

DOCUMENT RESUME

ED 127 102

RC 009 401

AUTHOR Lowenstein, Daniel H.  
 TITLE Wilderness Adventure Programs: An Activity Profile.  
 INSTITUTION Pennsylvania State Univ., University Park. Coll. of Human Development.  
 PUB DATE Nov 75  
 NOTE 92p.

EDRS PRICE MF-\$0.83 HC-\$4.67 Plus Postage.  
 DESCRIPTORS Activities; Definitions; Equipment; Facilities; Futures (of Society); \*History; Legal Responsibility; \*Outdoor Education; Participant Characteristics; Planning; Problems; \*Program Descriptions; \*Program Development; Research; \*Resources; Site Selection; Socioeconomic Influences  
 IDENTIFIERS \*Adventure Education; \*Wilderness Adventure Programs

ABSTRACT

Focusing upon the adventure aspect of wilderness programs, this paper presents a profile of those program activities which create a number of challenges and often stressful situations as the means of attaining specified goals and which can best be incorporated under the term "Wilderness Adventure Program" (WAP). Providing information of interest to persons concerned with WAP history, planning, and/or application, this paper presents the following chapters: (1) Introduction (typology); (2) Activity Description (history; functions; actions; knowledge; equipment; temporal considerations; formalized control; cost; and instruction); (3) Participants and Non-Participants (popularity and extensiveness; participant characterization; participant groups; and meaning of participation); (4) Demand and Consumption Factors (causal socioeconomic factors; Christy's elements; and future of WAPs); (5) Associated Resources (natural environment; areas, sites, and facilities; compatibility; suppliers); (6) Legal Aspects (legislative aspects; administrative aspects; and judicial aspects); (7) Problems and Issues (overview; criticism; research related to WAPs; WAPs as an educational tool, a therapeutic tool, and a unique recreational experience; and conclusion). Appendices provide information re: bases; exemplary programs; equipment; suppliers' addresses; and research related to standard courses. (JC)

\*\*\*\*\*  
 \* Documents acquired by ERIC include many informal unpublished \*  
 \* materials not available from other sources. ERIC makes every effort \*  
 \* to obtain the best copy available. Nevertheless, items of marginal \*  
 \* reproducibility are often encountered and this affects the quality \*  
 \* of the microfiche and hardcopy reproductions ERIC makes available \*  
 \* via the ERIC Document Reproduction Service (EDRS). EDRS is not \*  
 \* responsible for the quality of the original document. Reproductions \*  
 \* supplied by EDRS are the best that can be made from the original. \*  
 \*\*\*\*\*

# DIVISION OF MAN-ENVIRONMENT RELATIONS

ED127102

## WILDERNESS ADVENTURE PROGRAMS - An Activity Profile -

U.S. DEPARTMENT OF HEALTH  
EDUCATION & WELFARE  
NATIONAL INSTITUTE OF  
EDUCATION

THIS DOCUMENT HAS BEEN REPRODUCED EXACTLY AS RECEIVED FROM THE PERSON OR ORGANIZATION ORIGINATING IT. POINTS OF VIEW OR OPINIONS STATED DO NOT NECESSARILY REPRESENT OFFICIAL NATIONAL INSTITUTE OF EDUCATION POSITION OR POLICY.

FORMERLY KNOWN AS THE OFFICE  
OF RESEARCH AND DEVELOPMENT IN  
Daniel Lowenstein

THE OFFICE OF RESEARCH AND DEVELOPMENT IN  
EDUCATION, HEALTH, AND WELFARE  
NATIONAL INSTITUTE OF EDUCATION  
1200 K STREET, N.W.  
WASHINGTON, D.C. 20004

Daniel H. Lowenstein  
Department of Man-Environment Relations  
The Pennsylvania State University  
November 1975

2

**COLLEGE OF  
HUMAN DEVELOPMENT**  
PENNSYLVANIA STATE UNIVERSITY  
UNIVERSITY PARK, PA. 16802

## FORWORD

I hope that all devotees to the concept of Wilderness Adventure Programs will excuse me for this rather objective, almost mechanical accumulation of information on programs which are so 'personal' in the nature of the experience they provide for many individuals. However, I think the extreme importance these programs may have for our society merits an attempt to enhance our understanding of them, so that we may better realize their potential for the future.

As far as I know, this is the first attempt ever made to accumulate information on Wilderness Adventure Programs as an activity in general. Because my time span in which to carry out this research was limited to two months, there are certainly numerous instances of incomplete material. It is my hope that this study can act as the groundwork for a more complete collection of knowledge on this topic. I would sincerely appreciate any additions, comments and critique which might serve to better improve the appropriateness and extensiveness of this profile.

Because of the nature of this profile, certain chapters may be more relevant than others for individuals with specific interests. Students interested in the history of Wilderness Adventure Programs are referred to Chapter I; persons concerned with planning such programs should look at Chapters V and VI; and those interested in the possible application of the programs may find Chapter VII informative.

I wish to express my sincerest gratitude to Ms. Jean Kinnear, whose energy and direction provided the initial impetus to carry out this study. Also to Dr. Betty van der Smissen, Dr. Joachim Wohlwill, Ms. Sharon Koepke and Ernest Partridge, who either directly or indirectly supplied some of the information and thought contained herein.

@ Daniel H. Lowenstein  
November, 1975

## TABLE OF CONTENTS

Chapter I: Introduction	1
Typology	2
Chapter II: Activity Description	3
History	3
Functions	9
Actions	11
Knowledge	15
Equipment	16
Temporal Considerations	16
Formalized Control	17
Cost	17
Instruction	18
Chapter III: Participants and Non- Participants	19
Popularity and Extensiveness	19
Participant Characterization	20
Participant Groups	22
Meaning of Participation	23
Chapter IV: Demand and Consumption Factors	26
Causal Socio-Economic Factors	26
Christy's Elements	29
Future of Wilderness Adventure Programs	31
Chapter V: Associated Resources	32
Natural Environment	32
Areas, sites and facilities	33
Compatibility	36
Suppliers	37
Chapter VI: Legal Aspects	38
Legislative Aspects	38
Administrative Aspects	43
Judicial Aspects	44

Chapter VII: Problems - Issues	46
Overview	46
Criticism	46
Research Related to Wilderness Adventure Programs	48
Wilderness Adventure Programs as an educational tool	52
Wilderness Adventure Programs as a therapeutic tool	56
Wilderness Adventure Programs as a unique recreational experience	61
Conclusion	65
Appendix I: Bases and Natural Resources	67
Appendix II: Examples of Wilderness Adventure Program Course Content	68
Appendix III: Standard Student Equipment for COBS Summer Course	69
Appendix IV: Addresses of Suppliers	73
Appendix V: Review of Research Related to Standard Courses	76
References	81

#### LIST OF TABLES

Table I: Functions of Wilderness Adventure Programs	11
Table II: Length and Costs of Programs	17
Table III: Popularity Graph	19
Table IV: Natural Environments Used	32
Table V: Legislative Committees	42
Table VI: Government Agencies	43
Table VII: Results of Henry Study	78

## CHAPTER I

### INTRODUCTION

In the past few years, programs which are based upon a wilderness experience have received more and more attention as to their value in our increasingly technological, machine-built world. These wilderness programs are characterized by their use of the outdoor setting as a backdrop for experiencing nature 'first-hand,' oftentimes with an emphasis on personal growth, nature study, 'survival' training or environmental awareness.

This paper is a discussion focusing upon one class of wilderness programs; those specializing in the incorporation of 'adventure' activities. Whether these programs include such forms of outdoor recreation as rock climbing, white-water canoeing, extended hikes or similar experiences, all use these activities to create a number of challenging and often stressful situations as a means for attaining certain goals.

I choose to use the term "Wilderness Adventure Program" (WAP) to classify this particular type of wilderness activity. Thus such programs as resident camps, environmental education seminars, nature centers, etc. which might include adventure activities as a relatively small part of their curriculum are not included in this paper. Also, those programs which focus upon one particular adventure activity, such as rock climbing schools, are not considered here, since the goal of these programs is generally to develop competency in particular skills of an activity.

One might question doing an 'activity profile' on something which is actually comprised of a number of separate outdoor recreational activities. Indeed, profiles could be, and have been, done on some of the particular facets of WAPs; but I choose to deal with this class of wilderness programs as an activity in itself. The reason behind this will hopefully become clear through the remainder of this paper. Let it suffice to say here that I believe that there is value in inspecting these 'multi-disciplinary' programs as a whole, since their merits lie within the experience of wilderness adventure in general.

The term "outdoor recreational activity" has been locally defined as "an engagement or pursuit which gives a recreational experience to participants, and which depends upon the utilization of the natural environment." (100.) If one considers WAPs as programs for which engaging in

adventure is a primary pursuit, then they satisfy the above definition, and thus can be the object of an activity profile.

### Wilderness Adventure Program typology

Typologies are classification systems being used as an aid in delineating the many forms of outdoor recreation. In this section, WAPs will be placed into the framework of a number of typologies, in order to better understand their place in the realm of outdoor recreation.

Under the Douglass System of "Forest recreation Activities," which is based upon management, WAPs can be placed in two categories. The base camp which is common to most programs could be considered as a site for land based "Intensive Activities;" those which are centralized and have concentrated use. The expeditions and other extended trips which are universally part of WAPs would come under the heading "Extensive Activities," which take place over large areas where minimum development is required. These, of course, can be land or water based. (?)

In the "Statewide Comprehensive Outdoor Recreation Plan" classification system, WAPs would come under the general heading of "Environmental Related Recreation," including the sub-categories of "water activities" and "outing activities. WAPs emphasizing winter camping would be classified as "winter activities." Since the programs often entail survival skill training, ecology lessons, etc., they would also be included under "Outdoor Education." Finally, the general heading "Creative, Aesthetic, Educational and Cultural Recreation" is applicable here, since the programs are beginning to place more and more emphasis upon activities which develop an understanding of the outdoor environment. (13: )

WAPs can be placed in the classes of "III-Trips and Outings," "IV-Outdoor Living," and "V-Outdoor Related Sports" in the Carlson, Deppe, Maclean system for obvious reasons. (3:440-7)

An application of the Pennsylvania State University "Watershed Project Classification System" is deferred here, since the scheme is still not well enough defined at this time. The basic ideas behind this typology, however, will be used later in this paper as a basis behind a description of WAPs as a unique recreational experience. (See the final section of Chapter VII.)



## CHAPTER II

### ACTIVITY DESCRIPTION

#### History

Any description of Wilderness Adventure Programs is incomplete without a review of the ideas, thoughts and developments in the evolutionary history of such programs. Since most of the forms and functions of WAPs today have roots in programs of past decades, understanding of their development can give some insight into what they are at present and in what direction they may be headed.

It was not until the mid-1960s that WAPs became varied in terms of organizational suppliers. For the most part, any history of WAPs prior to that time is really a history of Outward Bound.

Though WAPs are truly an international phenomenon (programs are located throughout the world), the first programs developed in England. The mentor behind their initial growth was a school headmaster of German descent, Kurt Hahn. In 1933 he arrived in England, since, as a Jew and an open opponent of Hitler, Germany was no longer a suitable home. He had a number of friends in Britain who were either acquaintances in the teaching profession or parents of some of his previous pupils, and were able to assist him in continuing his educational pursuits. Hahn had a number of educational theories which he was convinced were necessary to apply, at a time when the European political systems were in such a state of turmoil. The basis for his theories was a belief that:

...the lethargy and crisis of adolescence are not the inevitable stages in development that they have almost been assumed to be, but that a system of training devices- athletics, expeditions, projects and services- can be used to avoid them. Modern youth... is sick because society does not provide them with challenges to develop basic human characteristics." (65:18)

He had used these ideas as the framework for his school in Salem, Germany, and wasted no time in establishing a new school in Gordonstoun, England. The first school season of 1933 saw characteristics which were to become a tradition; boys in snorts, taking early morning runs, and keeping track of their training programs with charts in which they recorded their daily accomplishments. Athletics were an integral part of his system, for Hahn felt that athletic dexterity and endurance were



necessary for a strong character. He did not place much emphasis upon the actual accumulation of knowledge itself, but believed more in the development of powers of judgement. His educational ideal was therefore the morally responsible man, not the scholar or artist or athlete. (65:71) He imposed a number of strict rules, including such demands for conduct of no lying or fighting, and was generally feared by staff and students alike. As the school prospered he detached himself more and more from the daily functions. It was not until he retired in 1953, however, that the school's program was changed to more of a conservative and conventional educational format.

Another of Hahn's strong beliefs was inspired by writer Henry James, in an essay entitled "The Moral Equivalent of War." James pointed out that war, for all its horror, has been known to bring out the best as well as the worst in men- heights of courage and compassion, depths of self realization that might never be probed in more normal pastimes. He posed the interesting question of whether some alternate form of struggle and challenge, retaining only the desirable aspects, might be evolved. (47:144) Hahn felt that such aspects of war as survival were experiences which could be pursued in a non-war setting. By risking their lives through learning and employing survival technique, boys would not only "acquire a new attitude toward life," but also provide a service to others in their capacity to handle emergencies. (65:18) He incorporated these ideas at Gordonstoun in the form of the 'Morey Badge', achieved through the demonstration of prowess in athletics, on land and sea expeditions, in life saving and by observing training conditions. In 1941, when Gordonstoun was moved to Aberdovey in Wales from fear of a Norwegian attack and pressure from the locals, Hahn found the opportunity to extend his ideas concerning the use of real challenges as a tool for education.

