



The status and scope of outdoor recreation programs for handicapped children in the state of Montana
by Karen Elissa Talley Shirer

A thesis submitted in partial fulfillment of the requirements for the degree of MASTER OF SCIENCE
in Physical Education

Montana State University

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Abstract:

The purpose of this study was to determine the present status and scope of outdoor recreation programs for the handicapped in the State of Montana. Specifically this study was designed to survey with a questionnaire a selected sample of organizations and agencies to determine: (1) The types of agencies offering outdoor recreation programs for the handicapped, (2) The number of individuals and the types of handicaps served with outdoor recreation programs, (3) Staff utilization, experience, and education (4) Problems encountered in offering outdoor recreation programs for the handicapped, and (5) Primary reasons why outdoor recreation services for the handicapped are not offered by certain agencies and organizations.

The study was delimited to a selected sample of agencies and organizations in Montana which the researcher believed might offer outdoor recreation services to the handicapped. Categories of agencies included in the sample were public schools and school districts, schools for special populations, private and parochial schools, institutes of higher education, commercial recreation agencies, governmental agencies, youth service organizations, and community service organizations.

A questionnaire designed and developed by the investigator was used to collect the data for the study. A response of 74.7 percent was obtained. Results from the questionnaire support the following conclusions: (1) Of the educational institutions responding, very few are involved in educating handicapped students concerning methods of dealing with their probable periods of enforced leisure. (2) From the questionnaire response, it appeared that voluntary organizations were the primary agencies involved in planning, organizing, and directing outdoor recreation activities for the handicapped. (3) The majority of the respondents not offering outdoor recreation services to the handicapped indicated the reasons to be lack of apparent need for the services or that it was not the responsibility of their agency to provide those services. (4) The outdoor recreation activities currently offered to the handicapped do not require a great deal of exertion or risk on the part of the participant. (5) Montana's natural scenic strengths are the primary resources utilized in outdoor recreation programs for the handicapped. (6) A need was expressed for more architectural modifications relating directly to outdoor recreation services and activities for the handicapped, (7) Mainstreaming has been accomplished by about half of the responding agencies. (8) The majority of administrators feel that their staff/participant ratio is inadequate.

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Date August 7, 1978

THE STATUS AND SCOPE OF OUTDOOR RECREATION PROGRAMS

FOR HANDICAPPED CHILDREN IN THE STATE OF MONTANA

by

KAREN TALLEY SHIRER

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

of

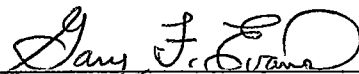
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ABSTRACT

The purpose of this study was to determine the present status and scope of outdoor recreation programs for the handicapped in the State of Montana. Specifically this study was designed to survey with a questionnaire a selected sample of organizations and agencies to determine: (1) The types of agencies offering outdoor recreation programs for the handicapped, (2) The number of individuals and the types of handicaps served with outdoor recreation programs, (3) Staff utilization, experience, and education (4) Problems encountered in offering outdoor recreation programs for the handicapped, and (5) Primary reasons why outdoor recreation services for the handicapped are not offered by certain agencies and organizations.

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Chapter 1

INTRODUCTION

Recent nationwide concern over educational and recreational opportunities for the handicapped, generated specifically by the implementation of Public Law 94-142, the Education for All Handicapped Children Act of 1975, provided the impetus for this study. Outdoor recreation opportunities for the handicapped in the State of Montana was of particular concern to the researcher because of its rural nature which seemed to suggest the possibility of several barriers impeding the participation of the handicapped in outdoor recreation programs: small communities yielding fewer organized programs and limited accessibility of these programs to the handicapped.

The result of conversations and discussions with recreation administrators, educators, specialists in programs for the handicapped, and handicapped individuals in Montana was that a survey of outdoor recreational programs offered to the handicapped in Montana would be desirable. It would be helpful not only for those individuals who might be made aware of additional recreational opportunities through this study, but also for those administrators who are involved in planning and developing outdoor recreation programs throughout the state.

Statement of the Problem

The general purpose of this study was to determine the status and scope of outdoor recreational services for handicapped children in the State of Montana. Specifically, the study was designed to:

1. Survey with a questionnaire a selected sample of organizations and agencies in Montana concerning the extent of outdoor recreation services offered to handicapped children.
2. Draw conclusions concerning the present status of outdoor recreation opportunities for the handicapped in Montana.
3. Make recommendations from the conclusions drawn concerning planning and implementation of outdoor recreation programs for the handicapped.

Definition of Terms

The following terms used in this study were defined by the investigator for the purpose of this study and may not equate exactly with common definition in everyday usage.

Outdoor Recreation. Outdoor recreation activities refer to those activities which are voluntary, occur during leisure, have pleasure as the primary purpose, and take place in natural areas as opposed to man-made areas.

Handicapped. The term handicapped refers to those individuals identified by the Montana Child Find Study as having limitations of a physical, mental or emotional nature beyond the limitations that all individuals normally possess. The term handicapped is synonymous with the terms exceptional and special needs.

Children. Children refers to those individuals between three and twenty-one years of age, inclusive, who are affected by the Education for All Handicapped Children Act of 1975.

Delimitations

This study was delimited to the State of Montana. Information was sought from directors of agencies concerning only outdoor recreation activities and programs as of spring 1978. If a responding agency offered information about other services, only those services pertaining to outdoor recreation for the handicapped were analyzed. The categories of handicapped included in this study for analysis were those delineated in the Education for All Handicapped Children Act of 1975. The categories are as follows: deaf, deaf-blind, hard of hearing, mentally retarded, multihandicapped, orthopedically impaired, other health impaired, seriously emotionally disturbed, specific learning disabled, speech impaired, and visually handicapped. The definitions for these terms (Appendix E) are those set forth in the Montana Regional Services Plan for the Handicapped (Office of the Superintendent of Public Instruction, 18:9-12).

No attempt was made at any time to evaluate the quality of or assign values to any service or program identified during the course of this study.

Limitations

This study was limited by the number of agencies and organizations to which questionnaires were mailed. Another limitation was that of widely differing concepts of the term "outdoor recreation" on the part of those who responded to the questionnaires. Further limitations included those which are inherent in any survey performed with the use of a written questionnaire: (1) Individual interpretations of questions asked, (2) A return of less than 100 percent, and (3) Inaccurate responses on the questionnaire due to the respondent's possible apprehension regarding the anonymity of his answers or insufficient knowledge on the part of the respondent concerning the number of children or types of handicaps served in a particular program.

Justification

We are entering a new era of awareness of the capabilities of the handicapped individual. At a time when the blind are skiing unaided and the paraplegic is meeting the rigorous challenges of an Outward Bound program, we are challenged to redirect our attitudes toward the individual with special needs, concentrating on his abilities rather than his disabilities. (Miller, 15, Jessen, 7, Littman, 9.)

Because of limited employment opportunities, many handicapped individuals are faced with the problem of enforced leisure. In the 1975 meeting of the National Advisory Committee on the Handicapped, the Deputy Commissioner of the Bureau of Education for the Handicapped cited the following projections: 21 percent of the handicapped children leaving schools within the next four years will be fully employed or will go on to college, 40 percent will be underemployed, 26 percent will be unemployed, 10 percent will require a partially sheltered setting, and 3 percent will be almost totally dependent (Ball, 1). It is for these reasons that educators and recreation leaders must prepare the handicapped for leisure.

Public Law 94-142, enacted by the legislature of the United States in 1975, provided that all handicapped children between the ages of three and twenty-one, inclusive, will receive a free and appropriate education comparable to that of their normal peers by 1980. This law speaks specifically to recreation for the individual with special needs. It requires compliance by those organizations and agencies receiving Federal support. At this time, many State legislatures are enacting similar laws. Many agencies, schools, and organizations are currently re-evaluating and re-designing programs to include the handicapped individual. It is the belief of this researcher that careful planning of programs and facility construction needs to be initiated in order to fulfill the outdoor recreational needs of the handicapped, to avoid

duplication of services, and to insure that all age groups and all exceptionalities are offered services. Before a statewide program is proposed, it is logical to determine the present status and scope of outdoor recreational services available to the handicapped in Montana. This study could serve as a starting point for the State of Montana in planning outdoor recreation programs for the handicapped.

Chapter 2

SURVEY OF RELATED LITERATURE

The doctoral dissertation by McCormick, "The Status and Scope of Recreation Services for Handicapped Children and Youth in Rhode Island," (10) served as the basis for this study. In his study McCormick surveyed all agencies in the State of Rhode Island which were identified as possibly offering recreation services to the handicapped. Though hampered by a questionnaire return of less than fifty percent, McCormick's study was valuable in offering guidelines for methodology and questionnaire construction. This study will differ from McCormick's in that it will deal specifically with outdoor recreation programs available to the handicapped in the State of Montana.

In reviewing literature related to this study, the researcher found that recreation program offerings for the handicapped seemed to be much more scarce than recreation services for the general population. Speaking to the scarcity of leisure services for the handicapped, Stein (26) stated that a recent survey of 2200 community recreation programs revealed that only two percent of those agencies surveyed offered recreation programs for the retarded. He further stated that most of the programs offered were initiated and sponsored by parent groups.

The studies show, among other things, that fewer mentally retarded adolescents and adults participate in outdoor sports and activities, such as hunting, fishing and boating, than members of the nonretarded population. Some report that as high as sixty percent of the retarded have no interest in hobbies of any type. (Stein, 26:575)

Several other studies yielding similar results were reviewed by the researcher. In 1966 David Brace (3) conducted a nationwide survey, mailing questionnaires to 4,022 public school superintendents, principals, and teachers, requesting information regarding the extent of physical education and recreation services offered to mentally retarded students. The 1,579 returns indicated that in general, mentally retarded pupils received little or no special instruction or attention in physical education and recreation in the public schools. It was estimated that twenty to thirty-five percent of primary and elementary school age mentally retarded students received no physical education or recreation services at all. Seventy-five percent of the responding schools lacked recreational facilities altogether and did not arrange for their mentally retarded students to have access to community recreation facilities. Recommendations made by Brace at the conclusion of this study included suggestions that a greater variety of recreational activities be offered to mentally retarded students and that teachers be given more extensive professional preparation in this area.

Another nationwide study conducted at the University of Wyoming (Masters, 14) was designed to survey 132 state institutions and twelve nationally recognized leaders in the field of recreation for the handicapped to determine the attitudes of institution administrators toward their recreation programs for the educable mentally retarded. Among

the conclusions reached in this study were the following: (1) In general, the respondents felt that recreation programs were essential in the treatment of educable mentally retarded individuals in their institutions, (2) For the most part, daily recreational activities were provided to the educable mentally retarded by the state institutions, although they were generally considered by the respondents to be inadequate in meeting the needs of their clientele, and (3) Most of the recreation programs referred to by the respondents were directed by personnel who were professionally prepared in the field of recreation for the handicapped, but the programs were understaffed.

A 1971 study conducted by William Hillman (6) sought to analyze state plans for improving recreation programs and services for the mentally retarded. Results of this study showed that only seven states had a task force or study group established specifically for recreation planning. (Montana was not among these states.) It was estimated that eighty percent of the mentally retarded individuals in the nation were not participating in recreational activities, for a variety of reasons. Recommendations were made to insure greater stimulation and guidance for recreation planning for the mentally retarded on the state level.

