 3		
	*LIFE STAGE	N	Z	**LIFE STAGE	N	Z	**LIFE STAGE	N	Z
1	Single, no dependents	81	52.6	Single, no dependents	44	35.8	Single, no dependents	51	37.2
2	Married, with children at home	29	18.8	Married, with children at home	36	29.3	Married, with children at home	41	29.9
3	Married with grown children	22	14.3	Married with grown children	26	21.1	Married with no children	19	13.9
4	Married with no children	17	11.0	Married with no children	8	6.5	Married with grown children	19	13.9
				Single with children	8	6.5	Single with children	7	5.1

**Indicates that Life Stage showed significant differences between organizations at the .05 level

Q28 Please describe your usual occupation (If retired, describe the usual occupation before retirement).

RESPONSE:

RANK	**A. POSITION			**A. POSITION			**A. POSITION		
		N	Z		N	Z		N	Z
1	Teacher K-12	58	37.2	Owner/operator	33	26.8	Teacher K-12	53	39.3
2	Naturalist/ranger	16	10.3	Director	16	13.0	Naturalist/ranger	8	5.9
3	Student/intern/volunteer	15	9.6	Nurse	6	4.9	Director/manager	7	5.2
4	Manager	10	6.4	Homemaker	6	4.9	Instructor	6	4.4
				Analyst	5	4.1			

RANK	**B. FIELD OF WORK			**B. FIELD OF WORK			**B. FIELD OF WORK		
		N	Z		N	Z		N	Z
1	Elementary Teaching	32	20.5	Elementary Teaching	18	13.3	Elementary Teaching	26	20.5
2	Environmental/Outdoor Education	20	12.8	Medicine	16	15.0	Science	18	14.2
3	Science	14	9.0	Library	9	7.5	Environmental/Outdoor Education	8	6.3
4	Student	13	8.3	Business	6	5.0	Medicine	6	4.7

** Indicates that Position and Field of Work showed significant differences between organizations at the .01 level

Q29 What was your approximate gross family income, before taxes, in 1983?

RESPONSE:

RANK	INCOME	N	%	INCOME	N	%	INCOME	N	%
1	10-24,900	52	34.4	25-39,900	41	33.6	< 10,000	43	33.3
2	25-39,900	42	27.8	10-24,900	27	22.1	10-24,900	38	29.5
3	40-59,900	23	15.2	40-59,900	11	9.0	25-39,900	17	13.2
4	<10,000	17	11.3	>80,000	10	8.2	40-59,900	14	10.9
5	>80,000	11	7.3	60-79,000	6	4.9	60-79,900	12	9.3
6	60-79,900	6	4.0	<10,000			> 80,000	5	3.9

Q30 What is your zipcode:

RESPONSE (Grouped by first digit into regions)

RANK	ORGANIZATION 1			ORGANIZATION 2			ORGANIZATION 3		
	ZIPCODE GROUP	N	%	ZIPCODE GROUP	N	%	ZIPCODE GROUP	N	%
1	9	46	29.8	0	18	15.5	8	31	32.6
2	8	27	17.5	2	16	13.8	4	16	16.8
3	1	20	13.0	4	16	13.8	9	10	10.5
4	4	10	6.5	3	15	12.9	6	9	9.5
5	5	9	5.8	1	13	11.2	3	6	6.3
5	6	9	5.8	5	10	8.6	1	5	5.3
6	7	8	5.2	7	9	7.8	0	4	4.2
7	2	6	4.0	8	6	5.2	2	3	3.3
7	3	6	4.0	9	6	5.2	7	1	1.0

Refer to SUMMARY FOR TOTAL SAMPLE for listing of states in each zipcode group.

Appendix GPearson Product Correlations Among Benefit Variables

CORRELATIONS BETWEEN BENEFIT VARIABLES
(REASONS FOR ATTENDING OUTDOOR EDUCATION PROGRAMS)

Pearson Product Correlations were computed for the 30 Benefit statements in Question 6. For each variable, benefits which showed a Correlation Coefficient of $r \geq .4000$ are listed with significance levels.