A shipowner by the name of Lawrence Holt met Hahn and expressed his dissatisfaction in the apparent inability of British seamen to handle emergency survival situations. He felt that with the development of engines and complex instrumentation, seamen had lost their sense of the elements, their interdependence, and their ability to rely on their own physical, nervous and technical resources in the event of a calamity. (79:28) Such lack of 'will to survive' was seen as responsible for the large number of seamen being lost at sea as a result of German attack. Holt felt that employing the theories of Hahn in a short term course of "intensive small boat experience and training in endurance" could instill once again the necessary qualities of good seamen- alertness, vigilance, close comradeship, humility and deep sustaining faith. (52:53) Thus, with Holt's financial backing, Hahn began the first "Outward Bound" sea school at Aberdovey.

3

The initial goal of the first Outward Bound programs was survival training for British seamen, but both Holt and Hahn agreed that the challenge course was "less a training for the sea, than a training through the sea." (65:71) For this reason, the program continued after the war ended. It was apparently being recognized by the British public that challenge in controlled circumstances did something for an individual's personal development. It was also noted that the programs at Aberdovey were memorable and worthwhile experiences in themselves: "It is natural and good for the young to seek outlets and tests for their growing powers, their sense of enterprise and adventure. For the great majority, the test of real adventure has been lacking. Our way of life encourages more and more the enjoyment of thrills vicariously." (52:53) The widespread recognition of Outward Bound as a useful program was evidenced by the interest of many midland manufacturing companies which were sending their apprentices to courses. In 1945, 33 four-week courses reached over 2,000 boys. (52:53) Because of the increased publicity, private donations and fund raising events, the Outward Bound Trust was founded in 1946 as the school's governing body. The Trust incorporated Hahn's philosophies into the formulation of principles which would guide the school:

...They must be residential and the courses must last for a minimum of four weeks. They must be opened to all, based on a spiritual foundation, and must contain a diversity of occupations and nationalities, without political or sectional bias. They must present each boy with a set of conditions and give him possibly for the first time, the opportunity to discover himself. These conditions, self-discipline, teamwork, adventure, physical hardship and some risk, are rarely met with except in time of war. They must endeavor to develop character through training with a vocation or other practical interest. (79:29)

The courses entailed four weeks of instruction in survival skills and technique, short sea expeditions, athletic endeavors and service to the public. Those participants who attained set standards were awarded a badge in particular skill areas. The badge system was soon discarded, however, and a single badge was given upon completion of the course.

The growth in number of schools in the following years was due to the continued acceptance of the special form of education at Aberdovey as an important tool for the character training of young people. At times, Outward Bound was conceived as a panacea for the problems of the world. At a fund raising dinner for the Outward Bound Trust, Master of Ballial, Lord Lindsay of Birker, hoped to see the day when six months of the military training of young men would be in Outward Bound conditions. He went on to say that the Trust,

by helping young people to lead far happier and more useful lives, might be taking a step toward preventing another war. (53:276)

In 1950, the second Outward Bound school was founded at Eskdale in the Cumberland Mountains, with an expressed emphasis on personal achievement rather than competition. The program included "running, jumping, the javelin... five mile walks, rope work, pioneering and tree felling." (54:474) The school was continuously on call for mountain rescue, and allowed a greater amount of free time than the previous programs. Moray Sea School in Scotland, which was founded in 1949, independent from the Outward Bound Trust prior to 1952, centered their activities on the sea expeditions with the sixty ton schooner 'Prince Louis.' It was here that the idea of the twelve-man 'watch' developed; referring to teams of boys who lived and worked together throughout the program. This is a concept which is central to the theme of a number of modern WAPs. The Times Educational Supplement of London was impressed by the program at Moray, and concluded a descriptive article publicizing the school by saying: "In days when so much is talked and written about citizenship and about leadership, discipline, self reliance and so forth in an adolescent population which is alleged to lack these qualities, at this school...something is being done." (55:721)

The 1950s saw the expansion of the Outward Bound program to other places in England, Ullswater in 1956 and Devon in 1959; and to other countries as well. In 1951 a school opened in Nigeria, and later in Germany, Kenya, Malaysia and Australia. (57:1304;59:1128) The German school came under sharp criticism from Englanders associated with Outward Bound as being too easygoing. Whereas the English schools attempted to take boys to the limits of their capabilities, "there was little chance of a boy being unnerved by the German idea of Outward Bound." (58: ) The apparent fact that fire duty was not stressed, that experienced guides attended the long term expeditions, and that individuals were given little chance for initiative was frowned upon by the Trust. This was partially explained, however, by a popular observation in England at the time, that "the older generation in Germany still feels unable to command, or the young to obey, is one of the consequences of Germany's past." (58: .) One of the reasons behind Germany's more subtle approach may have been due to a greater emphasis placed upon Outward Bound as a formal educational alternative rather than a program geared toward adding adventure to youth's experiences. There were initially problems in Germany when parents objected to their children missing an entire month of school study. The Minister of Education then declared that only entire classes could attend the courses, thus essentially adding it as a part of the formalized school systems. One German headmaster stated that a course at Outward Bound was "not only thoroughly justifiable within the framework of grammar and

secondary school education, it was in fact a necessity if the educational tasks of the schools was to be properly understood." (57:1304)

Meanwhile, in the United States, establishment of adventure programs took a bit more time to get started. In 1955 the idea of a week of school at a residential camp was being heralded as "one of the newest and most sensational developments in outdoor education." (29:8) It was estimated that approximately twenty-four states had either established courses or pilot programs in the use of the outdoor setting as an alternative school setting. These camps made no mention of adventure activities as an integral part of the camp-week. One possible move in this direction was a program in Orinda, California, which had a "three-week session of school in the wilderness," but even there it appears that there was no emphasis on involvement in adventure activities. (38:8)

It was not until 1962 that Outward Bound reached America, when a school was inaugurated in Colorado. Some Englishers believed that the need for Outward Bound in the U.S. paralleled the need in Britain. It was said that "Statistics from the Korean War showed lack of inner strength in the country's youth. One of every three prisoners, it is said, collaborated with their captors for better treatment. Apparently, few tried to escape." (62:275) It is difficult to determine whether this was a factor behind the adoption of the program in the U.S..

The Colorado Outward Bound programs were very physically oriented, including running, hiking and a six mile marathon; thus Hahn's concepts of character training through challenge were certainly present. However, there appears to have also been a strong feeling that the wilderness setting had much to offer as an experience in itself. The Chief Inspector of Colorado Outward Bound, Ernest Tapley, indicated this when he said: "The mountains and their inhabitants place adventure and character before us... They are ours to observe and absorb." (61:659) This is one of the first instances of incorporating the appreciation of the environment as a facet of the Outward Bound program, a trend which has become quite marked in many WAPs today.

The Outward Bound program caught on in the U.S. for much the same reasons as their growth in England; parents, employers and teachers saw improvements in youths who attended the courses. In an article well circulated by Readers Digest magazine, Lydia Lawrence proclaimed: "It's hard to believe that such a complete and lasting transformation can be achieved in such a short time. But in nearly every case the cocoon of youth drops away and the true fiber of man emerges." (45:191) With increased popularity via the press and television, schools were soon established in Maine, Minnesota, Oregon, North Carolina and Texas.



By the mid-1960s, other forms of Wilderness Adventure Programs were coming into existence. Paul Petzoldt, a former instructor at Colorado Outward Bound, felt that the Outward Bound courses placed too much emphasis upon challenging situations for their own sake. He founded a new school more oriented toward leadership and good judgement through fun and learning. (35:55) His National Outdoor Leadership School was considered by many as a 'finishing school' for Outward Bound, involving a longer course with more time for expeditions and the learning of outdoor living skills. Basing the school in the Teton Mountains of Wyoming, Petzoldt started from essentially nothing, and even with the competition of a well established Outward Bound program, managed to find considerable public interest. Though still having one base of operations, the school offers numerous courses which take place in various parts of the U.S., and one in Africa.

A number of other WAPs have come into existence in the past few years, but all appear to be more limited in their scope of operations and access to the public when compared to Outward Bound and NOLS. Inspired by a survival ordeal in his younger years, one Garret Oldhouse offered a school specializing in "survival skills for those who frequent the wild." (39:26) With a base located in the Pintlar Wilderness Area of Montana, Oldhouse's three-week course offered a program of skills learning, practice and application. A similar WAP was founded in 1969 in the Cascade Mountains of south-central Washington by two brothers, Darvel and Darryl Lloyd. Named after the central volcanic peak in the area, the Mount Adams Wilderness Institute offered a ten to fourteen day course which specialized in mountain expeditions. This included not only partaking in the actual assault of a mountain peak, but also the planning, practice and special skills necessary for such an undertaking.

WAPs also became popular in the U.S. as extensions of established residential camps and formal educational institutions. A program out of Camp Chuoyga in New York actually offered a one week 'adventure' of hiking and mountain climbing to seven and ten year olds. (20:19) Institutions also began to incorporate such activities in their programs. A childrens home in Boise, Idaho began using the 'adventure program' as part of their therapeutic endeavors. (43:50) Dartmouth College established an extension of Outward Bound through their William Jewett Tucker Foundation, making it part of the regular course curriculum. (103.) The State University of New York created a three-week semester break program involving snowshoeing, winter camping and orienteering, with the educational purpose of letting recreation majors have 'on-sight' training in those outdoor recreation activities.

By the 1970s, the WAP appeared to be recognized as a useful tool for the achievement of various goals. (This will be a main focus in other parts of this survey.) Indeed, not only were there a number of schools specializing in such programs throughout the year; there was also a significant number of institutions, residential camps, colleges, high schools and even corporative interests including WAPs as part of their own structure.

### Functions

It is hoped that the history just presented can give an idea of the development in conceptualization of what functions the Wilderness Adventure Programs have. Initially, of course, the early WAPs were patterned after Hahn's Gordonstoun educational methods; with the expressed function of teaching seamen how to better handle survival situations at sea. As the war passed, the Outward Bound Trust began to emphasize the character development which appeared to be an inherent part of the program as an end in itself, rather than actual preparation for emergencies. This was the first major shift of the functional development in the evolutionary history of WAPs. At first, the goal of character development was very 'macho,' emphasizing a toughening of boys through rigorous activities, which was "the end product of a great challenge mastered, when the mind commands the body to do the seemingly impossible, when strength and courage are summoned to extraordinary limits for the sake of something outside the self- a principle, an onerous task, another human life." (67:74)

This function of WAPs as a tool for 'character development' has become much more delineated in modern programs. Some schools interpret the goal of character development as "development of sense of purpose and a strong desire for achievement," or improvement of self confidence and self concept. (21:43) Others place emphasis upon personal growth in the areas of judgement and leadership. It appears that each school has formulated their own ideas of what 'character development' entails.

Another functional trend was initiated with the realization that WAPs provided a setting which allowed a participant to experience some of the group dynamics involved in working together with other individuals. At first this was fostered in the 'team spirit' and competition approach, but this soon gave way to an emphasis placed upon the importance of communicating with others and efficiency in working together. The educators at the earlier Outward Bound schools in Germany recognized this function as being of value, for they noted that teacher-student relations improved after

participation in a course. The idea of communication between individuals of different races was an expressed function of the Outward Bound school Kenya, which integrated their course with British and Kenyans.

The most recent trend in expressed functions of modern WAFs has been the utilization of adventure experiences in the wilderness setting as a tool toward the attainment of a greater appreciation of the outdoors. Also, to enhance a participant's understanding of not only the environment, but man's place in the environmental realm. This idea had its roots back in the 1950s, when a few officials of Outward Bound made note of the value in giving youths the opportunity to experience the wild. It was not until the late 1960s, however, that this became an expressed purpose of a number of programs. This was probably due to a growing concern for the environment by the American people. Lee Maynard, an individual involved with the administration of Outward Bound in the U.S., expressed this concept well:

Some of the lessons that everyone should eventually learn cannot be gleaned from books or taught even in the best of schools; they can only be learned from experience of a special kind. Education, in this sense, cannot be packaged, all that can be done is to offer the opportunity and the setting. Nature, too, has dimensions that are elusive in their effect on the young, and which are too intangible for measurement. They can only be sensed or felt.

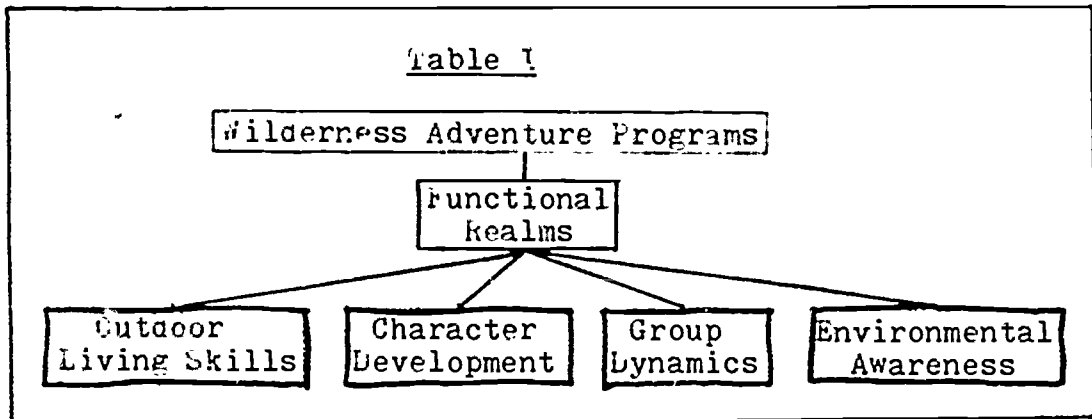
When education and nature are combined to produce an effect, no one knows the alchemy by which experience is transmitted into knowledge. The dunes of Cape Cod and the coast of Big Sur are nothing more than places where land and water meet, yet seen through receptive eyes, the experience can illuminate the whole mystery of human existence. And a youth who encounters, for the first time, a stretch of wilderness with which he must learn to cope in order to survive, almost inevitably discovers much, not only about nature, but about himself.