In Albany, New York a statewide study was conducted in 1966 to determine the number of recreation departments in New York which were actively involved in recreation programming for the mentally retarded (McGinn, 12). In this study, no attempt was made to assess

the quantity or quality of these programs. Questionnaires were mailed to seventy-nine municipal and school recreation personnel, and a seventy-seven percent return was obtained. Of the sixty-one responding agencies, it was determined that only twenty-four percent of the respondents did conduct recreation programs for the mentally retarded.

Peterson and Smith (21) compared the post-school adjustment of educable mentally retarded adults with that of adults of normal intelligence. The data collected in the study revealed, among other information, that most of the mentally retarded adults surveyed did not actively utilize recreational facilities available in the community. A specific suggestion made by Peterson and Smith was that public schools undertake the responsibility of providing information to the mentally retarded concerning recreational opportunities in the community so that they may spend their leisure time effectively and with pleasure to themselves.

Values of Recreation for the Handicapped

Several studies which attested to the values of a recreation program for the handicapped were reviewed by the investigator. As early as 1951 a study was conducted at the Southern Wisconsin Colony and Training School on the school's recreation program. It was determined that at that particular institution, camping and swimming were the most successful recreation activities offered. In general the recreation

program significantly reduced the number and severity of behavior problems encountered in the institution and raised the morale of the residents.

Sophia Salvin (25) conducted a study in 1958 which evaluated participants' reactions to camping and Scouting programs conducted for the severely mentally retarded by public recreation agencies. It was determined that even the severely mentally retarded children were highly motivated to participate in the recreational activities and that the recreation programs were valuable educational tools in helping the participants to learn to respect the rights of others and to participate effectively in competitive situations.

In 1965 a study was conducted to determine the effectiveness of a recreation program for severely and profoundly mentally retarded patients in a residential facility (Parker, 20). Through pre-testing and post-testing of both an experimental and control group, it was determined that those residents who had received recreational services significantly improved in physical fitness, reducing the amount of time they were ill and confined to bed. The appetites and sleeping habits of the experimental group significantly improved. Behavioral changes of the experimental group took place, including the following: aggressive behavior was reduced, subjects made better use of their free time, behaving more independently, and general cooperation improved.

Camping experiences for exceptional individuals seem to be gaining more popularity with administrators of programs for populations with special needs. In 1965 the Easter Seal Society initiated one of the first publicized camping experiences integrating non-ambulatory and other severely physically handicapped children with non-handicapped children in a residential camp (Robinson, 24). A study by McCreary in 1968 reported a carefully monitored seven-day camping experience for emotionally disturbed children. In this study, daily evaluations were kept by the camp staff concerning the attitudes and behavior of the children. In addition the children, their parents, and their teachers completed pre-camp and post-camp questionnaires to determine changes in attitude and behavior (McCreary, 11). The Adolescent Services Unit of the Oregon State Hospital selected twenty emotionally disturbed adolescents from the hospital and from the community to participate in a thirteen-day Wilderness and Arts camp. The experience involved many outdoor recreational activities, including a three-day backpacking trip. The Tennessee Self-Concept Scale was completed by the participants before and after the camping experience to determine changes in self-concept brought about through the experience (Jones, 8). All of these experimental camping experiences yielded positive results and desirable changes in the participants.

An example of the heights of achievement which can be accomplished by individuals with various handicaps is reported by Jessen (7),

In October 1975 the Northwest Outward Bound School led a pilot seven-day Outward Bound course involving handicapped adults. Of the five individuals participating in the course, three had moderate cerebral palsy, one was blind and epileptic, and one was a paraplegic due to spina bifida, confined to crutches. The three instructors who led the course (three is the usual number of instructors for an Outward Bound expedition) had had no previous experience specific to dealing with the handicapped. The activities in the course included a strenuous downhill hike, a rope traverse across a stream, rock climbing, rappelling, and wilderness solo experiences ranging from twenty-four hours to three days. All five of the participants completed each of the components of the course.

Day experiences for the handicapped which have been tried and reported with positive results include downhill skiing for the blind (2), cross-country skiing and racing for the blind (Miller, 15), and horseback riding for the physically handicapped, learning disabled, deaf, visually impaired, and mentally retarded (Gaskins, 5).

Innovative and creative programs are being conducted in many places. However, if one looks at the total scope of opportunities for all handicapped persons, it must be concluded that too few handicapped persons are currently being served. Too many programs suffer from a lack of adequate funding and insufficiently trained leadership. Many programs still operate on a separate or segregated basis which tends to perpetuate the concept that handicapped people are different and unable to participate in the "mainstream" of community life. Additionally, disabled persons are rarely involved at decision and policy-making levels regarding recreation programs and

activities. It is also unclear to what extent handicapped persons participate in informal, less organized recreation activities as opposed to formal, structured, and highly organized programs sponsored by public and private organizations. (Park, 19:122.)

Recreation for the Handicapped in Montana

Public Law 94-142, the Education for All Handicapped Children Act of 1975, provides specifically for recreational services to be offered to handicapped individuals as a related service of the special education provisions of the public schools (29). The State Legislature of Montana, in compliance with Federal legislation, provided for the Montana Child Find Study to determine the number and classifications of handicapped children in Montana who required special education services (Rice, 23). Now that the individuals between the ages of three and twenty-one in the State of Montana who are in need of special services have been identified, it seems appropriate to determine the extent of various services, including recreation, which are currently offered to those individuals.

The Parks Division of the Montana Department of Fish and Game and the Montana Department of Social and Rehabilitative Services conducted a joint survey in 1975 to determine the recreational behavior of the handicapped in Montana (Burnett, 4). Four hundred eighty handicapped individuals were surveyed. It was concluded that in general the handicapped engaged in extremely passive activities but desired the more active recreational pursuits valued by the normal population.

The most important deterrents to the participation of the handicapped in recreational activities were economic, transportation, and program factors. The importance of architectural barriers in impeding the participation of the individuals surveyed was relatively minor. This survey determined activities and problems from the point of view of the participant. The logical extension of this is to explore these same questions and additional information from the point of view of the recreation program administrator. With this combined information, it will be possible for an individual or agency to design a proposed statewide outdoor recreation program for the handicapped in Montana.

mode, or most frequently checked choice, was 1:4, 1:5, 1:6, indicated by thirty-one percent of the respondents answering this question.

Figure 2 illustrates the frequency of responses for each item in Question 11.

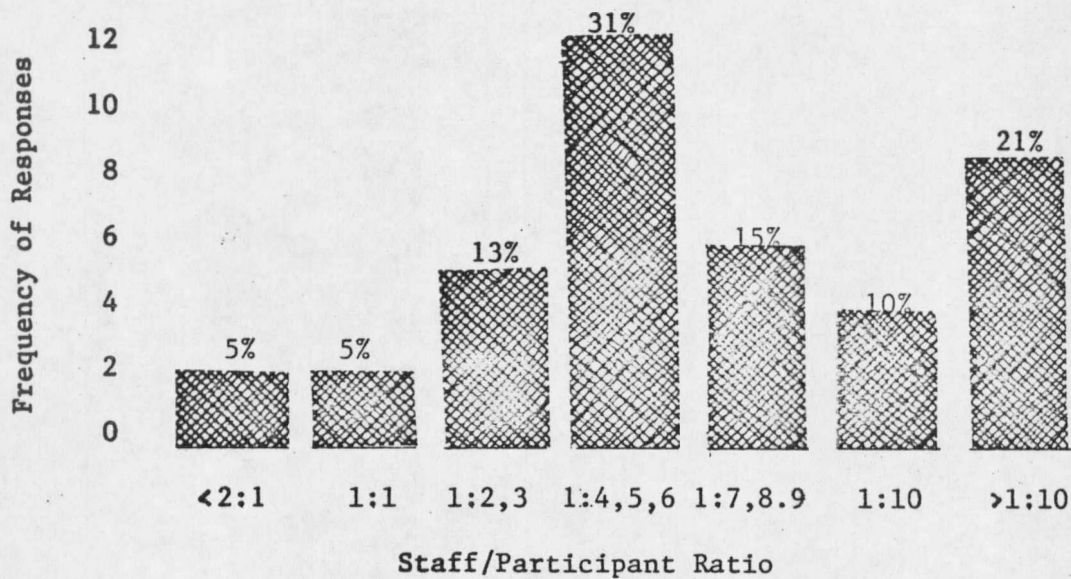


Figure 2

Staff/Participant Ratio

Question 12. Please check the one statement which most closely describes your feelings about your staff/participant ratio in outdoor recreation programs for the handicapped.

Of the forty-five respondents who answered this question, fifty-six percent expressed a need for more staff, forty-four percent

Chapter 3

RESEARCH METHODOLOGY

Questionnaire Construction

A questionnaire was designed and developed by the investigator to collect information on outdoor recreation services currently offered to handicapped individuals between the ages of three and twenty-one, inclusive, in the State of Montana. Several professional educators in the Health, Physical Education and Recreation Department of Montana State University, assisted in developing questions for the questionnaire construction.

In April of 1978 a pilot study of the questionnaire was conducted by the four members of the researcher's graduate committee and the director of Testing and Counseling at Montana State University for conciseness, clarity, and detection of ambiguous questions. After the recommended revisions had been implemented, the final composition of the questionnaire (Appendix A) was printed and prepared for mailing to the selected sample of agencies and organizations.

Questions

For those agencies which offer outdoor recreation services to the handicapped, questions were asked concerning:

1. The number of individuals and the types of handicaps served.
2. The types of outdoor recreation activities offered.

3. Staff utilization, experience and education.

4. Problems encountered in offering outdoor recreation services to the handicapped.

5. Suggestions based on experience in offering outdoor recreation services to the handicapped.

For those agencies which do not offer outdoor recreation programs for the handicapped, a question was asked concerning the primary reason for not offering those services.

Population

The population for this survey included administrators of organizations and agencies in Montana which were likely to offer outdoor recreation services to handicapped children. The following categories of organizations were included in the population:

Public Schools and School Districts

Private and Parochial Schools

Schools for Special Populations

Institutes of Higher Education

Church Affiliated Organizations

Commercial Recreation Agencies

Governmental Agencies

Youth Service Organizations

Community Service Organizations

Private, Non-Profit Organizations

Sample Selection

Two hundred twenty-five questionnaires were mailed to administrators of various organizations and agencies in Montana to collect information on outdoor recreation programs offered to the handicapped. The number of organizations within each category to which questionnaires were mailed is illustrated in Table 1. Following is a description of the process of selection for each category of agencies. (See Appendix C for a complete list of agencies to which questionnaires were mailed.)

Public Schools or School Districts. The book, Montana State University Placement Test Scores and Indices, by Suvak, categorizes high schools in Montana into first, second, and third class schools, based on enrollment figures. Because the researcher felt that secondary schools with larger enrollment figures were more likely to have the staff, facilities and demand for outdoor recreation activities for the handicapped, all eleven of the high schools categorized as first class were included in the sample, as well as a random sample of one-half (thirty-four) of the sixty-seven second class high schools in Montana. To include information on outdoor recreation opportunities for the handicapped in elementary schools, a questionnaire was mailed to the superintendent of the school district having the largest

Table 1

Sample Selection by Category

Category	Number in Sample	Percent of Total Sample
Public School or School District	101	44.9%
Institute of Higher Education	33	14.7%
Youth Service Organization	17	7.6%
Other	15	6.7%
Federal Governmental Agency	14	6.2%
Commercial Recreational Agency	11	4.9%
Private or Parochial School	10	4.4%
County/Municipal Governmental Agency	10	4.4%
State Governmental Agency	7	3.1%
Community Service Organization	6	2.7%
School for Special Populations	1	0.4%
TOTAL	225	100.0%

elementary (K-8) enrollment figure in each of the fifty-six counties in Montana which contain operating elementary school districts. The information concerning the enrollment figures and names and addresses of superintendents was obtained from the Montana Education Directory published by the Office of Public Instruction in Helena, Montana.