REASONS	CORRELATED REASONS	COEFFICIENT(r)	SIGNIFICANCE
Do something creative	(None)		
Exercise	Quiet and serenity	.4934	.00
	Improve physical health	.5348	.00
Enjoy scenery	Change from routine	.4005	.00
	Quiet and serenity	.4934	.00
	Close to nature	.4116	.00
	Views and open space	.5118	.00
Spiritual values	Think about who I am	.4099	.00
Be with friends or spouse	Spouse wanted me to	.4042	.00
	Family do something together	.5812	.00
Learn about region	(None)		
To physically relax	Change from routine	.5160	.00
	Reduce tension	.4003	.00
Change from routine	To physically relax	.5160	.00
	Reduce tension	.4664	.00
Meet new people	Be with others who enjoy same things	.5301	.00
Study nature	Develop skills and knowledge	.5054	.00
	Close to nature	.5088	.00
Feel like a better person	Think about who I am	.5497	.00
	Improve physical health	.4642	.00
	Reduce tension	.4545	.00
Direct activities of others	Share skills and knowledge	.5667	.00
Spouse/associate wanted me to	Be with friend or spouse	.4042	.00
	Family do something together	.4983	.00
Quiet and serenity	Enjoy scenery	.4934	.00
	Get away from civilization	.5927	.00
	Get away from people	.4136	.00
	Close to nature	.4584	.00
	Views and open space	.4273	.00
	Reduce tension	.4262	.00

Appendix G. Continued.

REASON	CORRELATED REASONS	COEFFICIENT(r)	SIGNIFICANCE
Learn how to be secure outdoors	Get away from civilization	.4334	.00
	Think about who I am	.4009	.00
	Improve physical health	.4676	.00
Get away from civilization	Quiet and serenity	.5927	.00
	Learn to be secure outdoors	.4334	.00
	Get away from people	.4155	.00
	Close to nature	.4855	.00
	Views and open space	.4851	.00
	Reduce tension	.4332	.00
Develop skills and knowledge	Study nature	.5054	.00
	Family do something together		
	Be with friends or spouse	.5812	.00
	Spouse/associate wanted me to	.4983	.00
Contribute to worthy cause	Share skills and knowledge with other	.4166	.00
Get away from people	Quiet and serenity	.4136	.00
	Get away from civilization	.4155	.00
Required for work	(None)		
	Close to nature		
	Enjoy scenery	.4116	.00
	Study nature	.5088	.00
	Quiet and serenity	.4584	.00
	Get away from civilization	.4845	.00
	Views and open space	.5234	.00
Think about who I am	Spiritual values	.4099	.00
	Feel like a better person	.5497	.00
	Learn to be secure outdoors	.4009	.00
	Improve physical health	.5510	.00
	Reduce tension	.4439	.00
Improve physical health	Exercise	.5346	.00
	Learn to be secure outdoors	.4676	.00
	Think about who I am	.5510	.00
	Reduce tension	.4362	.00

Appendix G. Continued.

REASON	CORRELATED REASONS	COEFFICIENT(r)	SIGNIFICANCE
Stimulating and exciting Views and open space	Views and open space	.4720	.00
	Enjoy scenery	.5118	.00
	Get away from civilization	.4851	.00
	Close to nature	.5234	.00
	Stimulating and exciting	.4720	.00
Share skill and knowledge with others	Direct activities of others	.5667	.00
	Contribute to worthy cause	.4166	.00
Be with others who enjoy same things Reduce tension	Meet new people	.5301	.00
	Relax physically	.4003	.00
	Change from routine	.4664	.00
	Feel like a better person	.4545	.00
	Quiet and serenity	.4262	.00
	Get away from civilization	.4332	.00
	Think about who I am	.4439	.00
	Improve physical health	.4362	.00
Be without family for awhile	(None)		

Appendix H

Results from Inventory of Adult Outdoor Education

Programs in Five Western States

SUMMARY OF RESPONSES FOR INVENTORY "What's Happening for Adults in the Outdoor Classroom?"