The experience is based on the belief that man is a part of nature, and that not only is it important for him to escape his evolutionary history, it is important in our industrialized society to reaffirm his connections with nature in an active way. (46:77)

All the present WAFs have functions with roots in one or more of these trends in their evolutionary history. The first being the learning of survival and outdoor living skills; second, the development of character (interpreted in various ways); third, the understanding of group dynamics; and last,



the understanding and appreciation of the natural environment. This is portrayed graphically in Table I.



The actual applications of these functions for more specialized use are treated in Chapter IV, "Demand and Consumption Factors."

### Actions

Though there are literally scores of different activities composing the structure of WAPs, there appears to be three specific phases of actions which characterize all of them. They are: 1) On-base basic conditioning and skill development; 2) Application of skills in the wilderness setting with supervision; 3) Experiences in the wilderness with limited supervision, if any.

All WAPs have an introductory phase which prepares the participant for the later facets of the program. In some cases, this phase actually commences prior to arrival at the base camp, for students are encouraged to engage in some physical conditioning in preparation for the course. (37: 0) After being received at the base camp on the first day, participants are given a general orientation to the facilities, issued equipment and assigned living quarters. They then begin a period of usually 'intensive' skills training seminars. Throughout this initial phase, some programs include such activities as running, swimming, obstacle courses, etc., used to improve the physical condition of the participant in preparation for the more rigorous activities of the later phases. Other schools merely integrate the conditioning in with a more 'low-key' approach, building stamina over a longer period of time involving the later phases.

Depending upon the nature of the program, a participant is instructed in such areas as fire building, outdoor shelters, backpacking skills, map and compass, first aid and other outdoor living skills. Oftentimes there is an emphasis upon

learning how to care for oneself in emergency conditions, including such topics as edible plants, cold weather precautions, drownproofing, etc.. Usually the base camp is located in close proximity to natural resources which suffice as settings for introduction to rock climbing, rapelling, mountain rescue techniques and cliff evacuation. These skills are sometimes approached in the second phase of WAPs, when groups of participants go with an instructor into the wilderness with the purpose of practicing and applying the skills learned on base. (Special mention should be made here of the National Outdoor Leadership School, which essentially combines the goals of this first phase into the second. That is, the groups commence on the second phase on the second day, incorporating the teaching of skills with the expeditions.)

Usually this second phase involves a group expedition, either on land or water, depending upon the location of the program and the course's specific emphasis on skill development. An instructor, whose role generally changes from conveying skill technique to acting as a resource and aid when necessary, accompanies the participants. It is usually in this expeditionary phase that the idea of teamwork and communication is stressed. The expedition, be it a canoe voyage or a summit assault, generally has some specific goals. These might include the completion of a certain distance of travel, achieving maximum distance in a limited amount of time, or even a more subtle goal of trying to 'enjoy' the wilderness environment as much as possible. Of course, this last goal can be interpreted in many different ways; but it refers to the programs which favor fewer miles per day versus a more in-depth exploration of the surroundings. These are generally the programs which stress the function pertaining to appreciation of the environment.

Because there are goals involved in such expeditions, and a group of participants with varied interests and skills are involved in the considerations of the goals, the instructor generally tries to make the participants aware of the positive aspects of working together. Thus the actions in this phase are very much oriented toward the entire group attaining the goals of the expedition. It should also be noted that this is often an evaluatory phase in which the instructor can assess the participant's capability in application of previously learned skills, and determine their readiness for the final phase.

In the vast majority of the WAPs reviewed, the highlight of the entire experience is considered to be the final exercise which the participants carry out on their own. This phase is often the focal point of the entire program, is stressed by the instructors as the final application of the course, and is generally expressed by most

participants as being the most memorable facet of the program. There have been two ways of carrying out this phase in the WAPs to date. The first is a group expedition without the instructor, either after completion of the second phase, or during the last few days of the main expedition. The main group is generally divided into smaller groups, often numbering four individuals to each 'final' team.

The second form of this phase is a "solo," in which a participant experiences the wilderness in solitude. Either a participant is placed in a particular location and instructed not to move away from the area until picked up later, or the participant leaves the base camp on his own and returns (hopefully) after a predetermined amount of time.

Generally the amount of equipment allotted to the single participant or the small group is held to a minimum, since it is expected that they can rely upon the skill development of the previous phases for their well-being. Thus this phase is generally an attempt to place a participant in a 'survival' situation, either with a few individuals or completely alone.

Upon completion of the final phase, there is generally a certain amount of debriefing; i.e. a retrospective review of the program, its' effects; applications to other situations, etc.. The participants also are required to return equipment and check out of the base camp. Certificates are issued on the last day to those who completed the course.

It is important to keep in mind that this is a somewhat gross generalization of the 'actions' of WAPs. Sometimes the sequence of the phases as presented are interchanged, though in all cases the instruction of skills is the initial phase. There are a few programs which omit the third phase. No considerations have been made here for the actions between phases; let it suffice to say that a certain amount of transportation, debriefing, relaxation and introduction is carried on between phases.

Examples. For added clarity to this section, a few examples of the actions in some particular WAPs, are presented. A cross-section of some of the existing types of courses is given, rather than a list of all schools in existence, though all programs have qualities which make them unique.

All the Outward Bound Schools have the same basic programs:

Physical conditioning in the early days merges with basic instruction to the basic skills you need to complete the course. There's instruction in safety

and first aid, equipment use, search and rescue techniques, food planning and cooking, map and compass skills, route finding, and environmental awareness.

These skills and others are applied in progressively more challenging situations during the course: an extended journey that may involve canoeing, backpacking, sailing, mountain climbing, or some other activity; a period of contemplation and self-sufficiency known as solo; and a final journey planned and executed with minimal supervision. Service projects, stressing group cooperation and the value of helping others, are important part of the courses. (98.)

The actual course content, of course, depends upon the particular Outward Bound school. Also, the many different types of courses at each school, due to consideration for participant characteristics and time involvement, results in many different combinations of a basic format.

Appendix I (pg.67) gives a list of the six Outward Bound schools with their location and particular unique characteristics. Appendix II (pg.68) gives a more detailed description of a standard course at the Hurricane Island Outward Bound school.

The National Outdoor Leadership School program is centered around a relatively long group expedition. The participants are issued food and equipment on the first or second day, and after introduction to the planning aspects of wilderness travel, set out on an expedition. The first week involves classes in hiking, map and compass, knot tying, cooking; incorporated into the day's travel. (Generally backpacking six to eight miles a day.) Participants are also taught practical conservation, i.e. campfires built in trenches, tidiness in campsites, etc.. In the following weeks, through lecture, demonstration and practice, they are taught the art of fly and spin casting, be-lay technique, rappelling, Tyrolean traverses, glissading and self arrest. The climax is the survival journey, a three to five day period of travelling for the last 40 to 50 miles of the expedition without food, in groups of four to five without supervision. (31:41-3) Once again, there are variations on this 'basic course.' Appendix II (pg.68) includes a list of some of the specific topics covered in a typical NOLS wilderness expedition.

The Asheville School in North Carolina offers two basic short-term programs. The first is a summer camp; "During the first few days of training the camp will be divided into groups according to age and experience, operating in small units, a wilderness backpacking expedition will fol-

low . These groups will then alternate between white-water kayaking, caving and rock climbing..." (95.) Also offered are the Western Mountain Climbing Expeditions, which involve backpacking to a site in the Grand Tetons for training in climbing rock, glacier and snow. These skills are then applied on a two-week backpack expedition.

The Mount Adams Wilderness Institute incorporates other unique facets to their program. In addition to skill development of mountaineering techniques, planning and carrying out of an expedition, some emphasis is placed upon daily discussions of topics related to outdoor living and the environment; "...pursuing such topics as glacier behavior...volcanic history...timberline ecology... flower identification, lava flow comparisons, and so forth." (96.)

The final phase in the form of solo travel was found to be unique to the "rainbow Camp" directed by Garret Oldhouse. The participants are involved in outdoor sports and educational travel, as well as survival schooling. The first week of orientation includes "detailed basic survival instruction...the second week...the youths hike and camp in well-supervised groups up to fifteen, then graduate to tests by twos, and finally they solo." (24:64) This solo involves travelling into the wilderness and returning to base after a few days.

### Knowledge

The knowledge of participants in the activities of WAPs is generally quite varied, but for the most part, the schools make no requirements as to a minimum amount of knowledge necessary for participation. Certain 'advanced' courses require that an individual show a certain level of proficiency in outdoor living before being admitted.

Because of their expressed concern for the effective and safe functioning of their programs, most schools employ only highly qualified instructors. This is evidenced throughout brochures giving descriptions of courses. The more noted schools assemble staffs including recognized experts in various fields of outdoor living. For example, the Hurricane Island Outward Bound school has included in their staff:

Reagh Wetmore, 45, of Boston University, one of the foremost experts on drownproofing. Paul Koss, 31, of Keswick, England is the rock specialist, with 15 years of expertise in England. A top climber with 90 new



routes, most grade 6, participated in the first successful British assault on the Bonatti pillar of the Augille. Euell Gibbons prepares students for solo. (67:74)

With the increased popularity of WAPs, and the large amount of competition for a limited number of positions as instructors, it appears that only those individuals with a high amount of expertise are accepted for teaching positions.

### Equipment

The equipment involved in WAPs depends upon the type of activities pursued in the particular course. For the most part, changes in the equipment used in the earlier courses as compared to that used now is merely due to advances in the design of equipment for the particular activity.

Climbing ropes, carabiners, webbing, pitons, chocks and other pieces of protection would be used for programs including rock climbing. Likewise, those courses which are part or wholly water-oriented make use of water craft; from canoes to whaling boats to schooners.

A rather complete equipment list for a standard summer course at the Colorado Outward Bound School is included in Appendix III (pg.69).

In all the WAPs surveyed, the participant is supplied all food and equipment necessary for the course, except for personal clothing and footwear, and in some cases a sleeping bag.

### Temporal Considerations

Length of Experience. As can be seen from Table II(next page), the length of WAPs vary greatly. The most common time span is a 'standard' three to five-week program. Becoming more popular are the special seven-day course, three-day seminars, and full-semester expanded programs.

Time of Participation. Though the earlier WAPs took place only during the summer season, in the past few years courses have become truly a 'year-round' activity. A number of special courses which emphasize winter snow camping and cross-country skiing are offered during the winter months. Table II includes information as to times of the year different WAPs offer courses.

Table II

<u>School</u>	<u>Length</u>	<u>Season</u>	<u>Cost*</u>
Outward Bound	21-26 days		\$500-600
	7 days		\$250-350
	5 days	Year round	\$150-175
	3 days		\$150
	Semester		?
NOLS	14-35 days		\$350-750
	10 days	Year round	\$200
	Semester	Feb.-May	\$1,875
Asheville School	14-21 days	Summer	\$250-450
	Semester	Fall-Winter-	
		Spring	?
Mt. Adams W.I.	6 days	Summer	\$175
	10 days	"	\$250
	14 days	"	\$300
Rainbow Camp	21 days	Summer	\$440 (1972)
	35 days	"	\$730 "

\*-Based upon prices given in 1975 brochures.

Formalized Control

There does not appear to be any standard regulations which apply to the activity of WAPs as a whole. Each program generally has their own instructional and safety standards, such as competency levels for instructors and requirements as to supervision of participants. Outward Bound, Inc., the governing body for the U.S. Outward Bound schools, states that "all U.S. Outward Bound schools and centers...are required to adhere to specific educational concepts, enrollment practices, and safety policies." (98.)

Cost

In the earlier WAPs, participants were usually sponsored by schools or employers, though no information could be found regarding what the sponsors paid for 'tuition.' Costs of the schools for participation in the past few years are listed in Table II. It should be noted that these costs do not include the cost of transportation involved in travel to the schools.



Outward Bound claims to give scholarships covering all or part of course costs to roughly 50% of their participants, with the financial support coming from individuals, foundations and corporations. (104.) A number of corporations which send their employees or employee's children cover their tuition. NOLS also offers scholarships for certain participants.

### Instruction

Since Wilderness Adventure Programs are 'instruction centers' in themselves, information on this topic is found throughout this paper. Appendix IV (pg.73) lists the WAPs for which information was found through either a literature survey or correspondence.