Private or Parochial Schools. The Montana Education Directory contains a list of ten state-accredited secondary schools which are not operated by public school districts. This list includes tribally operated schools and schools supported by religious faiths. A questionnaire was mailed to the principal of each of these ten schools.

Schools for Special Populations. One school was listed in the Montana Education Directory under this classification. A questionnaire was mailed to the superintendent of this school.

Institutes of Higher Education. Questionnaires were mailed to the directors of student recreation at each of the six institutes in the Montana University System, the three public community colleges, and the three private colleges in Montana. These were all listed in the Montana Education Directory. In addition, a list of County Extension Agents in Montana was obtained from the Montana State University Cooperative Extension Service. Twenty-one County Extension offices were selected for inclusion in the sample, based on the population of the county and its geographical location within the State. A questionnaire was mailed to the 4-H agent at each of these county

offices. Since the majority of these are affiliated with an institute of higher education, this is the organization category into which they were placed.

Commercial Recreation Agencies. The researcher determined that in Montana, the largest group of commercial recreation agencies dealing directly with outdoor recreation was most likely the ski industry. Names and addresses of eleven Montana ski slopes were obtained by investigating the advertising sections of recent issues of two national skiing magazines (Ski and Powder) and by looking through the telephone directories of major Montana cities. A questionnaire was mailed to the manager of each ski resort located.

Federal Governmental Agencies. A questionnaire was mailed to the Forest Supervisor of each of the ten National Forests in Montana. These addresses were obtained from Region 1 of the National Forest Service. In addition, the National Park Service's publication, National Park Guide for the Handicapped, lists all of the National Parks in each state. A questionnaire was sent to the Superintendent of each of the four National Parks, Monuments, Battlefields, and Recreation Areas in Montana.

State Governmental Agencies. The Parks Division of the Montana Fish and Game Department provided a list of the seven Regional Park Managers in the State of Montana; each of these Park Managers was mailed a questionnaire.

County and Municipal Governmental Agencies. A list of county and city recreation directors was obtained from the Bozeman Recreation and Parks Department. A random sample of ten of these directors was chosen for mailing of questionnaires.

Voluntary Youth Service Organizations. A list of the nine District Executives of Boy Scout Districts and the two Girl Scout District Executives was obtained from the Boy Scout and Girl Scout State Offices. Addresses of six Campfire Girl offices were obtained from telephone directories of major Montana cities. Each of these seventeen executives and directors was mailed a questionnaire.

Community Service Organizations. The National Young Men's Christian Association Directory produced the addresses of the five YMCA offices in Montana. A questionnaire was mailed to the director of each of these offices. In addition, a questionnaire was sent to the Safety Services Officer of the statewide division of the American National Red Cross.

Other. Other agencies and organizations to which questionnaires were sent included primarily private, non-profit organizations. The six Easter Seals Treatment Centers in Montana, one Lion's Club Camp, and eight group homes and residential centers were included in this category.

Data Collection

In April of 1978 the questionnaire (Appendix A) was mailed to the 225 organizations selected for the survey sample. A cover letter (Appendix B) was sent with the questionnaire to explain its use. A stamped, self-addressed envelope was enclosed. With the elapse of three weeks a second letter (Appendix B), questionnaire, and self-addressed, stamped envelope were mailed to non-respondants. A request was made to return the questionnaire within seven days of its receipt.

The number of questionnaires completed and returned after the second mailing was 168, or 75 percent of the total sample.

Results of the Data

The results of the questionnaire were tabulated, totaled, and percentages were computed. For those questions which were pre-coded for computer analysis, computations were made by the Sigma VII computer at the Montana State University Computer Center under the direction of Suvak. Distribution and item-count analyses were performed. Several questions requesting write-in responses required hand tabulation by the researcher. Samples of these responses are found in Appendix D.

The data obtained from the questionnaires are presented in tabular form in Chapter Four with an accompanying narrative explanation. Information is arranged by questions as they appear on the questionnaire and by the agency category responding to the questionnaire.

A summary of this study, conclusions and recommendations are presented in Chapter Five as a result of information obtained from the survey, the review of literature, and the background experience of the investigator in outdoor recreation programs for the handicapped.

Chapter 4

ANALYSIS OF DATA

The data presented in this chapter were collected from 168 administrators of organizations and agencies throughout Montana which the investigator believed might offer outdoor recreation services to the handicapped. Questionnaires were mailed to 225 agencies. One hundred sixty-eight were returned, yielding a 74.7 percent response. The analysis was based upon this response.

The returns were divided into two subgroups: those agencies which offered outdoor recreation services to the handicapped and those which did not. A general analysis of the first subgroup was performed using item count analysis and distribution analysis to yield descriptive statistics. Then the questionnaires submitted from the organizations which offered outdoor recreation services to the handicapped were divided into organization categories for further analysis. Responses to each question were analyzed as they appeared on the questionnaire.

Returns from the agencies which did not offer outdoor recreation services to the handicapped were first treated as a group to analyze the predominant reasons for not offering these services. They were then subdivided into organization categories for an analysis of the reasons why services were not offered.

The following is a brief summary of the responses to each question as they appeared on the questionnaire.

Question 1. Please check the one item that most accurately describes the type of organization or agency you administer. (Check only one.)

Table 2, page 27, indicates that the largest category of respondents was Public Schools and School Districts, comprising 48 percent of the total number of questionnaires returned. The next highest category was Institutes of Higher Education, submitting a return of 9.5 percent of the total. The remainder of the categories are ranked in descending order in Table 2.

Eight of the categories had a return percentage of 70 percent or greater (Table 3, page 28). A return of less than 50 percent was noted in only three categories.

Question 2A. Do you provide outdoor recreation services to non-handicapped individuals between the ages of three and twenty-one?

Fifty-eight percent of the respondents indicated that their organizations did provide outdoor recreation services to non-handicapped children and 40 percent indicated that they did not. Two percent of the respondents omitted Question 2A. Table 4, page 29, illustrates the response to Question 2A by organization categories.

Table 2

Respondants Categorized by Organization Type

Category	Number of Respondants	Percent of Total Responses
Public School or School District	81	48.2%
Institute of Higher Education	16	9.5%
Youth Service Organization	15	8.9%
Federal Governmental Agency	12	7.1%
Commercial Recreation Agency	9	5.4%
Private or Parochial School	9	5.4%
Other	8	4.8%
State Governmental Agency	7	4.2%
Municipal Governmental Agency	4	2.4%
Community Service Organization	3	1.8%
County Governmental Agency	3	1.8%
School for Special Populations	1	0.6%
TOTAL	168	100.0%

Table 3

Percentage of Response Within Each Organization Category

Category	Question- naires Mailed	Question- naires Received	Percent Response
Public School or School District	101	81	80%
Institute of Higher Education	33	16	48%
Youth Service Organization	17	15	88%
Other	15	8	53%
Federal Governmental Agency	14	12	86%
Commercial Recreation Agency	11	9	82%
County/Municipal Gov. Agency	10	7	70%
Private or Parochial School	10	9	90%
State Governmental Agency	7	7	100%
Community Service Organization	6	3	50%
School for Special Populations	1	1	100%
TOTAL	225	168	74.7%

Table 4

Organizations Offering Outdoor Recreation Services
to the Non-Handicapped

	Public Schools	Private Schools	Inst. of High. Ed.	Commer. Rec.Agen.	Gov't. Agencies	Volun. Organiz.
Yes	41%	89%	50%	100%	76%	94%
No	56%	11%	50%	0%	24%	6%
Omit	4%	0%	0%	0%	0%	0%

Question 2B. Do you provide outdoor recreation services to handicapped individuals between the ages of three and twenty-one?

Thirty-two percent of the respondents answered this question affirmatively. Sixty-eight percent indicated that their organizations did not offer outdoor recreation services to handicapped individuals in this age group. Table 5, page 30, indicates the percent of respondents within each category answering this question affirmatively and negatively.

Table 5

Organizations Offering Outdoor Recreation Services to the Handicapped

	Public Schools	Private Schools	Inst. of High. Ed.	Commer. Rec.Agen.	Gov't. Agencies	Volun. Organiz.
Yes	12%	33%	13%	67%	65%	61%
No	88%	67%	88%	33%	35%	39%

Instructions were given for only administrators of those agencies which did not offer outdoor recreation services to the handicapped to respond to Question 3.

Question 3. What is the primary reason your organization does not offer outdoor recreation services to the handicapped? (Check only one.)

Thirty-one percent of the respondents indicated that it was not the purpose of their organization to offer outdoor recreation services to the handicapped. Twenty-one percent said that their primary reason for not offering these services was lack of apparent need for them. The remaining percentage of responses for each item are illustrated in Table 6, page 31.

Table 6

Reasons for Not Offering Outdoor Recreation Services to the Handicapped

Reason	Number of Responses	Percent of Responses
Our organization is not designed for this purpose.	36	31%
There is no apparent need for these services in this area	24	21%
Other	18	16%
Our staff does not have the necessary education and/or experience to offer these services.	10	9%
Our facilities are inadequate to offer outdoor recreation services to the handicapped.	9	8%
We do not have enough personnel to offer these services.	7	6%
Funding is insufficient to offer these services.	5	4%
Omitted Question 3	6	5%

Of the eighteen respondents included in the "other" category in Table 6, thirteen were assigned to that category by the researcher because they indicated multiple answers to Question 3.

Table 7 illustrates the number and percent of respondents answering each item in Question 3 according to organization category. The numbers on the left-hand side of the table correspond to the response items as listed in the questionnaire (Appendix A).

Table 7

Reasons for Not Offering Services According to Organization Category

	Public Schools		Private Schools		Inst. of High. Ed.		Commer. Rec.Agen.		Gov't. Agencies		Volun. Organiz.	
	#	%	#	%	#	%	#	%	#	%	#	%
(1)	19	27%	1	17%	2	14%	1	33%	0	0%	1	14%
(2)	20	28%	2	33%	5	36%	0	0%	5	56%	0	0%
(3)	5	7%	0	0%	0	0%	0	0%	0	0%	0	0%
(4)	3	4%	0	0%	0	0%	2	67%	2	22%	2	29%
(5)	4	6%	0	0%	3	21%	0	0%	0	0%	0	0%
(6)	4	6%	0	0%	2	14%	0	0%	1	11%	3	43%
(7)	12	17%	3	50%	0	0%	0	0%	1	11%	1	14%
Omit	4	6%	0	0%	2	14%	0	0%	0	0%	0	0%

Questions 4 through 17 were answered only by administrators of those fifty-three agencies who indicated that they did offer outdoor recreation services to the handicapped. Therefore, percentages in the following tables were calculated using fifty-three as the base figure.

Question 4. Please check the outdoor recreation activities which you offer to handicapped children. (Check as many as your organization offers or is prepared to offer.)

Twenty-two outdoor recreation activities were listed for the respondents to check. It was possible for a respondent to indicate that his agency was prepared to offer all twenty-two of the activities. Table 8, page 34, lists the activities in descending order of response frequency.

Hiking, nature study, and camping were the three activities offered by more than 50 percent of the responding agencies, yielding respective response percentages of 70, 57 and 55 percent. The four activities offered by the fewest number of responding agencies were sailing, rock climbing, mountaineering and kayaking, all of which were offered by fewer than 6 percent of the responding agencies. Responses to Question 4 are sub-divided into organization categories in Table 9, pages 35 and 36. Percentages indicated in the table refer to the percentage of respondents within each category indicating each activity.