Section I

Q3 State of Organization

Rank	State	N	%
1	Colorado	11	36.7
2	Utah	6	20.0
3	Arizona	4	13.3
3	New Mexico	4	13.3
3	out of 5 State area	4	13.3
4	WY	1	3.3

Section II Programs

PROGRAM SETTING

Q7 Please describe the environmental setting of your programs (i.e. life zones, proximity to National Parks or other scenic attractions)

	NO		YES	
	N	%	N	%
Near Nat'l Park or other scenic setting	11	36.7	14	46.7

RANK	LIFE ZONE	N	%
1	Montane to Alpine	13	43.3
2	All life Zones	11	36.7
3	Desert	6	20.0

PROGRAM TOPICS

Q8 Please indicate what topics in natural and cultural resources that your programs cover. Check as many as apply.

RANK	TOPIC	N	%
1	General Ecology of area	27	90.0
2	Geology	25	83.3
3	Botany (Wildflower ID and others)	24	80.0
4	Archeology / Indian Culture	21	70.0

Q9 Please indicate what other related course topics that your organization offers. Please check as many as apply.

RANK	RELATED COURSES	N	%
1	Environmental Issues	18	60.0
1	Photography	18	60.0
2	Environmental Education Teaching Methods	14	46.7
2	Humanities	14	46.7
3	Solar and Renewable Energy	8	26.7
4	Taxonomy	4	13.3

Q10 What type of adventure travel if any, do your programs employ as a means to explore remote places? Please check as many as apply.

RANK	ADVENTURE TRAVEL	N	%
1	Canoeing, rafting, kayaking	18	60.0
1	Backpacking	18	60.0
2	Cross-country skiing	15	50.0
3	Horseback riding	9	30.0
4	Four-wheel drive Jeep	8	26.7

Q11 What forms of recreation/entertainment if any, does your organization offer for residential programs? Please check as many as apply.

RANK	RECREATION	N	%
1	Walks and hikes	26	86.7
2	Evening lectures, slide programs and movies	24	80.0
3	Tennis, volleyball, softball	11	36.7
4	Fishing	9	30.0

TYPES OF PROGRAMS

Please give the names of the major types of programs that your organization offers and briefly describe the program features for each category in the space provided. (Example of programs: evening seminars, 1/2 day naturalist hikes, 5 day field courses, etc.) These questions refer to programs offered by your organization; leasing facility for use by outside groups is addressed elsewhere.

Q12

RANK	A. TYPE OF PROGRAM	N	%
1	Workshop/seminar on site	33	43.42
2	Tour/Trip	17	22.37
3	Daily walk program	7	9.21
3	Evening lecture	7	9.21
4	Research trip on site	5	6.58
4	Elderhostel	5	6.58
5	Parent-child	2	2.63

RANK	B. SEASON	N	%
1	Summer	64	34.8
2	Fall	41	22.5
3	Spring	40	21.7
4	Winter	39	21.2

RANK	C. LENGTH	N	%
1	4-7 days	29	40.28
2	2-3 days	16	22.22
3	8 days or more	12	16.67
4	Several hours	10	13.89
5	1 day	5	6.94

RANK	D. COST PER DAY	N	%
1	\$30-\$39	16	24.24
2	Free or less than \$20.	15	22.73
3	\$60-\$69	7	10.60
4	\$50-\$59	6	9.09
4	\$80-\$99	6	9.09
5	\$20-\$29	5	7.58
5	\$40-\$49	5	7.58
5	Over \$100	5	7.58

E. CREDIT AVAILABLE?	MEAN PERCENT
NO	60.2
YES	39.8

F. ADVENTURE TRAVEL INCLUDED?	MEAN PERCENT
NO	47.45
YES	52.55

Section III Facility

Q18 What type of overnight accommodations does your organization provide? Please check as many as apply.