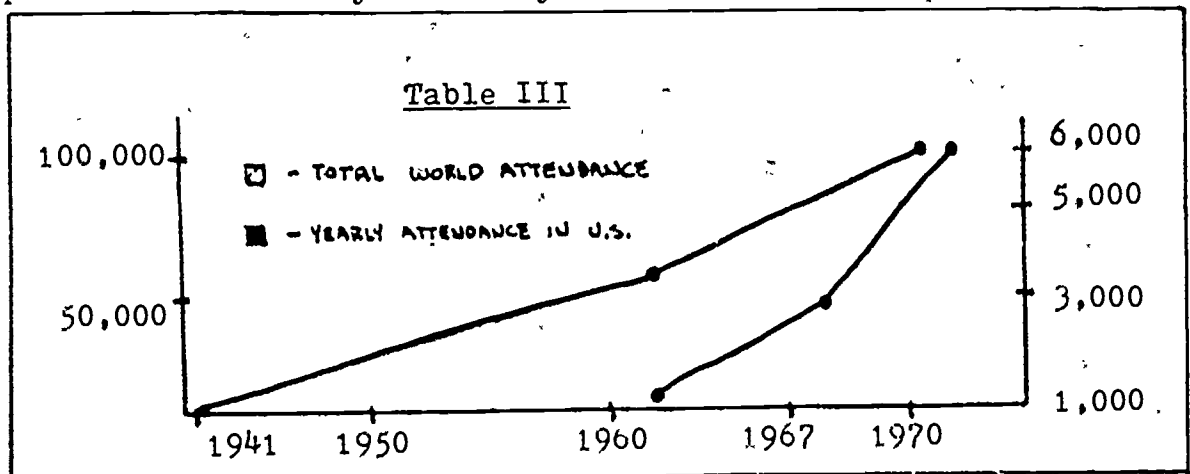
## CHAPTER III

### PARTICIPANTS AND NON-PARTICIPANTS

#### Wilderness Adventure Program Popularity and Extensiveness

It has been shown that the origins of WAPs came from England in the 1940s. Information on the popularity and extensiveness of WAPs since their inception has been accumulated from news articles in The Times Educational Supplement of London, and a few later periodicals. This information is limited to that associated with Outward Bound. No information could be found of popularity of other programs.

By 1945, four years after its' start, the Aberdovey Outward Bound school had held 33 two-week courses which had 2,000 participants. (52:53) From then on, the Outward Bound Trust saw a continual rise in attendance, as evidenced by their expansion to other locations in England, as well as other countries. By 1961, the courses had reached 40,000 British, along with another 10,000 participants in Germany. (57:1304) The Outward Bound school in Kenya, which began in 1952, reported that there had been 1,000 participants during the first nine years, with 405 attending the courses in 1961. (57:1304) Another indicator of popularity was an announcement and request for funds by the Outward Bound Trust in 1961, pointing to 1,000 applicants turned away in that year due to lack of space.



The first American Outward Bound school in Colorado started with 100 participants in 1962, and by 1972, schools throughout the U.S. were serving about 5,000 yearly. (30:37)

The latest Outward Bound publication reports that the six U.S. schools are reaching 6,000 yearly, with a total of 35,000 graduates since their first year. The most recent statistics found on all the Outward Bound schools throughout the world was in a May 1967 edition of Harpers Magazine, in which it was reported that total attendance since the first course at Aberdovey stood at 100,000. (25:70)

### Participant Characterization

The original WAPs, which had specific functions of survival skill development for seamen, were attended by members of the British Merchant Marine. By 1945, the Outward Bound school's more non-vocational approach encouraged participants with varied backgrounds to attend together. Industry, trade and the like began to sponsor employees, to the point where groups attained a heterogeneity characterized, in one report, by "shop floor apprentices, laborers and police cadets." (62:275) The school at Eskdale stated that there was a "big drive to reach a cross-section of the public...a body of boys of all dialects, jobs and customs..." (54:474) By the 1970s, WAPs had come to include even a broader range of participants, with courses open to all people regardless of color, ethnic background, economic status, sex or educational achievement.

Income. Originally, all participants were sponsored by 'parent' organizations, which enabled people from all income levels to attend courses. As mentioned earlier, the U.S. Outward Bound schools have tried to maintain a policy of 50% scholarship mix for those who are in need of assistance. In 1972, at the Colorado Outward Bound School, 599 students received some form of financial assistance; 219 came from a background of 'disadvantaged.' (70:1) For the most part, it appears that the participants either are in the lower income brackets and qualify for scholarships, or are in the upper brackets which can afford the relatively high cost of the programs. (It should be noted that tuition rates are presently about \$25 per day.)

Occupation. Initially limited to youths in the industrial and trade occupations, participants now include all occupational backgrounds from "hulking college types to sedentary businessmen to middle-age housewives." (98.) The special courses which have been developed for institutions have had a significant effect upon the occupational backgrounds reached. The programs designed for corporate concerns have involved such companies as Eastman Kodak, IBM, Gates Rubber Co., Adolf Coors Co. and Martin Marietta. Other programs have attracted individuals involved in education, such as teachers, administrators and student-teachers.

The majority of participants in WAPs in the past few years, however, have probably been students in high school and colleges.

Education. The educational background of participants has ranged from no formal educational training to college graduates with special degrees. There appears to have never been restrictions placed in this respect.

Age. The original Outward Bound schools limited their enrollment to youths from 16 to 21 years old. This was later extended to include 12 to 15 year olds accommodated in 'junior' courses. It appears that U.S. placed no upper age limits right from the beginning. An interesting account of a 66 year old women's reaction to an Outward Bound course was circulated in a 1966 issue of Sports Illustrated, (48:44-6+) Outward Bound courses now include participants as young as 12. The majority of participants come from the 15 to 20 age group.

NOLS appears to include almost the same age groups. The Asheville School opens their enrollment in different courses from junior high school age to adults. There are no requirements other than a minimum age of 15 at the Mt. Adams Wilderness Institute.

The youngest participants in WAPs to date seem to be the seven year olds in the program at Camp Chuoyga in New York, mentioned earlier. A group of youngsters were given ten days of in-camp training, then sent out on a 35 mile hiking expedition. (20:19)

Gender. Up until 1951, when the first Outward Bound course opened to girls, all participants were males. Since then, more and more women have attended courses. Almost all WAPs today have no restrictions as to gender, though the greater percentage of participants continue to be of the opposite sex. Outward Bound reported in 1975 that one-third of their participants were women. (23:68;56:321)

Residence. No specific information could be found pertaining to the residential backgrounds of participants. It appears that throughout the history of WAPs, the majority of participants have come from the urban and suburban areas.

Life Cycle. Participants in WAPs have been from all stages of the life span; including children, adolescents, young adults, adults, parents and entire families.

Life Style. The original WAPs reached youths involved in school, industry and trade. This mix, of course, has become quite diverse. The Moray Sea School expressed an interest in the diversification of their participants to include the blind, deaf and dumb, delinquents and business

executives. (64: )

Due to the increased spectrum of the individuals in terms of age, occupation, etc. now in attendance at WAPs, it is probable that people of quite varied life styles participate in the activity. This is evidenced by the corporate executives, emotionally disturbed, high school drop-outs and inner city youths which have attended Outward Bound courses.

Minority group membership. The earliest instances of persons with minority social or ethnic backgrounds becoming involved in WAPs was at the Kenyan and Rhodesian Outward Bound schools. In these cases, however, the white participants were the minority group of the region. One of the expressed values of the Rhodesian school was its "enabling young people of different races to meet on equal terms." (59:1128) The Outward Bound schools, through their scholarship programs and the feeling that a varied group mix added to a course, seem to reach various minority groups, though it was not found to what extent. Programs designed specifically for participants from the inner city have been held. (70.)

The National Outdoor Leadership School take a slightly different approach. As director, Paul Petzoldt has expressed his feelings that "I wish we could give more scholarships, so more poor kids and black kids could come, but to beg them to come would be patronizing and insulting. We do give a few scholarships, some to kids getting out of penal institutions." (35:55)

### Participant Groups

For the most part, participants in WAPs do not come as groups. Previous sections have indicated the various backgrounds associated with individuals attending courses. There are a number of organizations which use the WAP concept for their own staff training, thus fulfilling in part the definition of 'participant groups.'

Educational institutions have used the Outward Bound program as a supplement to the standard course curriculum. One example of this is East High School in Denver, Colorado, which offers a semester seminar for seniors. It takes place completely off-campus and is divided into three-week experiential models involving actual on-site learning and adventure activities. High schools also send their teachers to courses aimed at training them how to integrate WAP methods into the traditional educational structure. These same programs are also patronized by similar groups at the college level.

It has been mentioned previously that corporations have sent their executives and trainees to Outward Bound. Adolf Coors Co. is a notable example of this. Twenty percent of the company's executives have attended courses. (19:40-1) Their special 'management' courses at Colorado Outward Bound School grew out of a successful for the hard-core unemployed sponsored by the National Alliance of Businessmen. Besides sending their white collar workers, Coors requires individuals with unemployed backgrounds to participate in Outward Bound as part of their training for positions with the company.

Other organizations involved with the WAP concept are the Denver Metropolitan Youth Center, Inroads Inc. from Chicago, Massachusetts Division of Youth Services, Jobs Corps and Manpower Challenge. Generally, groups of participants from these sponsors are sent to specially designed WAPs, with such purposes as leadership training, crisis prevention and rehabilitation. (70.)

Since this information was gathered from sources made available by Colorado Outward Bound School, it is certainly only a limited survey of the number and kinds of participant groups in WAPs.

### Meaning of participation

One of the important facets in the development of WAPs as an outdoor recreational activity has been the interpretation of the meaning in participating in such a program. Ever since the formulation of their concept, numerous individuals have expressed their beliefs as to the needs of a participant which may or may not be satisfied through involvement in WAPs. The functions of WAPs presented in Chapter II can give a bit of insight as to the different needs which are attempted and/or claimed to be fulfilled. Thus, the activity has been interpreted to being conducive to development of outdoor skills, inner, group and environmental awareness. The problem with such claims, however, is two-fold. First, very little has been done to scientifically assess what an experience in a WAP is; and, second, the functional realms mentioned above are difficult to interpret in a standardized way. Thus, most claims are simply one person's opinion as to the meaning of participating in a WAP. One of the key issues of this activity is whether the functions as suggested are meaningful in today's society; and whether WAPs are, indeed, tools toward an individual's positive development in such realms. This will be considered in more depth in Chapter VII.



An important note to be made here is the distinction between the immediate experiences of various activities incorporated in WAPs, and the sum total of experiences of a WAP as an activity in itself. As an example, consider a course where participants spend one full day and night rowing their whale boat in order to complete their assigned task (Hurricane Island 'final' expedition). The immediate experience, that of being in a state of complete exhaustion, physical pain and questioning the value of the whole episode; would probably be quite different from that experienced upon completion of the voyage; one of pride, accomplishment and physical relief. This situation is found throughout many activities comprising WAPs. Rock climbing, morning runs and ropes courses probably initially entail quite negative experiences on the part of the participants. The reasons behind this, of course, are found in the concepts which have guided the evolution of WAPs. Kurt Hahn's belief in the merits of "challenge in controlled circumstances" led to the incorporation of activities felt to "reveal the inner worth of the man, the edge of his temper, the fiber of his stuff, the quality of his resistance." (65:18) "Friendship through hardship" was another early mention of this idea. (54:474) Thus a number of activities in WAPs are those which elicit stress and anxiety in the participant, immediate experiences which are generally not interpreted as very positive or enjoyable.

It is the overall experience of WAPs, however, which has been claimed to be valuable. In the area of skill development, it can be assumed that actual on-site training can facilitate an individual's mastery of outdoor skills. Concerning development in character, claims have been made of improvement in traits such as "courage, initiative, unselfishness." (56:321;57:1304) In a very important presentation before the Committee on Youth of the Ontario Parliament, Senator Clairborne Pell from Rhode Island cited the Outward Bound program as one which brings out the abilities of a participant of which he is not fully aware. (66:725)

The modern use of WAPs for employment training has become increasingly popular, due to the belief that programs "instill in our future managers the traits we can't foster in regular training- maturity, character, confidence, the will to succeed, and an addiction to excellence." (18:106) Earl E. Swartzlander, consulting psychiatrist for Coors, has observed that, for the most part, executives attending courses "are better leaders than before." (19:40) This is also extended to include development in group relations, where it is claimed that the Outward Bound courses "eliminate the phoniness of the chain of command and allow to share a raw experience with their peers." (51:36) Furthermore, it has been expressed that "One learns to revere life



by living it in its most elemental state; this builds self-respect and develops compassion and respect for others, their capabilities and their viewpoints." (21:43)

In the more recent functional realm considering environmental awareness, an example of the expressed benefits of a WAP experience is that a participant will "come to love and cherish the environment that provides this enjoyment and recreation, and thus realize that if they damage it, in the end they are not only hurting their fellow man and other life support systems, but also themselves." (34:81)

As a historical note, it is worth mentioning that early proponents of Outward Bound expressed the belief that the program also satisfied a need of youths to experience adventure activities, "to seek outlets and tests for their growing powers, their sense of enterprise and adventure. For the great majority, the test of real adventure has been lacking. Our way of life encourages more and more the enjoyment of thrills vicariously." (52:53) This idea maintains its relevancy with some of the similar theories of outdoor recreation today.

All these claims are based upon individuals' interpretations and observations of participants before and after their involvement with WAPs. The few cases of scientific approaches for such comparisons are presented in Chapter VII.

Numerous statements made by actual participants are contained throughout the surveyed literature. As conclusion to this section and chapter, the following quote, considered as one of the more interesting instances cited, is given:

None of us, I suspect, who was not an outdoorswoman before all this had become an outdoorswoman because of it, but that was never the point; in fact whichever girl liked it the least probably came off the best, having learned more than any of us what she is capable of. And that is the point. We are better than we know. If we can be made to see it, perhaps for the rest of our lives we will be unwilling to settle for less. (48:51)

## CHAPTER IV

### DEMAND AND CONSUMPTION FACTORS

#### Causal Socio-economic factors

Population. Due to the relatively recent development of WAPs as an outdoor recreation activity, the actual increase in population of different countries has probably had little to do with their growth. The increased percentage of people inhabiting the cities versus the country, however, has probably influenced participation considerably. It was noted earlier that early Outward Bound administrators noted the normal environment lacking in adventure. More recently, it has been suggested that some urban inhabitants seek outdoor recreation, especially in the wilderness setting, as an 'escape' or 'stress-release' from the heavily populated cities. Thus, urbanization may be a significant factor in the popularity of WAPs.