Table 8

Activities Offered by Responding Agencies

Activity	#	%	Activity	#	%
Hiking	37	70%	Orienteering	9	17%
Nature Study	30	57%	Downhill Skiing	8	15%
Camping	29	55%	Sledding	8	15%
Outdoor Swimming	26	49%	Horseback Riding	7	13%
Fishing	20	38%	Hunting	6	11%
Backpacking	17	32%	Snowmobiling	6	11%
Cross-Country Skiing	16	30%	Rafting	5	9%
Canoeing	14	26%	Sailing	3	6%
Motorized Boating	11	21%	Rock Climbing	3	6%
Bicycling	11	21%	Mountaineering	3	6%
Ice Skating	10	19%	Kayaking	1	2%

Table 9

Activities Offered According to Organization Category

	Public Schools	Private Schools	Inst. of High. Ed.	Commer. Rec.Agen.	Gov't. Agencies	Volun. Organiz.
Hiking	18%	13%	25%	22%	68%	59%
Bicycling	6%	0%	0%	22%	16%	24%
Backpacking	6%	13%	1%	0%	32%	41%
Camping	12%	13%	38%	11%	53%	53%
Canoeing	3%	13%	0%	0%	26%	35%
Kayaking	0%	0%	0%	0%	5%	35%
Rafting	0%	0%	13%	0%	11%	6%
Sailing	0%	0%	0%	0%	5%	12%
Motor Boating	3%	0%	0%	0%	32%	24%
Swimming	18%	25%	13%	22%	42%	35%
Fishing	9%	13%	13%	11%	42%	35%
X-C Skiing	18%	0%	0%	44%	16%	12%
Downhill Skiing	9%	0%	0%	33%	5%	0%
Snow- mobiling	0%	0%	0%	11%	21%	0%
Ice Skating	6%	0%	0%	22%	21%	6%

Table 9 (Continued)

	Public Schools	Private Schools	Inst. of High. Ed.	Commer. Rec.Agen.	Gov't. Agencies	Volun. Organiz.
Sledding	3%	0%	13%	11%	11%	12%
Rock Climbing	0%	0%	0%	0%	11%	6%
Mountai- neering	0%	0%	0%	0%	5%	12%
Orien- teering	6%	0%	13%	0%	11%	24%
Hunting	0%	0%	0%	0%	32%	0%
Horseback Riding	3%	0%	0%	0%	16%	18%
Nature Study	12%	13%	25%	22%	53%	53%
Other	3%	0%	13%	11%	16%	29%

Question 5. Please check the types of handicapped individuals to which you offer outdoor recreation services, (Check as many as your organization serves.)

As can be seen in Table 10, page 38, the five types of handicaps served by more than 50 percent of the responding organizations were mentally retarded (77 percent), specific learning disabled (57 percent), hard of hearing (55 percent), multihandicapped (53 percent), and speech impaired (51 percent). Emotionally disturbed, deaf-blind, and other health impaired were the handicaps least often served with outdoor recreation services.

Table 11, page 39, indicates the percentage of respondents in each organization category offering outdoor recreation services to each of the handicap types listed in Question 5.

Question 6. How many handicapped individuals between the chronological ages of three and twenty-one does your organization serve with outdoor recreation programs and activities?

A total of 3,216 handicapped children were reported to be served with outdoor recreation activities by the forty-two agencies responding to this question. This yielded a mean clientele of seventy-seven handicapped individuals per responding agency. The mode of six respondents indicated that their agencies served twenty handicapped individuals with outdoor recreation activities.

Table 10

Types of Handicaps Served

Handicap	Number of Responses	Percent of Responses
Mentally Retarded	41	77%
Specific Learning Disabled	30	57%
Hard of Hearing	29	55%
Multihandicapped	28	53%
Speech Impaired	27	51%
Orthopedically Handicapped	24	45%
Deaf	21	40%
Visually Handicapped	21	40%
Seriously Emotionally Disturbed	16	30%
Deaf-Blind	15	28%
Other Health Impaired	6	11%

Table 11

Types of Handicaps Served According to Organization Category

	Public Schools	Private Schools	Inst. of High. Ed.	Commer. Rec.Agen.	Gov't. Agencies	Volun. Organiz.
Deaf	3%	13%	13%	33%	37%	41%
Deaf-Blind	0%	13%	0%	22%	26%	35%
Hard of Hearing	15%	13%	25%	33%	42%	53%
Mentally Retarded	27%	25%	38%	56%	53%	53%
Multi- handicap	21%	13%	25%	0%	47%	41%
Orthoped. Handicap	9%	13%	13%	11%	42%	47%
Sev. Emo. Disturbed	12%	13%	13%	11%	32%	6%
Spec. Lrn. Disabil.	24%	13%	38%	22%	47%	24%
Speech Impaired	15%	13%	38%	33%	42%	29%
Visual Handicap	9%	0%	13%	22%	32%	35%
Other Hlth. Impaired	0%	0%	0%	0%	26%	0%

Question 7. Please place the number one (1) beside those architectural modifications which are presently incorporated into your physical facilities. If there are additional modifications which you do not presently have but you feel are necessary to your program, place the number nine (9) beside those.

Eleven architectural modifications were listed. An item count analysis was performed to determine the response to Question 7. The three architectural modifications most frequently incorporated were toilet facilities designed for wheelchair use (43 percent), doors designed for wheelchair users (42 percent), and ramps (38 percent). The three modifications least frequently listed were hiking trails designed for wheelchair use, braille signs and braille trails. Responses to all choice items in Question 7 are illustrated in Table 12, page 41.

The three modifications for which a need was most frequently indicated were picnic tables designed for wheelchair use (21 percent), ramps (19 percent), and hiking trails designed for wheelchair use (17 percent). The least frequently checked item in this question was telephones designed for wheelchair users (Table 13, page 42).

Tables 14 and 15, pages 43 and 44, indicate the percent of respondents within each organization category checking each item in both parts of Question 7.

Table 12

Architectural Modifications Presently Incorporated

Modification	Number of Responses	Percent of Responses
Toilet facilities/wheelchair use	23	43%
Doors/wheelchair use	22	42%
Ramps	20	38%
Special Parking Spaces	19	36%
Water fountains/wheelchair use	15	28%
Curb cuts	11	21%
Telephones/wheelchair use	8	15%
Picnic tables/wheelchair use	7	13%
Hiking trails/wheelchair use	5	9%
Braille signs	1	2%
Braille trails	1	2%

Table 13

Architectural Modifications Needed

Modification	Number of Responses	Percent of Responses
Picnic tables / wheelchair use	11	21%
Ramps	10	19%
Hiking trails/wheelchair use	9	17%
Water fountains/wheelchair use	8	15%
Toilet facilities/wheelchair use	8	15%
Special parking spaces	7	13%
Doors/wheelchair use	6	11%
Braille signs	5	9%
Braille trails	5	9%
Curb cuts	4	8%
Telephones/wheelchair use	3	6%

Table 14

Architectural Modifications Presently Incorporated by Category

	Public Schools	Private Schools	Inst. of High. Ed.	Commer. Rec.Agen.	Gov't. Agencies	Volun. Organiz.
Ramps	18%	25%	13%	22%	26%	12%
Curb Cuts	12%	13%	13%	22%	11%	0%
Wheelchair Hike Trail	3%	0%	0%	0%	11%	12%
Wheelchair Pic. Table	3%	0%	0%	0%	11%	24%
Wheelchair Water Ftn.	12%	13%	13%	22%	21%	12%
Wheelchair Toilet	24%	13%	13%	0%	53%	12%
Wheelchair Doors	21%	13%	13%	0%	37%	24%
Wheelchair Telephone	9%	0%	0%	0%	16%	6%
Spec. Park Spaces	12%	25%	13%	22%	37%	2%
Braille Signs	0%	0%	0%	0%	5%	0%
Braille Trails	0%	0%	0%	0%	5%	0%

Table 15

Architectural Modifications Needed by Category

	Public Schools	Private Schools	Inst. of High. Ed.	Commer. Rec.Agen.	Gov't. Agencies	Volun. Organiz.
Ramps	0%	0%	0%	11%	32%	0%
Curb Cuts	0%	0%	0%	0%	16%	0%
Wheelchair Hike Trail	0%	0%	13%	11%	26%	0%
Wheelchair Pic. Table	0%	0%	13%	11%	37%	0%
Wheelchair Wat. Ftn.	0%	0%	0%	11%	26%	0%
Wheelchair Toilet	0%	0%	0%	22%	21%	0%
Wheelchair Doors	0%	0%	0%	22%	16%	0%
Wheelchair Telephone	0%	0%	13%	11%	5%	0%
Spec. Park Spaces	0%	0%	0%	11%	26%	0%
Braille Signs	3%	0%	13%	11%	5%	0%
Braille Trails	0%	0%	13%	11%	5%	0%

Question 8. What types of facilities do you use in providing outdoor recreation activities to handicapped individuals? (Please check as many as you use.)

Of the ten types of areas listed (Table 16, page 46), natural areas, hiking trails and established campgrounds were reported to be used by the most agencies. Horseback trails and bicycle trails were indicated less frequently than the other items. Table 17, page 47, indicates the percentage of respondents within each organization category using each facility type.

Question 9. To what extent are outdoor recreation programs for the handicapped incorporated with those for the non-handicapped in your organization? (Check only one.)

Fifty-one agencies responded to this question. From the distribution of responses (Figure 1, page 48), it can be seen that the majority of the responding organizations were operated either by totally combining (mainstreaming) the handicapped with the non-handicapped in their outdoor recreation programs or by totally separating them all or most of the time. Very few responses indicated a partial mainstreaming policy. Table 18, page 49, illustrates the percentage of respondents in each organization category checking each item in Question 9. The figures on the left-hand side of the page correspond to the response items as listed in the questionnaire (Appendix A).