RANK	HOUSING	N	%
1	Sleep under the stars or in backpack tent	18	60.0
2	Rustic cabin	11	36.7
3	Dorm style bunkhouse	10	33.3
4	Resort-like guest lodging	9	30.0
5	Motel	7	23.3
6	Canvas tents on platforms	4	13.3
7	Historic home	2	6.7

Q19 What is your guest capacity on site?

AVERAGE - 529.68 people
 MODE - 0 people (Seven organizations have no guest capacity on site)
 RANGE - 0 to 9,000 people

Q20 What is your capacity for housing staff and guests instructors on site?

AVERAGE - 26.37 people
 MODE - 0 people (Ten organizations have no staff housing on site)
 RANGE - 0 - 300 people

Q21 What type of shower and bath facility is provided for guests? Please check as many as apply.

RANK	BATH	N	%
1	Attached shared bath	15	50.0
2	Attached private bath	10	33.3
3	Seperate shared bathhouse	9	30.0
4	Chemical Privy, running water available	6	20.0

Q22 What type of meal plan is provided for guests?

RANK	MEALS	N	%
1	Meals prepared, casseroles, stews, hamburgers	16	53.0
2	Meals prepared, gourmet dishes and fine dining	9	30.0
2	Purchase and prepare own meals	9	30.0
3	Meals prepared, use of whole grains, low cholesterol and fat, mostly vegetarian, some meat dishes	7	23.0
4	Cafe	3	10.0
5	Provide food, all help cook	2	6.7

Q23 Which indoor instructional facilities does your organization provide? Please check as many as apply.

RANK	FACILITIES	N	%
1	Meeting/classroom separate from dining area	16	53.3
2	Multi-purpose dining hall	13	43.3
2	Library	13	43.3
3	Museum	12	40.0
4	Lab/Workshop	7	23.3
5	Darkroom	3	10.0

Q24 Do you lease any of your facilities for seminar or retreat use by outside groups?

LEASE	N	%
NO	14	46.7
YES	13	43.3

Section IV Participants

Q25 What percent of your participants would fall in each age category? (divide 100 points among the categories; zero percent -0%- can be assigned).

RANK	AGE	Number of Organizations	%
1	College	24	30.90
2	41-55 years	29	30.46
3	Over 55 years	27	21.61
4	26-40 years	26	21.58
5	High school	19	7.43
6	Pre & Grade School	18	11.46

Q26 What is your estimate of number adult participants served in a 12 month year?

AVERAGE - 1501.79 people
 MODE - 200.00 people
 RANGE - 25 - 9,000 people (53.6% serve 400 or less in a year)

Q27 Please describe your "typical" adult participant in terms of sex, interests, occupation and income. (Summary of open ended questions coded into the following categories)

Mostly Male - 5.0%
 Mostly Female - 30.0%
 Both sexes - 65.0%
 Low Income - 10.0%
 Middle Income - 85.0%
 High Income - 5.0%
 Highly Educated - 100%
 Couples - 20.0%
 Singles - 60.0%
 Families - 13.3%
 Attending conference - 6.7%
 Not Handicapped - 95.2%
 Handicapped - 4.8%
 Motivated by Love of Nature - 41.7%
 Concerned about Convenience/Comfort - 25.0%
 Very diverse in interests - 33.3%

Q28 What percent of your adult participants attend as : (divide 100 points among the categories; zero percent-0%- can be assigned)

RANK	PARTICIPANTS	MEAN PERCENT
1	Single adults	56.56
2	Couples	31.89
3	Families	11.56

Q29 What percent of your organization's income is derived from the following sources? (divide 100 points among the categories; zero percent--0%- can be assigned).

RANK	INCOME	MEAN PERCENT
1	Participation in programs	54.11
2	Private Donations	18.0
3	Government support	17.22
4	Leasing of facilities	9.48
5	Sale of educational materials	1.11
6	Support by Nat Hist Assoc	.44