Leisure. The increased amount of leisure time available to individuals in the U.S. has undoubtedly played a significant role in the increased participation in WAPs. Since courses generally involved three to four-weeks of time, the relevant facet of leisure was the amount of vacation available. Thus young people have always had the summer vacation in which to participate. Adults, on the other hand, who have had limited yearly vacations, probably have not been as able to devote what would be an entire vacation to one activity.

Two trends now occurring should change this. One, most WAP schools are creating short, seminar courses lasting only five to seven-days. Also, vacations are getting longer. Thus more people will have the opportunity to attend shorter courses, leaving enough vacation time for other pursuits.

Transportation. Since WAPs are generally located in areas (of the U.S.) classified as resource-based (see Chapter V, "Areas"), transportation has played a key role in their increased popularity. Indeed, most WAPs are located a considerable distance from population centers. Thus travel to the activity can involve considerable distance and expense. Furthermore, an individual might find only one course offering a particular desired emphasis, located on the other side of the country.

The decrease in travel time and the increased ease of travel through transportation improvement has certainly made WAPs more accessible to the public, and this trend

will probably continue. (4:97)

Income. In the days when virtually all participants were sponsored by 'parent' organizations, the cost of schools was not a factor in popularity. Since no information could be found as to the course cost in those times, it is difficult to assess the change in ability of sponsors to pay for the youths. Over the years, the increase in discretionary income throughout the U.S. is an almost certain factor in the increased popularity of the programs. Though scholarships are available in some instances, the majority of participants in WAPs must provide their own tuition. The present costs of participation is rather high relative to other forms of recreation. Furthermore, transportation to the program sometimes costs as much as the tuition itself.

Regardless of the background of non-scholarship participants, the current rise in personal disposable income will make WAPs financially feasible to more and more people. Whether they choose this activity in lieu of less expensive activities is another question.

Education. The changes in the ideas regarding the effectiveness of traditional education and its role in society has been a major factor in the development of WAPs. The Germans were one of the first to include an adventure course as part of their regular school year. They felt that the Outward Bound experience was a valuable addition to the normal educational structure: "Experience shows that the loss in school hours involved in attending these courses is easily made up for by a greater willingness to work, and above all, an increased sense of responsibility. The boys are mostly far more independent, and have learned to set themselves stricter standards..." (57:1304) A superintendent of an early outdoor program in the U.S. claimed that the wilderness setting provided benefits "from the group living and closer contact between student and teacher." (38:8) It appears that more and more people associated with education are looking at WAPs as not only an effective supplement to traditional education, but a necessary part to a complete education.

An educator at Appalachian State University has pointed out that "Schools are not providing development in tenacious spirit, active curiosity, self discipline and sympathy for ones fellow man," and goes on to explain that the only way to develop these qualities is through WAP concepts. (32:77)

More recently, some educators are pointing to the belief that WAPs have the potential of providing an educational experience which even most modern outdoor programs cannot supply. Says Donald S. Warden, Professor of Recreation at Wyoming University: "Perhaps this learning from experience is missing from our outdoor programs, we tend

to structure them as much as in the classroom. A major challenge for the wilderness experience program is to involve participants in an educational experience." He believes that WAPs have this potential. (32:77)

The above citations are, once again, ones which obviously lack any scientific backing. However, there have been a small number of empirical investigations involving comparisons between the settings of the traditional classroom and WAPs. A review of these studies, along with a rather in-depth discussion of WAPs and their relation to education is contained in Chapter VII.

Change in philosophy. The changes in society's philosophy regarding the wilderness has probably had a definite effect upon participation in WAPs. Some of the best research on this topic is that presented by Roderick Nash in Wilderness and the American Mind. A brief synopsis of some of the ideas presented by Nash is presented here as background information.

In early times, the wilderness was considered in a rather negative way. William Bradford, one of the original settlers from the 'Mayflower,' described a "hideous and desolate wilderness." (11:23-4) It was not until the 1800s, in fact, that the Romantics began to show an appreciation for the 'mysterious' and 'chaotic' qualities of the wild. This led to a greater interest in the wilderness as a setting of worth in itself; and soon men like Thoreau and Muir were popularizing the beauty and order of the natural world.

By the late nineteenth century, the wilderness was becoming a source of pride for America, and the idea of the value of the wilderness setting was expressed in the growing preservationist movement. By the turn of the century, however, many Americans realized that what once had been a vast frontier was no longer existent. The vanishing wilderness "prompted many Americans to seek ways of retaining the influence of wilderness in modern civilization. (11:147) One result of this was the formation of the "Boy Scouts of America." The Boy Scout Handbook stated that people "who live nearest to the ground, that is, who live the simple life of primitive times; live long and happy lives. (11:48) It was hoped that boys would spend at least a month of every year away from civilization, keeping in contact with frontier skills and values." (11:48)

Aldo Leopold, the famous naturalist and poet of the twentieth century, promoted this philosophy. He felt that one of the special characteristics of the American culture was the history of the frontier, and the vigor and ruggedness associated with frontier life. "These, if anything, are the indigenous parts of Americanism, the qualities that set it

apart as a new rather than an imitative contribution to civilization." (11:188) He thus pointed to the value of the wilderness in maintaining "the opportunity for successive generations of Americans to acquire the characteristics of pioneers and to acquaint themselves firsthand with the conditions that shaped their culture." (10:188)

Undoubtedly, philosophies such as these were influential in the growing number of people who sought the wilderness for enjoyment. It is difficult to assess, however, whether these attitudes were a contributing factor to the popularity of WAPs, which are a relatively new phenomenon in the U.S.. By the 1960s, residential camping was rather commonplace, as were vacations spent camping at natural areas. The point to be made here is that every year the wilderness is becoming less and less wild in the minds of Americans. The idea of spending a few weeks in the wilderness is probably not as radical as was once thought.

In the past few years, the "back to the earth" movement has received recognition from our society. The movement, which started in the late sixties, represented a shift in philosophy by younger people toward striving for a greater awareness of the environment. The word 'ecology' was popularized through books like Ecotactics and celebrations such as "Earth Day;" which influenced people to take a closer look at the environment and learn to appreciate the 'balance' and beauty within. The idea of going into a natural setting took on a special meaning in its connotation as a method of "communing" with nature. This also probably had a significant affect on WAP popularity. Most schools publicize the unique opportunity for a student to learn about the environment through participation in their programs.

Thus, it can be seen that shifting philosophies regarding the wilderness as an acceptable setting for recreation, and the value of pursuing environmental awareness through interactions with nature, have been important causal factors in the popularity of WAPs.

#### Christy's Elements

In an article entitled "Elements of Mass Demand for Outdoor Recreation," Christy presents five factors which he considers important in assessing and predicting the popularity of an recreational activity. These are: 1) ease of participation, 2) desirable image, 3) characteristics which permit a strong identification with the image, 4) opportunities for demonstrating skills, and 5) comfortable and



efficient use of leisure time. In this section, WAPs will be analyzed according to each factor, and a prediction of popularity according to Christy's framework will then be made. It will be shown that the activity rates rather low in all categories, which supports the fact that a small segment of the total population presently participate in WAPs.

WAPs rate very low in the first element. Not only is the cost of courses rather high, but transportation to and from the school is generally extensive and costly. Christy describes one part of 'ease' as an allowance for gradual development of skills with enjoyment. (9:100) Most programs are quite the opposite of this; they thrust a very new, often stressful situation at the participant right from the start; and attempt to fit in as much skill development and activities as possible in a limited amount of time.

At present, there does not appear to be much of a popular image associated with WAPs. Because of the mixed backgrounds of participants, no single group is identified as people who frequent such programs. This heterogeneity probably greatly hinders the development of an image of the activity, since individuals cannot identify particular characteristics common to the few participants they might be exposed to.

There are very few kinds of "proof" which a person has which displays his/her participation in a WAP. At most, an individual might have a course diploma and a T-shirt.

It is probably difficult for participants to demonstrate their involvement in WAPs. First, in the program itself, ones audience is relatively small, i.e. the typical 10 to 15 person group. Second, the majority of the time, most participants are in settings quite different from the wilderness, and thus do not have the chance to demonstrate skills they may have learned in the wild. However, if one interprets the development of character and environmental awareness as skills which are affected positively through participation, than an increased receptivity by the public to these traits may affect the potential for demonstration of such 'skills' in the non-wilderness setting.

For young people, a three-week wilderness experience is probably an enjoyable use of their summer vacation. For the working adult with a limited amount of vacation time, such a length of involvement is probably too long to allow for a "comfortable use of leisure time." (9-101) Also, many individuals probably do not feel that the hardships, stress and challenge of three to five-weeks in the wilderness to be worth the possible long-term sense of fulfillment. This

may be a consideration for young people, as well, who are showing more and more of a tendency toward participating in activities which give more immediate pleasures.

The newer shortened versions of standard WAPs will affect the relationship of this activity and use of leisure time. They represent a more accessible length of leisure time for adults, and a lesser amount of hardship and challenge.

Due to the fact that WAPs rate rather low in all five factors, Christy would predict this activity as being limited in demand. This, indeed, appears to be the case, as a relatively small percentage of the population participate in the activity. In this framework, the demand will increase if some of the conditions noted change in a positive direction.

#### Future of Wilderness Adventure Programs

As pointed out in the former part of this chapter, the upward trends in the causal socio-economic factors of population, leisure, transportation and income will make the activity of WAPs more accessible to an increasing number of people in the future. These factors alone, however, will probably not account for any drastic change in the popularity trends of WAPs at present. The changes in educational views and philosophy toward the environment may be very influential to a rise in popularity. It is only in the last few years that these newer philosophies have received much attention, and it appears that the great increase in their recognition will continue in the future. The connection between the increased acceptance of these philosophies and an increased interest in WAPs is premised, of course, upon whether such activities do provide experiences which are conducive to the development of desirable characteristics (according to the changing educational and philosophical frameworks). Furthermore, according to Christy's criteria, an increased recognition by the public of these characteristics could facilitate the opportunities for demonstration of such 'skills.' Finally, the relatively new short courses will enhance the public's opportunity to participate.

In conclusion, the future of WAPs is probably based upon the changes in attitude regarding education and the environment, and the recognition of WAPs as effective tools toward pursuits in these areas.



CHAPTER V:

ASSOCIATED RESOURCES

Natural Environment

All of the Wilderness Adventure Programs surveyed in this study include the wilderness setting as an integral part of their program. Such locations as the Pintlar Wilderness Area in Montana, the Quetico-Superior Wilderness of northern Minnesota and Canada, and the Yampa and Colorado rivers are resources for these activities. In general, the schools have a base camp on private land, but make extensive use of public lands and waterways for their expeditions. Appendix I (pg. 67) lists the location of schools surveyed and some of the surrounding natural resources used.

These areas can be classified as to their habitat types. Brainerd has developed a system which divides the natural environment into: 1) Drylands, 2) Wetlands, 3) Water Areas and 4) Shores. (2.) Odum uses a slightly different approach; not dividing land into two categories, but considering fresh-water separate from salt water, i.e.: 1) Freshwater, 2) Marine, 3) Terrestrial and 4) Estuarine. (12.) Table IV shows examples of natural environments by habitat categories used as resources for the three primary types of activities in WAPs.

TABLE IV

<u>Habitat</u>	<u>Activities and Resources</u>
Brainerd:	
Dryland	BASE CAMPS; SKILL DEVELOPMENT AREAS CAMPSITES, TRAILS, MOUNTAIN SUMMITS ROCK FACES - LAND EXPEDITIONS
Wetland	LIMITED
Water Areas	LAKES; RIVERS FOR CANOE/RAFT TRIPS SWIMMING AREAS; OCEANS FOR SEA SCHOOL
Shores	INTERFACE OF LAND BASES / SEA SCHOOL
Odum:	
Terrestrial	SAME AS ABOVE; "DRYLAND"
Freshwater	LAKES, RIVERS, PONDS FOR EXPEDITIONS SWIMMING
Marine	SEA SCHOOL ACTIVITIES
Estuarine	LIMITED

The majority of WAP activities take place on land resources, specifically those lands in which the natural characteristics have been preserved. Herblands, which include the environs found in the higher elevations of mountainous regions, are used as a resource by any schools entailing mountaineering activities. Likewise, programs stressing backpacking in the lower levels make use of tree lands, specifically the sub-habitats; 1) Northern Narrow-leaved Evergreen forest, 2) Broad-leaved Forest (southern Appalachians), 3) Natural Forests of western North America and 4) Treelands of the Pacific Northwest. The Outward Bound school at Hurricane Island makes extensive use of the sea environment, whereas programs including canoe or raft expeditions make extensive use of lakes, rivers and streams. Many of the 'transition' habitats included in these types of environments are encountered, but are not used specifically. One exception is the "Bedrock" sub-habitat of Barelands (Brainerd) which, when in the form of cliffs, are used in rock climbing, an activity common to almost all programs.

Due to the rather rugged nature of WAPs, and their general disregard in avoiding what might popularly be considered 'desolate' or 'uncomfortable' environments, there are probably no habitats which could not conceivably be used as a resource. Those habitats distant from undeveloped lands, (i.e. prairie lands), and those altered by man (lawns, athletic fields) are probably not used.

#### Areas, sites and facilities.

Areas. There are a number of schemes which classify outdoor recreational resources into more specific areas in order to better understand and analyze their uses. (4:36) In this section, the areas used by WAPs will be classified according to three popular schemes, the ORRRC "General Classification of Outdoor Recreation Uses and Resources," that of Clawson and Knetsch, and the federal classification scheme.