Table 16

Facilities Used by Responding Agencies

Type of Facility	Number of Responses	Percent of Responses
Natural areas (mountains, woods, etc.)	30	57%
Hiking trails	26	49%
Established campgrounds	23	43%
Rivers	22	42%
Lakes or ponds	20	38%
Multipurpose outdoor areas	19	36%
Ski trails or slopes	14	26%
Outdoor ice skating areas	9	17%
Horseback trails	5	9%
Bicycle trails	4	8%

Table 17

Facilities Used According to Organization Categories

	Public Schools	Private Schools	Inst. of High. Ed.	Commer. Rec.Agen.	Gov't. Agencies	Volun. Organiz.
Hiking Trails	9%	13%	25%	11%	47%	53%
Bicycle Trails	6%	0%	13%	0%	0%	6%
Horseback Trails	3%	0%	0%	0%	11%	12%
Natural Areas	12%	13%	25%	11%	47%	65%
Rivers	9%	0%	13%	11%	37%	47%
Lakes	3%	0%	13%	11%	37%	47%
Ski Trails	12%	0%	0%	33%	16%	12%
Ice Skate Areas	9%	0%	0%	22%	11%	6%
Multi- purpose	15%	0%	13%	11%	26%	35%
Campgrounds	9%	0%	25%	0%	58%	41%

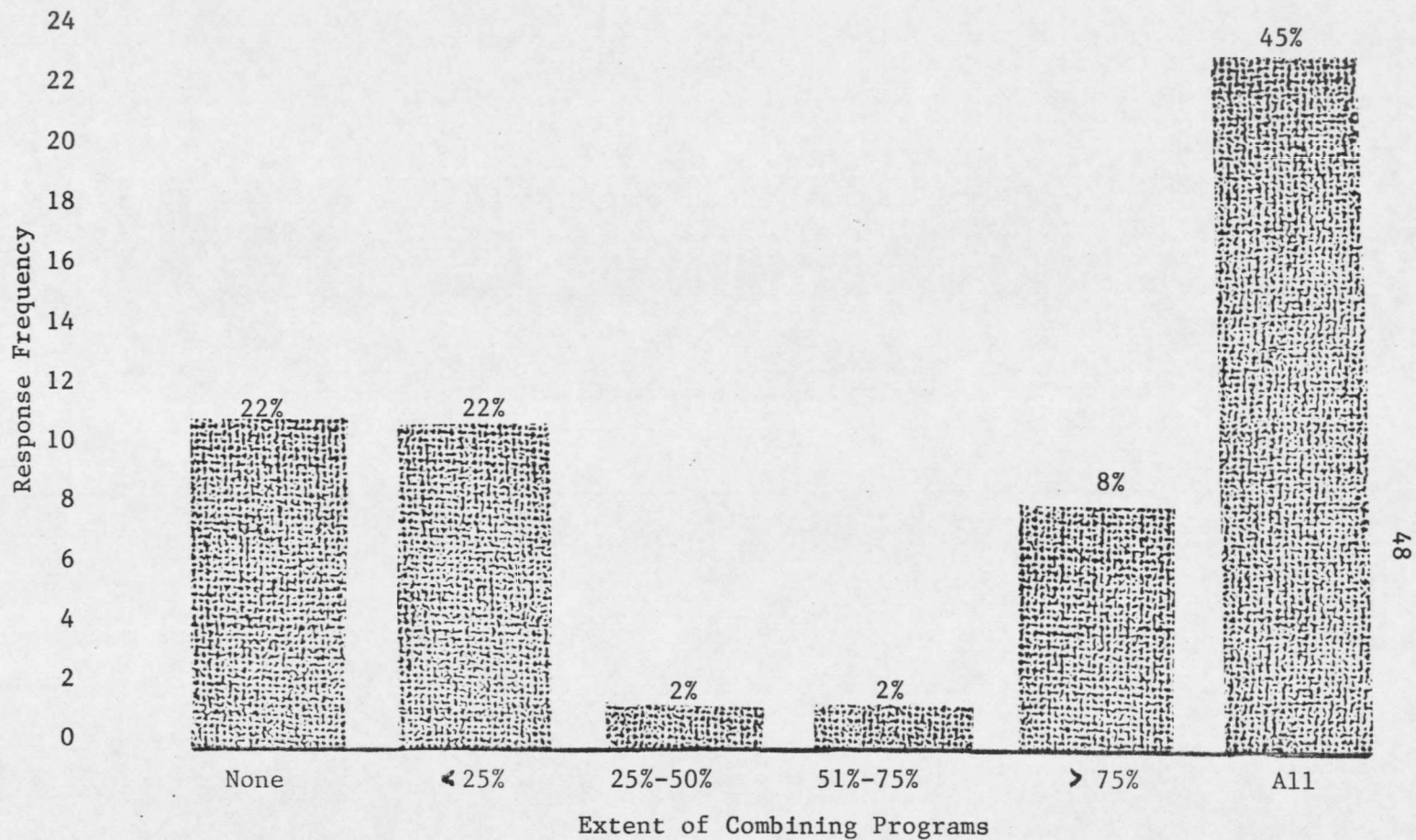


Figure 1

Extent of Combining Handicapped with Non-Handicapped
in Outdoor Recreation Programs

Table 18

Extent of Combining Programs According to Organization Category

	Public Schools	Private Schools	Inst. of High. Ed.	Commer. Rec.Agen.	Gov't. Agencies	Volun. Organiz.
(1)	12%	13%	13%	11%	5%	6%
(2)	6%	0%	0%	11%	21%	24%
(3)	0%	0%	0%	0%	5%	0%
(4)	0%	0%	0%	11%	0%	0%
(5)	3%	0%	25%	0%	5%	0%
(6)	6%	13%	13%	33%	47%	35%

Question 10. Please check the modes of transportation by which your facility is accessible for handicapped individuals. (Check as many as apply.)

Five modes of transportation access were listed after Question 10. Private auto and specially equipped bus or auto were the modes most frequently checked; bicycle routes were indicated by the fewest number of agencies (Table 19).

Table 19
Modes of Accessibility of Facilities

Transportation Mode	Number of Responses	Percent of Responses
Private Auto	38	72%
Specially Equipped Bus or Auto	20	38%
Sidewalks or Walking Trails	10	19%
Public Bus System	7	13%
Bicycle Route	3	6%

Table 20, page 51, indicates the percentage of responses received from each organization category for each item in Question 10.

Table 20

Modes of Accessibility According to Category

	Public Schools	Private Schools	Inst. of Higher Ed.	Commer. Rec.Agen.	Gov't, Agencies	Volun. Organiz.
Private Auto	15%	13%	38%	56%	74%	53%
Special Bus	15%	25%	13%	22%	37%	12%
Public Bus	9%	0%	13%	11%	5%	0%
Bicycle Route	3%	0%	13%	0%	5%	0%
Walking Trail	12%	0%	13%	11%	21%	0%

Question 11. What is your average staff/participant ratio in outdoor recreation programs for the handicapped? (Check only one.)

Seven choices were given for respondents to indicate the ratio most often used in their programs. Thirty-nine respondents answered Question 11; percentages were computed for a maximum response of thirty-nine. The majority of responses, concentrated in the lower portion of the choice items, indicated that most of the responding agencies operated with a staff/participant ratio of one to four or greater. The

indicated that their present number of staff members was adequate, and none of the respondents stated that there was a surplus of staff members for their programs (Table 21).

Table 21
Adequacy of Staff/Participant Ratio

Statement	Number of Responses	Percent of Responses
We need more staff members to adequately organize and operate our activities	25	56%
We have an adequate number of staff members to organize and operate our activities.	20	44%
We have more staff members than we need to organize and operate our activities.	0	0%

Question 13. How many staff members in each of the following categories do you have working directly with outdoor recreation programs for the handicapped? (1) Administrative, (2) Paid Staff, (3) Volunteer.

The modes for each of the three categories of staff members were as follows: Administrative personnel, one (fifteen respondents), Paid staff, three (five respondents), and Volunteers, ten (three respondents). Table 22, page 54, shows the distribution of responses.

Table 22

Number of Staff Working Directly With
Outdoor Recreation for the Handicapped

Administrative			Paid Staff			Volunteers		
Response	#	%	Response	#	%	Response	#	%
1	15	60%	1	2	11%	1	2	12%
2	7	28%	2	4	21%	3	1	6%
3	2	8%	3	4	26%	4	2	12%
5	1	4%	4	3	16%	5	1	6%
			5	2	11%	6	2	12%
			6	3	16%	7	1	6%
						10	3	18%
						15	2	12%
						20	2	12%
						35	1	6%

Question 14A. Please indicate the number of paid personnel in your organization who fall into the following education/experience categories. Count a person only in the highest category into which he/she fits.

Five education/experience categories were listed after Question 14A (Table 23, page 56). The modes of responses for each category were as follows: Advanced degree or three years experience, one staff member; Bachelors degree or two years experience, one; two years of college or one year experience, three; high school diploma or less than one year experience, one; and no degree or no previous experience, one.

Question 14B. Please indicate the number of volunteers in your organization who fall into the following education/experience categories.

The same five categories were listed in 14B as in 14A. The modes of responses for 14B were as follows: Category one, one volunteer; category two, two volunteers; category three, one volunteer; category four, one volunteer; category five was split between the two responses, six and fifteen (Table 24, page 57).

Table 23

Paid Staff Divided Into Education/Experience Categories

Adv. Deg./3 yrs.			Bach./2 yrs.			Associate/1 yr.			High Sch./1 yr.			No Deg./No Exp.		
Resp.	#	%	Resp.	#	%	Resp.	#	%	Resp.	#	%	Resp.	#	%
1	9	53%	1	13	52%	1	1	7%	1	2	33%	1	2	100%
2	3	18%	2	5	20%	2	4	14%	2	1	17%			
3	1	6%	3	2	8%	3	8	57%	3	1	17%			
4	2	12%	4	1	4%	8	1	7%	4	1	17%			
10	1	6%	5	1	4%				33	1	17%			
58	1	6%	6	2	8%									
			68	1	4%									

Table 24

Volunteers Divided Into Education/Experience Categories

Adv. Deg./3 yrs.			Bach./2 yrs.			Associate/1 yr.			High Sch./1 yr.			No Deg./No Exp.		
Resp.	#	%	Resp.	#	%	Resp.	#	%	Resp.	#	%	Resp.	#	%
1	4	33%	1	3	25%	1	5	38%	1	3	30%	6	1	50%
2	2	6%	2	5	42%	2	1	8%	2	2	20%	15	1	50%
3	3	25%	3	1	8%	3	2	15%	3	2	20%			
4	1	8%	8	1	8%	4	1	8%	4	1	10%			
9	1	8%	10	1	8%	6	1	8%	10	1	10%			
25	1	8%	50	1	8%	7	1	8%	300	1	10%			
						10	1	8%						
						25	1	8%						

Question 15. Please list in order of significance what you consider to be your three major problems in offering outdoor recreation services to the handicapped.

All fifty-three respondents answered this question at least partially. To retain the significance of prioritizing the responses, values were assigned to the responses as follows: each time a problem was listed first, a value of three points was assigned, for second place a value of two points was assigned, and if listed third the problem was given one point. The point value for each problem was totaled. As would be expected, some problems were listed more frequently than others. Lack of funding, indicated as a problem by 70 percent of the respondents, accumulated a total point value of 91. Inadequate physical facilities was the second most frequently indicated problem, listed by 51 percent of the respondents for a point value of 49. The need for a more highly-trained staff was listed third most frequently by 36 percent of the respondents for an accumulated value of 30 points. Table 25, page 59, shows the seven problems most frequently listed by the fifty-three respondents. All other problems indicated in the questionnaires were cited by no more than two respondents.

Question 16. Please indicate the outdoor recreation activity which you think your organization has had the most success in offering to handicapped children. What do you feel is responsible for this activity being your most successful?

Table 25

Most Frequently Listed Problems
To Offering Outdoor Recreation Services

Problem	Number of Responses	Percent of Responses	Total Pt Value
Lack of funds	36	70%	91
Inadequate Physical Facilities	27	51%	49
Need for Trained Staff	19	36%	30
Need for More Users	9	17%	22
Need for Volunteer Leadership	4	8%	11
Program Planning	5	9%	9
Inadequate Transportation	4	8%	8

Table 26 illustrates that of the twenty-eight administrators responding to this question, 50 percent indicated that overnight camping had been their most successful outdoor recreation activity. Eighteen percent listed hiking and 14 percent indicated that swimming had been most successful.

Table 26
Most Successful Outdoor Recreation Activities

Activity	Number of Responses	Percent of Responses
Camping	14	50%
Hiking	5	18%
Swimming	4	14%
Cross-Country Skiing	3	11%

Of the many reasons offered for the success of various activities, three were listed more frequently than any others. Forty-six percent of the respondents indicated in some way that staff members, through their dedication, interest, and enthusiasm, made the difference between the most successful activity and other activities. Accessibility of facilities was listed by 19 percent of the respondents as a reason for the success of certain activities. And 8 percent attributed

the success of an activity to parental participation and involvement in the program.

Question 17. Please indicate the outdoor recreation activity which you think your organization has had the least success in offering to handicapped children. What do you feel is responsible for this activity being your least successful?

Fourteen respondents answered Question 17. Hiking was cited by 29 percent, fishing by 21 percent, and downhill skiing by 14 percent of the respondents as being the least successful activities in their programs (Table 27). Although a specific activity was not named, 14 percent of the respondents indicated a concern about offering recreational opportunities for those in wheelchairs.

Table 27

Least Successful Outdoor Recreation Activities

Activity	Number of Responses	Percent of Responses
Hiking	4	29%
Fishing	3	21%
Skiing	2	14%
Wheelchair Activities	2	14%

Of the thirteen respondents who gave reasons for the lack of success of certain activities, problems with accessibility of facilities was mentioned by 38 percent. Twenty-three percent of the respondents cited inadequate facilities as the reason for an activity's lack of success.

A complete listing of the responses and reasons for both Questions 16 and 17 can be found in Appendix D.

Discussion

It appears that most of the outdoor recreation services offered to the handicapped population are provided by commercial recreation agencies, governmental agencies, and voluntary organizations. This provides several drawbacks for the handicapped individual desiring to participate in such activities; commercial recreation agencies generally charge for their services, Scout groups and similar organizations require participants to be members, and from the questionnaire responses received from the governmental agencies, the majority indicated that they simply provided the facilities and not the personnel to direct outdoor recreation programs. From the questionnaires received from the educational institutions (public and private schools and colleges), it appears that very little is being done to offer instruction to handicapped individuals on how to deal with leisure time and the acquisition of skills necessary for learning to adjust to a lifestyle of leisure.

Of the respondents from those agencies not offering outdoor recreation programs for the handicapped, very few listed funding, lack of personnel, facilities, and experience or knowledge as barriers preventing the implementation of such services. However, of those agencies already offering outdoor recreation programs for the handicapped, funding, inadequate physical facilities and the need for more highly trained staff were listed as the top problems in offering such services.

The highest percentage of responses concerning the reasons for not offering services by the three educational institutions was that it was not their purpose to offer such services. However, Section 121a.4 of Public Law 94-142 insures that Special Education and Related Services will be offered to handicapped individuals in assuring them a "free appropriate public education." (29:42478) In Section 121a.13, recreation is included in the definition of Related Services and is stated to include: (1) Assessment of leisure function, (2) Therapeutic recreational services, (3) Recreation programs in schools and community agencies, and (4) Leisure education (29:42479).

It is interesting to note that high-risk activities and those requiring considerable exertion on the part of the participant were among those least often offered by responding agencies. The study by Burnett (4) which surveyed the desires of handicapped citizens in Montana concluded that in general, the handicapped population surveyed desired to be involved in more active recreational pursuits, wishing

to participate in those same activities valued by the general non-handicapped population of Montana.

In general, the handicapping conditions included in outdoor recreation programs by most responding agencies were those which were predominantly identified in the Montana Child Find Study. The one obvious exception was speech and language impaired. This was cited as the most prevalent handicap in Montana's school age population in the Child Find Study but in this study it was listed by only 51 percent of the responding agencies as a handicap for which outdoor recreation programs were offered. However, because speech impairment is not associated with any readily apparent outward physical limitations, it is one handicap often not identified by the general population. Little special programming in outdoor recreation activities would be required for children with speech impairments.

It is interesting to note that the agencies which appeared to have more architectural modifications incorporated into their physical facilities were generally those which were eligible to receive federal funds and were therefore expected to comply with federal legislation (such as the Architectural Barriers Act of 1968). An exception to this generalization was found in the responses of institutes of higher education; fewer architectural modifications were noted in this category. It appeared that governmental agencies and commercial recreation areas

indicated a greater need for further architectural modifications of their facilities than did the other agencies.

The modifications which were reported to be presently incorporated into the physical facilities of most responding organizations were those which are important for daily activity and mobility of the handicapped population (specially designed toilets, doors, and ramps). Those which related to outdoor recreation activities (picnic tables and hiking trails for wheelchair use) were among the modifications for which a need was most frequently indicated.

In general, the types of facilities utilized by the responding agencies corresponded with the activities offered by most of the agencies. Montana's outdoor strengths (natural areas, hiking trails, campgrounds, and rivers) seemed to be capitalized upon by most of the responding agencies.

Questionnaire response indicated that almost half of the organizations were implementing the current trend to "normalize" and mainstream the handicapped with the general population. It was also evident that almost half of the respondents operated with little or no combining of outdoor recreational programs.

Seventy-seven percent of the respondents indicated that their programs were operated with a staff/participant ratio of one to four or greater. A definite need was expressed for more staff members, yielding a lower staff/participant ratio.

Chapter 5

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

The purpose of this study was to determine the present status and scope of outdoor recreation programs for the handicapped in the State of Montana. Specifically this study was designed to survey with a questionnaire a selected sample of organizations and agencies to determine: (1) The types of agencies offering outdoor recreation programs for the handicapped, (2) The number of individuals and the types of handicaps served with outdoor recreation programs, (3) Staff utilization, experience, and education, (4) Problems encountered in offering outdoor recreation programs for the handicapped, and (5) Primary reasons why outdoor recreation services for the handicapped are not offered by certain agencies and organizations.

This study was delimited to a selected sample of agencies and organizations in Montana which the researcher believed might offer outdoor recreation services to the handicapped. Categories of agencies included in the sample were public schools and school districts, schools for special populations, private and parochial schools, institutes of higher education, commercial recreation agencies, governmental agencies, youth service organizations, and community service organizations,

A questionnaire designed and developed by the investigator was used to collect the data for this study. A response of 74.7 percent

was obtained. The data were tabulated, totaled, and percentages were computed to the nearest whole percent for presentation in tabular form.

The review of literature, response from the questionnaires, and the researcher's background in outdoor recreation and handicapped populations provided the basis for drawing conclusions and making recommendations.

The review of literature suggested that more recreation programs for the handicapped need to be implemented and that handicapped individuals need to be made more aware of recreational opportunities existing within the community. Many studies were reviewed which attested to the values of recreation programs for the handicapped and to the accomplishments which can be achieved through these organized programs.

Because of these findings, the investigator chose to survey the aforementioned types of agencies to determine the current status of outdoor recreation programs for the handicapped in Montana. A summary of the findings of this study follows:

Thirty-two percent of the administrators returning the questionnaire indicated that their organizations offered outdoor recreation services to handicapped persons between the ages of three and twenty-one; 68 percent did not. Of those organizations not offering outdoor recreation services, 31 percent stated that their organization was not designed for that purpose and 21 percent indicated that there was no apparent need for those services in their locality. Only 18 percent

indicated that funding, facilities, or personnel were inadequate for their agencies to offer outdoor recreation services for the handicapped.

Of the agencies offering outdoor recreation services to the handicapped, hiking, nature study, and camping were the three most predominant activities, all of which were indicated by more than 50 percent of the respondents. The high risk activities of rock climbing, mountaineering and kayaking were offered by the fewest responding agencies.

More agencies offered outdoor recreation services for mentally retarded children than for any other type of handicap (77 percent). Other handicaps served by more than 50 percent of the responding organizations were specific learning disabled, hard of hearing, multi-handicapped, and speech impaired. The three handicaps served by the fewest number of agencies were emotionally disturbed, deaf-blind, and other health impaired.

The number of handicapped children served with outdoor recreation programs by the responding agencies ranged from two to one thousand. The mean number served was seventy-seven, and the mode was twenty.

Architectural modifications most frequently incorporated into the physical facilities of the responding agencies were toilet facilities designed for wheelchair use, doors designed for wheelchair use, and ramps. Hiking trails designed for wheelchair use, braille signs and braille trails were the modifications included in the fewest facilities.

Needs for further architectural modifications were indicated by less than 25 percent of the respondents. Of those, the most needed modifications were picnic tables designed for wheelchair use, ramps, and hiking trails designed for wheelchair use.

In indicating the types of facilities used to provide outdoor recreation services to the handicapped, it appeared that Montana's natural strengths were utilized well. Natural areas, hiking trails, established campgrounds, and rivers were used by more than 40 percent of the responding organizations.

Forty-five percent of the respondents indicated that their organization combined the handicapped and non-handicapped in outdoor recreation programs all of the time. Almost an equal number stated that they combined the two groups less than 25 percent of the time.

Seventy-two percent of the respondents indicated that their agencies were accessible by private automobile. Thirty-eight percent have provisions for loading and unloading passengers from a specially equipped bus or automobile. Very few of the respondents indicated that their facilities were accessible by sidewalks or walking trails, public bus systems, or bicycle routes.

There was a wide distribution of responses concerning the staff/participant ratio in outdoor recreation programs for the handicapped. The majority of the responding agencies (77 percent) operated with a ratio of one staff member to four or more participants. Only 10 percent

indicated a one to one situation or better. Thirty-one percent of the responding agencies dealt with handicapped children with a ratio of one to ten or more.

Fifty-six percent of the respondents stated that they needed more staff members to adequately plan, organize, and implement outdoor recreation programs for the handicapped. Forty-four percent indicated that they had an adequate number of staff members to carry out their programs.

Of those agencies offering outdoor recreation programs for the handicapped, the major problems cited were funding, inadequate physical facilities and the need for a more highly trained staff,

Camping, hiking, swimming and cross-country skiing were the activities listed by an accumulated 93 percent of the respondents as being most successful in their programs. The success of certain activities was attributed to staff participation and enthusiasm, accessibility of the facilities to the handicapped participants, and parental involvement.

Of the fourteen agencies indicating an activity which met with limited success in their programs, 66 percent attributed the lack of success to limited accessibility of facilities or inadequate facilities;

Conclusions

1. Of the educational institutions responding to the questionnaire, very few are involved in educating handicapped students concerning methods of dealing with probable periods of enforced leisure.

2. Of the governmental agencies and commercial recreational agencies responding to the questionnaire, the majority indicated that they were able to provide facilities for all citizens to use but did not have the personnel to plan, organize, and direct programs and activities.

3. From the questionnaire response, it appeared that voluntary organizations were the primary agencies involved in planning, organizing, and directing outdoor recreation activities for the handicapped.

4. Of the agencies which did not offer outdoor recreation programs for the handicapped, major factors in preventing these services from being offered did not seem to be inadequate facilities, personnel, or funding. The majority of these respondents indicated the reasons to be lack of apparent need for the services or that it was not the responsibility of their agency to provide those services.

5. Outdoor recreation activities presently offered to the handicapped are comprised primarily of those for which a great deal of capital outlay and facility construction is not required.

6. The outdoor recreation activities currently offered to the handicapped do not require a great deal of exertion or risk on the part of the participant.

7. Montana's natural scenic strengths are the primary resources utilized in outdoor recreation programs for the handicapped.

8. All categories of handicapping conditions identified in the Montana Child Find Study are offered outdoor recreation programs and/or facilities somewhere in the State of Montana.

9. The majority of the responding agencies have incorporated into their physical facilities architectural modifications to fill the daily functional and mobility needs of the handicapped.

10. A need was expressed for more architectural modifications relating directly to outdoor recreation services and activities for the handicapped.

11. Total mainstreaming in outdoor recreation activities has been accomplished by almost half of the responding organizations.

12. Almost 50 percent of the respondents indicated little or no mainstreaming in their outdoor recreation programs.

13. Most of the respondents indicated that outdoor recreation facilities are accessible by private auto or specially equipped vehicles; very few indicated that their facilities are accessible by public bus, walking trails, or bicycle trails.