The majority of activities in WAPs use areas listed by the ORRRC as "Class IV- Outstanding Natural Areas; areas of outstanding scenic splendor, natural wonder or scientific importance" (e.g. the Appalachian or White Mountains), and "Class V- Primitive Areas; undisturbed roadless area, characterized by natural, wild conditions, including 'wilderness areas'" (e.g. the Mt. Adams wilderness area). Some of the areas used by WAPs in England which are closer to population centers, may make use of "Class III- Natural Environment Areas", which are used for recreation in the natural setting but are close to urban areas. (93:79)

Clawson and Knetsch propose a three-fold classification scheme: areas which are user-oriented, intermediate and resource-based. (4:36) Thus almost all activities use those areas which would be classified as resource-based, whose "dominant characteristic is their outstanding physical resources." All the examples cited above would fall in this category. (Some of the British schools might be 'intermediate.')

The classification scheme proposed by A Nationwide Outdoor Recreation Plan is based on the type of resource used for different groupings of activities. Under such a system, WAPs would be considered in the categories of "Camping," "Water Activities," and "Winter Activities" for obvious reasons. "Nature Study" could also be included due to the emphasis being placed on that area by some programs. (92:712-3)

Due to the large amount of space involved in resource-based activities (approximating 'Class IV and V' by the ORRRC), and their limited use, there does not seem to be a problem in terms of supply for land-based activities. This may not be the case for water resources needed for white-water canoeing and rafting. Wild rivers are "limited in number, for the 3,000,000 miles of streams in the U.S., only 100,000 miles can be considered suitable for white-water canoeing." (92:749) Nonetheless, because of their location being relatively distant from population centers, and the limited accessibility via roads, most wilderness areas and many free-flowing waters do not receive too much use at present.

This will probably change, however, as exceptions already exist. Such resources as Yosemite Valley and the Colorado River are being limited to access by federal and state authorities, since it is believed that the numbers of people using these areas has reached a point where the quality of the resource, and of the experience, is being adversely affected. Permit systems are being introduced, in which a potential user must first obtain a permit before entering specified areas. (permits for access to parts of the Colorado River are now booked over two years in advance!) (101.)

Since WAPs place much emphasis upon the wilderness setting, and appear to prefer areas which do not receive too much use, they will probably continue to seek out resources not frequented by the majority of resource-based users. At present this does not appear to be a problem, but with the increased popularity of backpacking, mountaineering, etc. by the general public; more areas will receive more use, thus limiting those locations presently preferred by WAPs.

Site and facilities. Since most of the time in a WAP is spent on expeditions and the like, the amount of necessary sites and facilities is rather small. All schools have a central site of some sort, which provides shelter and food for participants in the first phase of the course, and a few facilities used in skill and/or physical training. The amount of site development is held to a minimum, in order to preserve the natural setting as much as possible.

Depending upon the size of the school, one or more centralized buildings are used for shelter, dining and classrooms. Many summer programs use tents with platforms as shelter for participants and instructors. Other permanent structures might include equipment sheds, boat racks, radio shacks, garages, maintenance sheds, etc.. Docks for boating and swimming facilities are usually used in programs which incorporate such activities.

Outward bound schools build a 'ropes course' and a wooden wall on-site to facilitate their program. The ropes course is a system of trees, logs, branches, ropes and cables which has a designated route over which a participant must travel. The path usually involves such things as "jumps from one uneven stump to another, rope swings into climbing nets, balance walks on elevated shakey beams;" and is used as a way of challenging an individual to climb and balance at rather high altitudes. (41-7) Another obstacle facility is a ten foot wooden wall. Outward Bound teams are required to get their entire group from one side to the other, only by going over the top. Requiring a certain amount of planning and coordination for success, this is claimed to be useful in developing group cooperation. (An excellent source for information about the materials and construction of these facilities can be found in Adventure Curriculum pg. 25-48, published by Project Adventure.)

The WAP site may also have a running and orienteering course, survival training sites (with fire areas, emergency shelters, etc.) and other specific skill development areas. A helpful comparison of WAP sites and facilities might be to a residential camp which is minimally developed, relying on more primitive methods of camping. There are a number of WAPs, however, which, due to previous site use, special temporal requirements or the program emphasis, use permanent buildings and related facilities to a greater extent.

Cliffs used for rock climbing and rappelling practice, ice areas, glaciers, portage trails, navigation aids, emergency shelters, river access areas, etc. may also be considered as sites or facilities used by WAPs.

It cannot be determined via the surveyed literature whether the present areas, sites and facilities are sufficient for the present extent of WAPs. Should the demand for such activities increase, it appears that

the crucial resource will be public lands available for expeditionary use. The programs depend upon a wilderness setting, and it would appear likely that the quality of the experience on expeditions will someday be related to the carrying capacity regulations maintained by governing authorities. For the immediate future, however, the availability of suitable lands will continue. Due to the ability of WAPs to withstand more rugged conditions than the general camping public, situations of wilderness living, solitude and other associated qualities should continue to be accessible.

### Compatibility

Outdoor recreation. Due to their dependence upon a wilderness setting for most of its activities, WAPs can be seen to be compatible with only those concerns which use the natural resources without developing them. Almost by definition, WAPs are in conflict with anything which does not preserve the natural characteristics of a resource,

The study on compatibility presented in A Nationwide Outdoor Recreation Plan provides information in considering the compatibility of WAPs with other forms of outdoor recreation. Specifically, the topics of "trail camping," "canoeing" and "river-running" are applicable. (92:712-72)

Trail camping, which is defined as having seclusion as a primary motivation, is compatible with those activities which do not involve great numbers of people and/or developed facilities. It can take place on areas of land which are large enough or frequented to such a small degree so as to hold contact with others to a minimum. In order to maintain the quality of the WAP experience, the land should be in as much of a natural state as possible. Thus these activities can be seen to be in conflict with trailer camping, family camping, winter sports, motorized sightseeing and any other activities of a developed nature. Due to safety considerations, hunting and trail camping would not be compatible in the same area. (92:722)

White-water canoeing and river rafting have much the same requirements as those cited above, though they are based upon water resources. In WAPs, those water activities incorporated in expeditions are best suited when remote from large numbers of people and development. Water-based outdoor recreation activities which would be in conflict would include other forms of boating, surfing and waterfowl hunting. (92:726)

Non-outdoor recreation uses. As conveyed previously, the "quality of experience" of WAP activity is very dependent upon the natural resources in which a natural setting is

maintained. Thus those concerns which affect the natural environment through development, pollution, etc. can be in conflict with WAPs. Timber management is probably the only use of lands which would not affect the quality of experience. Any other form of development, such as mining, utility lines, housing, highways, commercial centers, etc. would detract from the natural setting and the seclusion preferred. (92:722)

### Suppliers

Since this paper has essentially profiled individual suppliers in order to describe Wilderness Adventure Programs in general, no detailed description of one particular supplier is felt to be necessary.

In an effort to determine those organizations presently operating WAPs, letters were sent to groups supposedly offering such programs. These addresses, along with their status determined by replies, are listed in Appendix IV (pg.73).



## CHAPTER VI

### LEGAL ASPECTS

#### Legislative aspects

Laws. Though test cases involving 'adventure programs' were not found in the legal literature reviewed, it appears that there are a number of laws and court decisions from other areas of legislation which could apply to such programs. The two most prominent concerns are the legal liabilities of WAPs to their participants, and the laws governing the public lands which WAPs use extensively.

Liability. (\*) Since all concerns which undertake the formation of outdoor schools declare themselves as "non-profit tax exempt educational institutions," they are governed by much of the same legislation applied to public schools. It should be noted that public schools are protected to a certain amount by governmental immunity, for it is generally accepted that public educational functions are governmental in nature. The increased use of outdoor facilities, such as parks, and program designs incorporating more outdoor recreation, however, has raised a question as to the amount of immunity covering schools and municipalities to laws governing such activities. Indeed, the judicial trend toward reducing this immunity has resulted in increasing allowance of liability for negligent operation. (17:41) Thus if one considers such a trend for the public sector, then the same legislation is applicable to the non-profit tax exempt educational institutions which, being private in nature, are not granted immunity.

The definitions of liability are numerous, among them "condition of being actually or potentially subject to an obligation," and "amenability or responsibility." (1.) When a WAP school offers a course, and accepts an individual as a participant, it assumes a certain amount of responsibility for that person. Failure to uphold this responsibility is known as negligence, which has been defined by the courts: "Negligence is an unintentional breach of legal duty causing damage reasonably foreseeable without which breach the damage would not have occurred." (6:61) Negligent conduct

(\*)- The information in this section is gathered from the research in the legal aspects of outdoor recreation carried out by Dr. Betty van der Smissen of Pennsylvania State University. Her assistance is gratefully acknowledged.

in itself, however, is not enough to imply liability. It must be shown that the party charged with negligence owed a duty to exercise care toward the party injured. "This duty must be owed privately, as distinguished from a duty to the general public." (17:52) In the case of a WAP operated by a private organization, there is obviously a duty of the school to exercise supervision and care for its participants. Such programs which did not accommodate such an obligation would find it very difficult to generate confidence from the public. Descriptive literature of all WAPs emphasizes expert supervision and safety control in operation. In all cases, however, the WAPs also warn that the nature of the activity is one which is hazardous, and all schools appear to require that a person acknowledge these hazards and assume the risks involved. For example, the Hurricane Island school literature specifically describes this under "Risks:"

Outward Bound participants take part in challenging program activities carried out in an environment possessing risks not normally found in daily life. By enrolling, you accept this fact. We seek to train you to recognize and handle possible risk situations. Ultimately, it is your responsibility to observe the safety procedures taught. (99.)

A school could then use the law which states that "no harm is done to one who consents." The law has been interpreted as implying that "in any type of consent, thorough knowledge and ability to understand the risks involved are important." (17:94) Applicants are required to sign a 'waiver,' releasing the school from any responsibility. (Parents assume risks for a minor.) It would appear that a written acknowledgement of the risks involved and assumption of such risks would protect WAPs from liability. However, there are so many legal interpretations of what constitutes negligence, that even written assumption of risk is not enough to fully protect a school from liability.

The law appears to uphold the fact that, regardless of the assumption of risk, an educational institution has a certain amount of responsibility in supervising outdoor activities, providing a safe setting, and ample warning of situations where dangers are involved. (17:52+) More specifically, the amount of supervision, the conduct of the activity, and the equipment and environment with which the activity is undertaken are all considerations to which a WAP holds a certain amount of responsibility. (85:13-5)

There are two types of protective devices which educational institutions may use to protect themselves from liability suits. One is statutory aids, which are certain requirements as to the time within which one must file a claim, and an

expiration period after which no suits can be brought in. The other is insurance, which is a form of protection against either property damage, social losses (i.e. salary, medical expenses) and liability insurance. (17:238) It should be noted that liability insurance, which provides coverage for liability suits against the policy holder, in no way reduces the holders susceptibility to suit. Apparently, it "increases the likelihood of suit." (17:238) Such types of insurance policies as owners, automobile and accident are used to give coverage for severe financial losses, and to leave the problems of investigation, legal counsel and settlement to the insurance carriers. (17:238)

Regardless of insurance coverage, the best protection for WAPs against law suits is to exercise the proper amount of care and protection to avoid instances of undue risk and harm to a participant. This can best be accomplished by maintaining a strict level of safety and employing competent, trained leaders. (85:15)

Use of public lands by WAPs. Since the expeditions undertaken by WAPs generally take place on public lands, specifically those areas noted for their natural settings, they are governed by laws relating to the use of such lands. In this section, a brief overview of laws pertaining to public lands related to this form of outdoor recreation is presented.

For outdoor programs, the U.S. Code Annotated states that the Department of Interior adopts the policy that it "is desirable that all American people of present and future generations be assured outdoor recreation resources, and that it is desirable for all levels of governmental and private interests to take prompt and coordinated action to...conserve, develop and utilize such resources for the benefit and enjoyment of the American people." (16:751) Furthermore, the Secretary of the Interior is vested with the powers and duties to "(d) Provide technical assistance and advice to and cooperate with...private interests, including non-profit organizations with respect to outdoor recreation," and also "to cooperate with educational institutions and others in order to assist in establishing educational programs and activities and to encourage public use and benefits from outdoor recreation." (16:751) Thus it can be seen that non-profit institutions involving WAPs are closely related to some of the considerations of the Interior Department.

WAPs rely on the natural setting, and thus depend upon the preservation of wild lands. There are a number of types of public lands, including Wilderness Areas, National Forests and Wild and Scenic Rivers which are protected by law, and available as a resource for some forms of recreation.

On September 3, 1973, the "National Wilderness Preservation System" was created, in order to "assure that an increasing population, accompanied by expanding settlement and growing mechanization, does not occupy and modify all areas within the U.S.," and to preserve areas "where the earth and its community of life are untrammelled by man... and 1) appears affected by forces of nature; 2) outstanding opportunities for solitude or a primitive and unconfined type of recreation..." (15:1131) Pertaining to use, the law also states that "...wilderness areas shall be devoted to the public purposes of recreational, scenic, scientific, educational, conservation and historical use." (15:1131) Since the creation of this act, over 12,000,000 acres of land have been set aside as "Wilderness Areas," such as the Boundary Waters Canoe Area, Minnesota, and the John Muir Wilderness Area in California.

The "Wild and Scenic Rivers Act" was a congressional declaration whereby "Selected rivers of the nation (and their immediate environments) possessing remarkably scenic, recreational, geologic and similar values, shall be preserved in free-flowing conditions, (be) protected for the future." (15:1271) Such rivers are classified as 1) wild (inaccessible except by trail), 2) scenic (undeveloped shorelines but accessible by road), and 3) recreational (might have development but offer recreational opportunities). Examples of such rivers protected by this act include the Chattoga River in North and South Carolinas and Georgia, and the Rio Grande in New Mexico. (36:38-42)

These laws seem to imply a preservation of at least some of the natural resources necessary to WAPs. Other public lands which are not 'preserved' to such an extent, but are used by WAPs due to their sufficiency as a natural setting, include lands in the National Park System, National Recreation Areas and Forest Lands.

Created in 1916, the National Park Service was established with a "primary purpose to conserve scenery and natural and historic objects and wildlife and provide for the enjoyment of the people." (15:66) General laws protecting game and fish, and allowing for the conservation of specific areas, are also included. (15:199,264)

Federal laws also provide the U.S. Department of Agriculture the power to create National recreation Areas and Forest Reserve Lands. The National Forests were created primarily to insure a continuing lumber supply, but certain laws authorize "the use by public and private agencies, corporations and associations of the lands and structures under control of the Forest Service." (11:166;15:196) The Forest Service Multiple Use Act of 1960 defined a major purpose of National Forests as providing outdoor recreation opportunities, thus implying the consideration of recreational use in decisions involving the use of such lands.

Regarding laws pertaining to admission into various public lands and recreation use fees, the "Outdoor Programs" section of the U.S. Codes for public lands lists a number of federal guidelines: "(a) No admission fees of any kind shall be charged or imposed for entrance into any other federally owned areas which are operated and maintained by a Federal Agency or used for outdoor recreation purposes." (16:763) However, there are exceptions, including entrance or admission fees at designated units of the National Park Service and National Recreation Areas; and fees for use of "special boat launching facilities and campgrounds." (16:763) Regardless of camping areas provided, the law requires that a free-use primitive camping area must be provided.

Also, special recreation permits may be issued "for group activities, recreation events...and other specialized events." (16:763) The actual application of use-fees and permits are placed under the authority of specific agencies.

Committees. Table V lists committees in the House of Representatives and Senate which are concerned with some of the resources and functions of WAPs.

Table V

Senate Committees

Agriculture and Forestry  
 Appropriations  
 Commerce  
 Education  
 Interior and Insular Affairs  
 Labor and Public Welfare  
 Nutrition and Human Needs  
 Public Works

House Committees

Agriculture  
 Appropriations  
 Education and Labor  
 Interior and Insular Affairs  
 Interstate and Foreign Commerce  
 Merchant Marine and Fisheries  
 Public Works  
 Rules

Lobby groups. There are no lobby groups related to WAPs in themselves. There are a number of groups, however, which are dedicated to the preservation of the natural resources for which the WAFs depend. The Sierra Club, created in 1892 through the efforts of John Muir, has become one of the leading lobby groups interested in preserving wilderness areas, and has also been active in bringing questions concerning the use of public lands to court. A recent example of this was the Mineral King controversy, which concerned the development of a ski area in land governed by the U.S. Forest Service. (22:20010) Other groups which publicize the protection of the natural resources, and challenge interests which are contrary via the judicial branch, are the National Audubon Society, the Wilderness Society, Friends of the Earth and the Environmental Defense Fund. (22:20042)



## Administrative Aspects

Agencies. There are no governmental agencies directly concerned with WAPs. The only indirect concerns relating to the activity itself might be by educational agencies interested in the WAP approach to education.

The public lands which are an important resource for WAPs are placed under the planning and administrative control of various government agencies, listed in Table VI.

Table VI

<u>Agency</u>	<u>Areas of concern</u>
Dept. of Agriculture Forest Service	Forest lands
Dept. of Commerce NOAA	Seas
Dept. of the Interior BLM BOR Fish and Wildlife Service National Park Service	Public lands Multiple-use lands Recreation Planning Game lands National Parks
Dept. of Transportation U.S. Coast Guard	Boating activities

Independent agencies which might be involved with decisions regarding these lands include the Advisory Board on National Parks, Council on Environmental Quality, National Forest Reservation System, National Park Foundation and others.

Regulations. Once again, there does not appear to be any regulations concerning WAPs and their functions in general. Specific rules involving boating activities and the use of certain public lands do exist, however, and are therefore applicable to some of the activities comprising WAPs.

The Code of Federal Regulations #36, deals with "Parks, Forests and Public Property," and lists existing regulations pertaining to these areas. The National Park System allows for camping in designated areas, and may require the issuance of "written permits to persons desiring to camp in backcountry," and also permits to build fires. (90:6) The Superintendent of the Park may also require permits for boating. (90:21)

Each park created by the National Park Service has its own particular regulations depending upon its location, resources and use. An example is that of Rocky Mountain National Park, which specifies that "registration with a park ranger is required prior to all technical mountain climbing. Upon completion of climbing, the registrant is



required to check out..." (90:45) The same regulations apply to persons going out on winter backcountry trips.

In Grand Canyon National Park, certain regulations govern the activities of white-water boating and rafting. "No persons shall conduct, lead or guide a river trip unless such person possesses a permit," which may be issued by the Park Superintendent. Furthermore, the guide must show experience and have the proper equipment; and commercial interests (i.e. where a fee or charge is assessed for conducting the trip) "must also have an additional permit authorizing conduct of commercial activities." (90:45)

The Forest Service requires permits for certain uses of its lands (timber, mining) but provides that "the temporary use or occupancy of national forest land by individuals for camping, picnicing, hiking...and similar purposes may be allowed without a special use permit;" though certain fees may be required for such use of specified areas. (90:45)

The volume of the Code of Federal Regulations pertaining to public lands lists regulations concerning the use of Wilderness Areas, including one providing federal authorities the right to collect fees and require permits for camping and, among other things, group activities in such areas. (91:123) Another regulation provides that the Bureau of Land Management include as one of their objectives "to promote the public use and enjoyment of lands for outdoor recreation." (91:586) Also, the establishment of "Primitive Areas," defined as "natural, wild and undeveloped lands in settings essentially removed from the effects of civilization," is set forth, with the encouragement for their public use. (91:589)

Finally, the Code of Federal Regulations #33, "Navigation and Navigable Waters," lists regulations for personal flotation devices which would apply directly to boating activities of WAPs. The U.S. Coast Guard requires that "all recreational boats that are propelled by...paddles..." require "at least one approved life jacket for each passenger, plus one additional one for boats over 16 ft.." (89:681) Exceptions to this are kayaks and other closed boats, which may use approved cellular vests.

### Judicial aspects

Judicial decisions regarding WAPs of the past or present were not found. Those concerning liability which might be applicable to WAPs are cited by Dr. Betty van der Smissen in her book Legal Liabilities of Cities and Schools for Injuries in Recreation and Parks. Numerous cases are given which are helpful in interpreting the laws concerning responsibility

for supervision, maintenance of facilities, etc.. Dr van der Smissen also lists a summary of principles to protect against liability in the fourth chapter, "Situations giving rise to law suits."

Questions of negligence and liability would probably be initially pursued in courts functioning under the authority of the state in which the WAP is located. Depending on the amount of damages sought, it would go to the County, District, Superior or Supreme Court which has jurisdiction in the area. (14:17-9) Also included at the state level would be cases involving the use of state-owned lands.

Decisions pertaining to federal lands would be brought to federal court. Section 2, article III of the U.S. constitution provides that "controversies to which the U.S. shall be a party," and "controversies between two or more states, between states and citizens of another state, citizens of different states..." go to the U.S. Courts. Thus citizen groups seeking the preservation of federal lands would bring the opposing party to court at the federal level. Furthermore, a national citizen group could take a case involving a particular state's lands to federal courts. These would be initially tried in the District Courts (of which there are 80 in the 50 states). The decision could then be appealed in the Appellate Courts, which would determine whether the case should be tried by the Supreme Court. The Supreme Court has the ultimate authority in interpreting the law. (94.)

A well-known example of a case reaching the Supreme Court is that of "Wilderness Society, Friends of the Earth, Environmental Defense Fund vs. Hickel," involving the rights of oil concerns to construct an 800 mile oil pipeline in Alaska. (22:20042)

The intention of this chapter has been to present an overview of the legal aspects pertaining to WAPs. Though incomplete and quite brief with respect to all the legal implications of such an activity, it is hoped that the reader can get an idea of the considerations of the law for some facets of WAPs.

Laws, agencies and regulations particular to each state appear to take a similar approach to public lands, liabilities and the like. Nonetheless, each state is granted sovereignty, and thus has the authority to make <sup>its own</sup> laws and regulations for its own. Legal questions regarding WAPs at the state level should be referred to the particular state involved.

## CHAPTER VII

### PROBLEMS--ISSUES

#### Overview

As indicated earlier, Wilderness Adventure Programs have seen increased popularity since their inception in the 1940s. Along with this popularity has been the general recognition and acceptance of numerous valuable aspects of the WAP experience. In the first 25 years of their existence, very little was done to try and ascertain exactly what it was which produced these supposed merits. The few critics of the programs were answered by non-empirically supported statements.

In the past few years, however, a number of efforts have been made by individuals to try and assess the values of a WAP experience, along with attempts to identify the components of WAPs which might be responsible for the positive aspects cited. From these and related studies, some individuals have suggested that WAPs are effective in meeting some of the needs of our increasingly technological, urban-oriented society.

In this chapter, some of these issues will be discussed at greater length. Past criticism of WAPs and research related to the programs is presented in order to facilitate the reader's understanding of the issue concerned with the merits of WAPs claimed by proponents. This is followed by three sections discussing the ideas related to the value of WAPs for education, therapy and in providing a unique recreational experience.

#### Criticism

Though there has been no wide-spread criticism of WAPs, a few individuals have spoken out against some of the practices and philosophies of such programs. In a letter in the August 13, 1965 issue of The Times Educational Supplement of London, one A. Macklehorse questioned the entire purpose of the 'adventure' schools. He suggested that all the qualities purported to be developed in the outdoor activities could be even more effectively enhanced in the classroom or home. The technical competence and sense of achievement experienced in scaling a cliff was likened to the study and challenge involved in solving a laboratory experiment. Even more,

"the 'follow-me chaps' leadership taught at the schools is totally unsuitable to almost any other sphere of life." (62:273) Thus Macle hose claimed that anything supposedly accomplished at an adventure school could be achieved just as easily, if not more effectively, in a traditional school setting.

Other individuals have criticized the fake situations and emergencies used to keep participants alert, and imply that a primary vocation at some schools is "crying wolf." (25:78) The adventure activities and contrived situations were viewed as being a negative experience for some individuals, and publicity of a number of injuries and fatalities in the U.S. Outward Bound schools added strength to the questioning of a few as to whether the activity was worth the risk involved. Joshua Miner, a Director of Outward Bound, answered this criticism by pointing out the strict maintenance of safety rules, and insisting that the danger must be real, or else:

...the city kid will remain comfortable in his response, and we won't be able to do anything with him... where the forces of nature are untamed as in the mountains or in the waterways, accidents do occur and we must be willing to accept more risk for the benefits to be derived, then we do in everyday life. (25:78)

Later criticism centered upon the lack of application of a WAP experience to the real world. Often Outward Bound critics endorsed ideas such as reviving the New Deal's Civilian Conservation Corps and similar programs, where youth could enjoy the outdoors and be constructive at the same time. (25:79)

The primary reactions by WAP advocates to such critique was (and still is) to point out that Outward Bound and similar programs "need not be a panacea to be valuable." Kurt Hahn recognized right from the beginning that some people were not suited for WAPs, for he said "there is a kind of boy who remains contentedly unfit, whom you cannot challenge." Furthermore, not all of the participants were expected to show development in the realms focused upon. The programs were maintained as valuable in that, if nothing else, participants were removed from their normal way of life for a few weeks and allowed to experience new surroundings, and to have the opportunity to explore physical and mental potentialities to which they may not have been aware. (25:79)

Due to the recent growth in popularity of the WAPs, along with the apparent acceptance of the merits of such programs by educational institutions and business corporations, criticism has remained limited. It appears that most people continue to accept the fact that, though difficult to pin-

point, something of worth is going on in the programs.

### Research Related to Wilderness Adventure Programs

Studies analyzing the actual effects of WAPs upon participants have taken place only in the past eight years, and have focused upon the Outward Bound programs. Because of the diversity of application of these programs, research has dealt with not only participants of 'standard' courses, but also the specialized programs for student teachers and problem youth.

Standard courses. Due to its relatively lengthy nature, the survey of studies of standard courses is contained in Appendix V. Should the reader want to become familiar with some of the ideas and techniques employed in these studies, he/she is referred to that section. In an attempt to avoid unnecessary tedium, a basic overview of these 11 studies is presented here.

Six of the studies investigated the ideas a person had about self immediately before and immediately after participation in a WAP. (79.;86.;73.;81.;69.) Except for two, all concluded that the WAP appeared to be an important factor in an overall improvement in self concept (e.g. feelings of competency, self confidence). One in particular cited improvement in female's self-actualization process, a concept developed by Maslow relating to the development toward a more full and enriched life. For the most part, the results of these studies are rather inconclusive, and considering the techniques involved, not very surprising. An important consideration to be made is that the comparison of self-concepts immediately before and after a course would probably be quite different from a comparison of changes, if any, over a longer period of time. A student arriving at a school for the first time is probably in a rather atypical mental state; confused by a new environment, filled with mixed feelings of anxiety, excitement, etc.. Upon the completion of the course, participants generally feel a great sense of achievement, and look forward to getting home and having a good meal. One might question the validity of evaluation in these two time periods. It is not very surprising that participants rate themselves higher in self concept immediately after an experience which is geared toward feeling a sense of achievement. Nor is it very enlightening to learn that a student has more anxiety before undertaking a course which is known to be difficult, stressful and challenging than after, as one study showed.