14. The majority of outdoor recreation programs for the handicapped are conducted with a staff/participant ratio of one to four or greater; the majority of administrators feel that an increase in the number of staff members is necessary.

15. Lack of funding, inadequate facilities, and the need for more trained staff members are the three problems which administrators feel are the most significant in offering outdoor recreation programs for the handicapped.

16. High quality staff members and accessibility of facilities to participants are two essential criteria for the success of an activity or program.

Recommendations

The investigator proposes the following recommendations:

1. To provide a greater data base and a basis for comparison, a study similar to this one should be conducted to determine the status of outdoor recreation programs for the non-handicapped in Montana,

2. In order to gain a more complete picture of outdoor recreation services now available to the handicapped in Montana, a broader sample of organizations (including summer camps, church activities, etc.) should be surveyed, collecting data similar to that collected in this study.

3. A full-scale experimental outdoor recreation program for the handicapped should be initiated for at least one year to determine

successful and beneficial activities, to provide a prototype for a statewide plan, to increase participation and enthusiasm of handicapped participants, and to educate the general public concerning the capabilities and abilities of the handicapped. This could be implemented by the application for and provision of a federal grant.

4. A task force or planning board should be organized to develop a statewide master plan for outdoor recreation programs for the handicapped.

5. Educational institutions should initiate programs to offer instruction to handicapped individuals in skills necessary for lifetime sports, outdoor recreation activities, and enjoyable and productive use of leisure.

6. To make handicapped individuals aware of the current programs available, a directory of outdoor recreation programs for the handicapped in Montana should be compiled and distributed throughout the state.

7. To fill the need for more highly-trained personnel in outdoor recreation programs for the handicapped, educational programs in Montana emphasizing knowledge of the needs of the handicapped and direct application of the knowledge with recreational experiences should be expanded.

These recommendations focus primarily on action rather than on needs for further study. Once a program is effected, it can be evaluated and improved to better fill the needs of the handicapped,

What is now needed is a moratorium on study, research and learned talk, especially on the part of those who limit themselves to the special needs and special diagnoses of different types of handicapped. The right to recreation and leisure services needs no more justification for the handicapped today than for the "normal" citizen, nor do the former need or wish to wear limiting labels. . . .

. . . In short, the time has come to START, not to talk about starting, and to start in however small a way to set our priorities where they belong -- at the service level. (Pomeroy, 22:243)

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LITERATURE CITED

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APPENDICES

APPENDIX A

Questionnaire

SURVEY OF OUTDOOR RECREATION SERVICES
FOR THE HANDICAPPED
IN THE STATE OF MONTANA

1. Please check the one item that most accurately describes the type of organization or agency you administer. (Check only one.)

- ☐ (1) Public School or School District
☐ (2) Private or Parochial School
☐ (3) School for Special Populations
☐ (4) Institute of Higher Education
☐ (5) Church Affiliated Organization
☐ (6) Commercial Recreation Agency

Governmental Agency

- ☐ (7) Federal
☐ (8) State
☐ (9) County
☐ (10) Municipal

Voluntary Organization

- ☐ (11) Youth Service
☐ (12) Community Service

☐ (13) Other _____

2. Do you provide outdoor recreation services to the following groups?

A. Non-handicapped individuals between the ages of 3 and 21, inclusive?

- ☐ Yes
☐ No

B. Handicapped individuals between the ages of 3 and 21, inclusive?

- ☐ Yes
☐ No

If the answer to 2B is yes, please go to question #4 and complete the questionnaire.

If the answer to 2B is no, please answer question #3 only and return the questionnaire in the enclosed envelope. Feel free to comment in the space provided at the end of the questionnaire.

3. What is the primary reason your organization does not offer outdoor recreation services to the handicapped? (Check only one.)

- ☐ (1) There is no apparent need for these services in this area.
☐ (2) Our organization is not designed for this purpose.
☐ (3) Funding is insufficient to offer these services.
☐ (4) Our facilities are inadequate to offer outdoor recreation programs for the handicapped.
☐ (5) We do not have enough personnel to offer these services.
☐ (6) Our staff does not have the necessary education and/or experience to offer these services.
☐ (7) Other _____

4. Please check the outdoor recreation activities which you offer to handicapped children. (Check as many as your organization offers or is prepared to offer.)

☐ Hiking	☐ Boating (motorized)	☐ Rock Climbing
☐ Bicycling	☐ Swimming (outdoors)	☐ Mountaineering
☐ Backpacking	☐ Fishing	☐ Orienteering
☐ Camping	☐ Cross-Country Skiing	☐ Hunting
☐ Canoeing	☐ Downhill Skiing	☐ Horseback Riding
☐ Kayaking	☐ Snowmobiling	☐ Nature Study
☐ Rafting	☐ Ice Skating (outdoors)	☐ _____
☐ Sailing	☐ Sledding	☐ _____

5. Please check the types of handicapped individuals to which you offer outdoor recreation services. (Check as many as your organization serves.)

☐ Deaf	☐ Seriously Emotionally Disturbed
☐ Deaf-Blind	☐ Specific Learning Disabled
☐ Hard of Hearing	☐ Speech Impaired
☐ Mentally Retarded	☐ Visually Handicapped
☐ Multihandicapped	☐ Other Health Impaired _____
☐ Orthopedically Handicapped	_____

6. How many handicapped individuals between the chronological ages of 3 and 21 (inclusive) does your organization serve with outdoor recreation programs and activities?

This number is (check one):

☐ Exact
☐ Approximate

7. Please place the number one (1) beside those architectural modifications which are presently incorporated into your physical facilities. If there are additional modifications which you do not presently have but you feel are necessary to your program, place the number nine (9) beside those.

☐ Ramps
☐ Curb cuts
☐ Hiking trails designed for wheelchair use
☐ Picnic tables designed for wheelchair use
☐ Water fountains accessible to wheelchair users
☐ Toilet facilities designed for wheelchair users
☐ Doors designed for wheelchair users
☐ Telephones designed for wheelchair users
☐ Parking spaces designed for loading and unloading of the handicapped
☐ Braille signs
☐ Braille trails
☐ Other _____

8. What types of facilities do you use in providing outdoor recreation activities to handicapped individuals? (Please check as many as you use.)

☐ Hiking trails	☐ Ski trails or slopes
☐ Bicycle trails	☐ Outdoor ice skating areas
☐ Horseback trails	☐ Multipurpose outdoor areas
☐ Natural areas (mountains, woods, etc.)	☐ Established campgrounds
☐ Rivers	☐ _____
☐ Lakes or ponds	☐ _____

9. To what extent are outdoor recreation programs for the handicapped incorporated with those for the non-handicapped in your organization? (Check only one.)

☐ (1) No combining; separate programs for the handicapped and non-handicapped.
☐ (2) Less than 25% of the time.
☐ (3) 25% to 50% of the time.
☐ (4) 51% to 75% of the time.
☐ (5) Greater than 75% of the time.
☐ (6) All outdoor recreation programs and activities combine both handicapped and non-handicapped participants.

10. Please check the modes of transportation by which your facility is accessible for handicapped individuals. (Check as many as apply.)

☐ Private auto
☐ Specially equipped bus or auto
☐ Public bus system (Bus stop 2 blocks away or closer)
☐ Bicycle route
☐ Sidewalks or walking trails
☐ Other _____

11. What is your average staff/participant ratio in outdoor recreation programs for the handicapped? (Check only one.)

☐ (1) 2:1 or higher
☐ (2) 1:1
☐ (3) 1:2, 1:3
☐ (4) 1:4, 1:5, 1:6
☐ (5) 1:7, 1:8, 1:9
☐ (6) 1:10
☐ (7) greater than 1:10

12. Please check the one statement which most closely describes your feelings about your staff/participant ratio in outdoor recreation programs for the handicapped.

☐ We have more staff members than we need to organize and operate our activities.
☐ We have an adequate number of staff members to organize and operate our activities.
☐ We need more staff members to adequately organize and operate our activities.

The next two questions require numbers, rather than checkmarks, to be placed in the adjacent blanks.

13. How many staff members do you have working directly with outdoor recreation programs for the handicapped? (Please place the number beside each category. If you have no one to cover a particular category, place a zero beside that one. Please count each staff member only once.)

Administrative (planning programs, resource, etc.)
 Paid staff working directly with handicapped children.
 Volunteers in outdoor recreation programs for the handicapped.
 Other _____

14. Please indicate the number of personnel in your organization who fall into the following educational/experience categories. Two columns are provided; one for paid personnel and one for volunteers. (Count a person only in the highest category into which he/she fits.)

Paid
 Staff Volunteers

		Advanced degree (Masters, Doctorate) <u>or</u> 3 or more years experience working with the handicapped.
		Bachelors degree <u>or</u> 2 years experience working with the handicapped.
		Two years of college <u>or</u> 1 year experience working with the handicapped.
		High school diploma <u>or</u> less than 1 year experience working the handicapped.
		No high school diploma <u>or</u> no previous experience working with the handicapped.

15. Please list in order of significance what you consider to be your three major problems in offering outdoor recreation services to the handicapped. (For example, funding, physical facilities, etc.)

1.

2.

3.

16. Please indicate the outdoor recreation activity which you think your organization has had the most success in offering to handicapped children.

What do you feel is responsible for this activity being your most successful?

17. Please indicate the outdoor recreation activity which you think your organization has had the least success in offering to handicapped children.

What do you feel is responsible for this activity being your least successful?

18. If you are interested in receiving a synopsis of the results of this questionnaire, please indicate here by filling your name and the name and address of your organization. This information will not be used at all in this study; this is merely to facilitate mailing the results to you. These results will be mailed to interested individuals no later than August 31, 1978.

19. Please use this space to include any additional comments which you feel may be helpful in the inventory of outdoor recreation programs for the handicapped.

Thank you very much for your participation.

APPENDIX B

Letters of Transmittal



DEPARTMENT OF HEALTH, PHYSICAL EDUCATION & RECREATION

COLLEGE OF EDUCATION

MONTANA STATE UNIVERSITY, BOZEMAN 59717

April 10, 1978

Dear Director:

The Bureau of Education for the Handicapped Training Project #G007700990, Physical Education for the Exceptional Individual, needs specific information regarding the current outdoor recreation services offered to handicapped individuals in the State of Montana. This information will be used for inventory purposes. From this inventory our Training Project can better assess the needs of handicapped individuals and design workshops and course offerings to prepare educators, youth leaders, and recreation leaders in providing services to all youth.

Your agency has been identified as one which is in a position to offer outdoor recreation services to the handicapped. Please take the time to assist us in this research which is necessary to help determine the needs of handicapped individuals in Montana. No names of specific individuals or agencies will be identified in the results of this study. The information will be treated as group data and complete anonymity is assured.

For the purpose of this study, outdoor recreation activities are those which are voluntary and which occur during leisure with pleasure as the primary purpose. These activities are differentiated from other recreation activities in that they center primarily around natural areas, as opposed to man-made facilities. Because Public Law 94-142 focuses on children from ages 3 to 21, this is the age group for which we wish to collect information.

The enclosed questionnaire is designed to be quick and convenient for you to answer. Please complete it and return it in the enclosed self-addressed, stamped envelope by April 18, 1978.

Thank you for your participation in this study.

Sincerely,

G.S. "Don" Morris
Project Director

Karen Shirer
Research Coordinator



DEPARTMENT OF HEALTH, PHYSICAL EDUCATION & RECREATION

COLLEGE OF EDUCATION

MONTANA STATE UNIVERSITY, BOZEMAN 59717

May 3, 1978

Dear Director:

The Bureau of Education for the Handicapped Training Project, Physical Education for the Special Needs Individual, desperately needs your input. Without information on your program regarding outdoor recreation services for the handicapped, we cannot adequately inventory these services in Montana. We realize that you may offer a very limited outdoor recreation program to the handicapped, or perhaps may not offer anything in this area at all. This information is just as important to us as information about a full-scale program.

Please keep in mind that the information we receive will be treated as group data and that no agency or organization will be identified in the study. You are assured complete anonymity in your responses.

Through this inventory of outdoor recreation programs for the handicapped, we can gain an understanding of Montana's overall strengths and weaknesses in this area, and we will better be able to design workshops and other services to assist physical educators, recreation leaders and youth leaders in providing programs for the handicapped.

Please take the time today to complete the enclosed questionnaire and return it in the envelope provided by May 10. If you have questions or need assistance in completing the questionnaire, please feel free to contact me at 994-2260 or 994-4001. Thank you for your participation in this study.

Sincerely,

A handwritten signature in cursive script that reads "Karen Shirer".

Karen Shirer
Research Coordinator
B.E.H. Training Project

APPENDIX C

Organizations in Survey Sample

PUBLIC SCHOOLS AND SCHOOL DISTRICTS

High Schools--First Class

Anaconda
 Russell
 Great Falls
 Flathead
 Bozeman
 Havre
 Capital
 Helena
 Park
 Billings
 Billings West

High Schools--Second Class

Augusta
 Belgrade
 Bridger
 Browning
 Chester
 Choteau
 Columbai Falls
 Conrad
 Culbertson
 Darby
 Fairfield
 Forsyth
 Froid
 Geraldine
 Hamilton
 Harlem
 Harlowton
 Huntley Project
 Laurel
 Lodge Grass
 Malta
 Opheim
 Plentywood
 Poplar
 Ronan
 Scobey
 St. Ignatius
 Terry

Three Forks
 Twin Bridges
 Victor
 Whitehall
 Wolf Point

Elementary School Districts

Dillon No. 10
 Hardin-Crow Agency No. 17-H
 Chinook No. 10
 Twonsend No. 7
 Roberts No. 23
 Ekalaka No. 15
 Great Falls No. 1
 Fort Benton No. 1
 Miles City No. 1
 Peerless No. 2
 Gelndive No. 1
 Anaconda No. 10
 Baker No. 12
 Lewistown No. 1
 Columbia Falls No. 6
 Bozeman No. 7
 Jordan
 Browning No. 9
 Ryegate No. 6
 Havre No. 16
 Boulder No. 7
 Hobson No. 25
 Polson No. 23
 Helena No. 1
 Chester No. 33
 Libby No. 4
 Ennis No. 52
 Circle No. 1
 White Sulphur Springs No. 8
 Superior No. 3
 Philipsburg No. 1
 Missoula No. 1
 Roundup No. 55
 Livingston No. 4
 Winnett No. 159
 Malta No. 14

Elementary School Districts

Conrad No. 10
 Broadus No. 79J
 Deer Lodge No. 1
 Terry No. 5
 Hamilton No. 3
 Sidney No. 5
 Wolf Point No. 45
 Colstrip No. 19
 Thompson Falls No. 2
 Plentywood No. 20
 Butte No. 1
 Columbus No. 6
 Big Timber No. 1
 Choteau No. 1
 Shelby No. 14
 Hysham No. 7
 Glasgow No. 1
 Harlowton No. 16
 Wibaux No. 6
 Billings No. 2

PRIVATE AND PAROCHIAL SCHOOLS

Busby
 Sacred Heart
 St. Leo
 Manhattan Christian
 Labre Indian Schools
 Butte Central
 Lustre Bible Academy
 Central Catholic
 Mt. Ellis Academy

SCHOOLS FOR SPECIAL POPULATIONS

Montana State School for
 the Deaf and Blind

INSTITUTES OF HIGHER EDUCATION

Colleges and Universities

Eastern Montana College
 Montana Tech
 Montana State University
 University of Montana
 Northern Montana College
 Western Montana College
 Dawson College
 Flathead Valley Community
 College
 Miles Community College
 Carroll College
 Rocky Mountain College

4-H Agents

Lewis & Clark County
 Lincoln County
 Missoula County
 Musselshell-Golden Valley
 Counties
 Ravalli County
 Roosevelt County
 Phillips County
 Silver Bow County
 Valley County
 Yellowstone County
 Urban--Billings
 Urban--Great Falls

COMMERCIAL RECREATION AGENCIES

Ski Areas

Big Mountain
 Big Sky
 Bridger Bowl
 Beef Trail
 Teton Pass
 Showdown
 Marshall
 Red Lodge Mountain
 Deep Creek
 Belmont
 Lost Trail

FEDERAL GOVERNMENTAL AGENCIES

National Forests
 Beaverhead
 Bitterroot
 Custer
 Deerlodge
 Flathead
 Gallatin
 Helena
 Kootenai
 Lewis & Clark
 Lolo

National Parks
 Big Hole
 Bighorn Canyon
 Custer Battlefield
 Glacier

STATE GOVERNMENTAL AGENCIES

State Park Regions
 1--Kalispell
 2--Missoula
 3--Bozeman
 4--Great Falls
 5--Billings
 6--Glasgow
 7--Miles City

COUNTY/MUNICIPAL GOVERNMENT AGENCIES

City of Billings
 City of Glasgow
 City of Bozeman
 City of Butte
 City of Great Falls
 City of Havre
 Flathead County
 City of Lewiston
 City of Miles City
 City of Missoula

YOUTH SERVICE ORGANIZATIONS

Boy Scout Districts
 Northwest
 Mullan Trail, Ravalli
 Shortgrass, Badlands,
 Buffalo Plains
 District 13
 Central, Black Otter
 Prickly Pear, Mountain
 Valley
 Lewis & Clark
 Nuoohska, Hilina
 Vigilante

Girl Scout Councils
 Midland Empire
 Big Sky

Campfire Girl Offices
 Billings
 Great Falls
 Bozeman
 Missoula
 Helena
 Butte

COMMUNITY SERVICE ORGANIZATIONS

American Red Cross
 Wrangler Division

YMCA Offices

Butte
 Billings
 Great Falls
 Helena
 Missoula

OTHER ORGANIZATIONS

Residential Homes

Hi-Line Home Programs
Cascade County Housing for
Developmentally Disabled
Regional Living Services,
Havre
Region II Residential
Services, Great Falls
Special Training for
Exceptional People
First Step, Inc.
Missoula Community Homes
Council
Flathead Industries for
the Handicapped
Montana Center for Handi-
capped Children

Easter Seals Treatment Centers

Billings
Bozeman
Butte
Conrad
Havre
Helena

APPENDIX D

Responses to Write-In Questions

Question 16. Please indicate the outdoor recreation activity which you think your organization has had the most success in offering to handicapped children. What do you feel is responsible for this activity being your most successful?

Activity	Reasons for Success
Camping	Children come with parents.
Camping	Availability of land.
Hiking, camping	
Interpretive programs, boat tours	Children can participate with parents.
Camping, hiking	Main thrust of Scout program.
Camping	Major program
Camping	Facilities, volunteers, staff
Summer camp	Training and staff.
Skiing	Staff.
Cross-country skiing	
Fishing	Accessibility.
Hiking, games	Staff, volunteers.
Camping	Close-knit group, everyone is involved.
Camping	Enthusiasm and interest.
Swimming	Accessibility of facilities.
Camping	Facility and staff.
Camping	Area and staff.
Camping	Small group experience.

Question 16, continued.

Activity	Reasons for Success
Camping	New experience for kids.
Swimming	Access to facility.
Hiking	Instructors.
Indian Days	Enthusiasm.
Swimming	Supervision and facilities.
Swimming	Staff and volunteers.
Camping	Staff.
Hiking	Lots of open space.
Cross-country skiing	Popular activity; handicapped can relate with "normal" population.

Question 17. Please indicate the outdoor recreation activity which you think your organization has had the least success in offering to handicapped children. What do you feel is responsible for this activity being your least successful?

Activity	Reasons for Lack of Success
Fishing	No facilities for blind and physically handicapped.
Fishing and hiking	
Wheelchair activities	Lack of facilities.
Hiking	Too few trails.
Hunting	Staff.
Hiking	Accessibility.
Hiking	Accessibility.
Fishing	Access to fishing areas.
Wheelchair activities	Accessibility.
Rafting	Not enough leaders.
Cross-country skiing	Weather conditions.
Skiing	Scheduling problems.
Skiing	Distance to facility.
Swimming	Parents feel the need to be present at every class.

APPENDIX E

Definitions of Handicapping Conditions

Mentally Retarded. Individuals are considered to be mentally retarded when their rate of intellectual development is significantly less than the normal rate and their potential for academic achievement is estimated to be markedly less than that expected of persons with a normal rate of intellectual development.

Learning Disability. Individuals with this handicap exhibit a disorder in one or more basic psychological processes involved in understanding or using spoken or written language. These processes may be manifested in disorders of listening, thinking, reading, writing, spelling, or simple computing. The term includes conditions which have been referred to as perceptual handicaps, brain injury, minimal brain dysfunction, dyslexia, development aphasia, etc. This category does not include learning problems which are primarily because of visual, hearing, or motor handicaps, mental retardation, emotional disturbances, or environmental disadvantages.

Seriously Emotionally Disturbed. Individuals with this handicap suffer from psychiatric disturbances which limit their ability to govern their own behavior. These disturbances are of such a nature and severity as to require one or more special educational or other type of services.

Orthopedically Handicapped. These individuals have a limited ability in self-mobility, sitting in a classroom, and/or using materials or equipment for learning because of muscular, skeletal, or neuromuscular impairment.

Visually Handicapped. These individuals are severely limited in their ability to see. State laws and regulations establish the criteria for diagnosis and classifications of visual disabilities.

- a. Partially Sighted. Using the criteria specified by the state, include in this group those individuals whose vision is limited even with correction to the extent that modifications must be made in program, equipment, materials and/or facilities if they are to be able to succeed in the vocational program.
- b. Blind. State laws define legal blindness. The extent of the visual disability is severe. Usually, the visual handicap is such that the individual must depend, to a large extent, on his senses of touch and hearing rather than on his sense of sight.

Hearing Impaired. Individuals in this group have a sense of hearing that is inadequate for success in the learning situation. State laws and regulations establish the criteria for diagnosis and classification of hearing disabilities.

- a. Hard of Hearing. Individual can hear and understand speech, but with difficulty. The speech must be loud and the individual must use a hearing aid, or lip read along with a hearing aid, to supplement his own hearing.
- b. Deaf. Even with the amplification of sound provided with a hearing aid, the individual is unable to hear and recognize all speech sounds.

Speech Impaired. These individuals have speech patterns that differ from the normal to an extent which is noticeable. Some speech disorders are articulatory, vocal, stuttering, delayed speech, and speech disorders associated with cleft palate, hearing impairment, or cerebral palsy.

Other Health Impaired. This group of individuals have limited strength, vitality, and alertness because of chronic health problems such as heart conditions, tuberculosis, rheumatic fever, nephritis, infectious hepatitis, infectious mononucleosis, asthma, hemophilia, epilepsy, leukemia, diabetes and other illnesses.

Multi-handicapped. Individuals in this group have a combination of handicapping conditions, each of which must be considered in planning programs or program modification. (Office of the Superintendent of Public Instruction, 18:9-12.)

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Shirer, K. E. T.

The status and scope
of outdoor recreation
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