Two studies took more of a long range approach toward



evaluating conceptual changes of participants. (79.;83.) Using questionnaires, an attempt was made to see whether there was any noticeable changes in Outward Bound students after more than a year. One study concluded that there were no significant changes, the other reported that there were. The problem involved in the latter study, as pointed out by the researcher, is the difficulty in determining whether the supposed changes were attributed primarily to the wilderness experience.

Of the three remaining studies, one determined the reasons individuals participated in a particular WAP, and two surveyed impressions individuals had about themselves and the program in retrospect. (76.;79.)

All in all, the studies which have been carried out to date have accomplished little in empirically testing some of the expressed functions of standard courses. For the most part, the results are not especially conclusive, and some of the technique used in investigation can be questioned. In all fairness to the researchers, however, it must be noted that empirical testing of individual's values and concepts is an extremely difficult task, and conclusive results based upon sound measurement techniques are few and far between.

Teacher education. A 1971 study investigated the effect of an Outward Bound course upon 24 student teachers attending the State University of New York. Results based upon a questionnaire showed that the only personality trait that improved significantly was the one of "stability," which was characterized by being calm in a crisis and difficult to disturb or distract. The researcher also concluded that the Outward Bound experience was beneficial in regard to personality characteristics and improvement of faculty-student relationships. (72.)

A similar study in 1972 produced more defined results. Godfrey used a pre and post-test questionnaire in an attempt to evaluate a special Outward Bound program aimed at introducing Outward Bound methodology to educators from a Colorado school district. He cited five significant results: 1) Educators in the Outward Bound program experienced significant personal growth and improved inter-personal relationship, with the course environment being strongly responsible for such changes, 2) Outward Bound was effective in stimulating organizational change in the District, 3) Outward Bound influenced teachers in their work with colleagues and pupils, 4) the traditional aspects of Outward Bound (rock climbing, etc.) were accorded less value by educators than factors such as climate for developing relationships, small group structure and communal living, and 5) The initial response of participants immediately after Outward



Bound exhibited an enduring quality.(74.) To add a bit more clarity to these results, it should be noted, this particular Outward Bound course was modified in the sense that more emphasis was placed upon learning experiential education concept than upon adventure activities.

The third teacher study surveyed compared self descriptions of teachers as a result of an Outward Bound experience. Questionnaires were mailed to participants before the course and nine months later; with analysis showing no significant changes in self description. This investigation appeared to be quite straight forward and effectively carried out, and can be viewed as lending support to those who contend that Outward Bound does not have any long-lasting effects. (84.)

Problem youth. Of the three studies surveyed, the earliest was by Schroder and Lee in 1967, who investigated the effects of a WAP upon disadvantaged inner-city youths from Trenton, New Jersey. A special program entitled "Action Bound" involved weekend adventure activities and week-long expeditions during winter and spring vacations. Fourty male students between 16 and 18 years, termed as "underachievers," were compared to a control group considered to be of the same approximate age, intelligence, race, socioeconomic status and academic progress. Psychological tests were administered at the beginning of the program, and again five to six months later. The results indicated that students involved in the Action Bound program showed "significant attitude changes: (1) they perceived themselves as more active, stronger, generally more positive, and less alienated; (2) they viewed others more as individuals, saw teachers and peers more positively and took a more positive attitude towards participation; and (3) they established generally more positive goals and demonstrated a more mature goal orientation." (79:37) The techniques of this study were not reviewed, but from the appearance of the abstract this investigation appeared to be carried out in a fashion significantly more complete than many of the others. Doing a more long range comparison, along with the use of various psychological tests rather than a single questionnaire, lends even more credence to these results.

In a HEW sponsored study, Kelly studied the effects of Outward Bound upon adolescent juvenile delinquents. The comparison between a group of delinquents sent to various Outward Bound programs and a control group which remained in the normal correctional program was based upon resulting "recidivism." This term refers to the number of subjects returning to the institution after a new offense. 20% of the Outward Bound participants and 37% of the comparison group were recidivists, suggesting that Outward Bound is a "desireable short term alternative to traditional institutional care for some." (77.)

Adams carried out a similar study in 1969 measuring the recidivism of emotionally disturbed adolescents participating in a 30 day survival training experience. Nineteen patients from a state institution, hospitalized for an average of 11 months, were integrated with 'normal' participants in a program incorporating typical WAP activities, including a 200 mile hike. Pre and post testing included a form of the Tennessee Self Concept Scale and the 16 Personality Factor Questionnaire, and special tests for measuring anxiety and neuroticism. The abstract describing this research states:

Principle changes occurred in total esteem, feelings of physical adequacy, reduced general maladjustment, and less personality disorder. Factors found to change were higher enthusiasm, increased ego strength and self reliance, adaptable and more tranquil. Neuroticism reduced significantly.

Follow-up results indicated three of the 19 (subjects) to be recidivists. (68.)

These results were considered as an improvement over the norm. The author suggested that such "non-professional" therapeutic methods as survival training be considered as possible alternatives to traditional therapy methods. (68.)

On the whole, these studies involving problem adolescents all showed rather straightforward results based upon sound testing technique. This is probably due to the relative ease of measuring a behavior such as recidivism, and also the focusing upon changes in rather particular behavioral problems; versus the more general approaches by the other studies. Perhaps it is easier to assess 'mental health' at the negative end of the spectrum than the positive end. It is noteworthy, however, that these three particular studies elapsed over a relatively long period of time, and two of the three relied on what appears to be in-depth psychological testing methods.

Conclusion. Of all the studies, those in the third section are probably the most meaningful in trying to identify some of the actual effects of WAPs upon participants. They demonstrate, quite plainly, that the WAP experience has definite value in the therapy of problem youths. The inconclusive nature of most of the other studies lends no substantial support to claims by defenders nor critics of WAPs. The general consensus of the researchers is that positive changes do occur as a result of participation in these programs, though the empirical evidence is lacking to isolate any particular positive development. This indirectly lends credence to a previously cited opinion that, though it has not been scientifically identified, something of positive value is gained through a WAP experience.

## The value of Wilderness Adventure Programs as an educational tool

Regardless of the lack of empirical evidence, educators throughout the world are recognizing the value of WAPs as effective programs of education. (See Chapter III "Education") In England, the educational authorities no longer question the purpose and value of the so-called 'Mountain Centers;' they merely have to choose which of a number of WAPs best suit their needs. (8:7) Here in America, the educational system has been changing, yet with tighter budgets, outdoor education is still surviving. (32:77) Thus with the new attitudes of education, along with the apparent acceptance and support of various outdoor programs, one must assume that some particular characteristics of these popularized forms of education are at least partly responsible for their growth. The obvious similarity among these programs, of course, is the use of the natural setting, and there are a number of emerging philosophies which assert that it is the natural setting itself which is largely responsible for the proclaimed effectiveness of the outdoor programs in education.

It is beyond the scope of this paper to delve into educational theory, but some mention of relevant ideas is worthwhile here.

The dictionary definition of education as "the act or process of developing mentally or morally" can serve as a starting point. Traditionally, it was thought that the in-school setting was the prime location for most effectively directing the development of students. Field trips and outdoor classes were few and far between, considered by teachers as a technique for adding diversity to the class schedule. Lately, however, such class excursions are being considered as essential in fully conveying ideas related to certain topics. The incorporation of 'outdoor labs' into the structure of a Biology course is a perfect example of this, along with the trend of spending a week at a country farm or residential camp. This is not to say that these ideas have appeared in the past few years, it is only to point to the widespread acceptance of settings outside of the classroom as effective, if not superior, locations for education in certain realms.

The classroom is probably the best setting for the study of certain disciplines. An idea of mathematics can usually be best conveyed in a quiet room, where the student is able to fully concentrate upon the sound of a teacher's voice and the writing on the chalkboard, without being distracted by an uncomfortable resting position, or oppressive temperatures, or changes in the weather. Indeed, the technology involved in classroom design has focused upon the reduction of these variables: everything from wall color to lighting to

desk size is being considered in providing the most comfortable, unchanging, least distracting environment possible. Once again, for realms of instruction involving the conveyance of ideas via written and spoken symbols, this is probably an optimum environment.

One possible reason for this is that such symbols have no real, tangible objects which can serve to better represent them. True, early instruction in mathematics uses objects to facilitate the concept of numbers, but for the more rigorous concepts of division, bases, calculus, etc., no physical representations have been found which convey the ideas better than the evolved system of mathematical symbols. The same might hold true for some topics of history and geography, where temporal and spatial limitations make the actual physical representations impossible to acquire. Thus, for lack of alternatives, one might conclude that the man-built, comfort-optimizing classroom is most conducive to instruction in realms for which only words and symbols can convey the topics involved.

But what of those words to which a physical object or process is currently associated? It is easy to see that education recognizes the tremendous difference between conveying a process such as boiling water via a first-hand experience versus words and pictures. Science classes have relied upon experimentation for centuries as the best technique for developing a student's understanding of physical properties.

It appears that education has increasingly emphasized the importance of this 'first-hand' experience. With the development of more efficient transportation and communication, and more money available for education, school programs are including more field trips, one-week trips to historical sights, more expensive equipment to facilitate physics classes, etc..

Whereas at one time a Geology class would study sedimentation, erosion, and properties of rocks in the classroom, laboratories in the field are becoming commonplace. One might question whether there is any difference between studying a piece of quartz in the classroom and in its 'natural' location in the field. Its physical properties of hardness, composition, etc. can be just as effectively determined in either location, without the use of chalkboard or lecture.

The real difference is that a piece of quartz may be considered more than a physical object. Associated with its existence is the natural processes which have determined its present state. When a student comes upon a piece of quartz in the field, the ideas of the geological processes which have characterized the rock may not be apparent at first; but they are more easily conveyed by an instructor in the 'wider' framework of the field than the classroom. The lab table essentially severs the temporal and spatial charac-

acteristics of the rock from the rock itself.\*

One might say that the frame of reference with which we treat objects in the classroom is a rather limited one, for it does not include related objects and processes formulating the object's existence. It would seem that individual can best understand that object's existence by experiencing the same natural setting and processes first-hand.

Thus, the limitations of the classroom can be seen as two-fold. First, it is most efficient only for the development of thought for which only words or symbols exist to represent the concepts involved. Second, it can limit the frame of reference with which we view these concepts. (28:36)

The relevance of these ideas in this discussion is as a basis for considering the more specific topic of the classroom versus the natural setting. The previous paragraph contained a rather obvious example of the effectiveness of the natural setting as an aid for developing an understanding of processes and things in nature. For reemphasis, the distinguishing characteristic was the inclusion of spatial and temporal considerations in the natural settings. To those people with any expertise in the Natural Sciences, the idea of looking at objects in nature without consideration to their place or history would be absurd. Thus an understanding of natural things must include an understanding of the spatial and temporal components of that environment. Since the classroom limits this frame of reference, and is not the most effective setting for developing an understanding of ideas for which physical representations do exist; the natural setting can be considered as an important and necessary "tool" for education in such realms as the Natural Sciences.

With the increased concern expressed by our society about the condition of the environment, education is being assigned the task of making individuals more understanding and aware of nature. This trend, coupled with the educational ideas cited above, has caused the huge increase in interest for environmental education, outdoor education, etc.. Education stressing the importance of the understanding of processes of nature is enabling individuals to better realize man's interrelationship with the environment. And many believe that by understanding our place in nature, a change in attitudes and values can occur, which will be necessary to curb the present degradation of the environment. (32:77;26:7-9)

Conservation clubs, nature camps, and other similar outdoor activities have a significant positive effect upon environmental attitudes. (27:26) Thus experiences in the

\*- This concept was set forth by Ernest Rutherford in The Lessons of Nature (29.)



natural setting aside from those being incorporated in formalized education can be considered valuable. The field of outdoor recreation in general has been cited as an important tool for the development of environmental awareness. The following remark by Lloyd Barhkaradt, an avid proponent of the importance of outdoor recreation as a supplement to formal education, expresses this view well:

Appreciation of, and respect for, our natural environment often is developed through participation in outdoor recreational activities. Nearly all forms of outdoor recreation are dependent upon environmental quality. To fish we must have clean waters... to enjoy hiking and camping, we need land area which has not been marked or despoiled by civilization, to enjoy gardening, we need rich, fertile soils and clean air. Because this is so, the recreationist must seek out certain environmental characteristics if he to enjoy his chosen activity. Thus, the first thing outdoor recreation does is reacquaint and reunite man with the natural world- that natural world from which he is far removed in his technological, urbanized society. It develops a personal interest in quality natural resources. (43:48-9)

In particular, the importance of WAPs as providing more than just an opportunity to experience adventure and character development is being recognized. By taking an individual into the natural setting, in a frame of reference which does not hide time or space, such programs are enhancing the individual's development of thought related to nature; and, in essence, assisting in the education of the individual.

Nature can be uncomfortable and distracting, thus hindering an individual's awareness of the environment around him. The WAP not only places the individual within the natural frame of reference, but also teaches the participant the few techniques necessary for existing in comfort and without fear in the outdoors. Says Frederick Medrick, of the Colorado Outward Bound School:

By becoming competent in some skills and more self-assured, the student begins to use and interact with nature rather than fighting against nature. He learns to cooperate with and appreciate nature for the way in which its inherent beauty can enlarge one's sense of self and of human possibilities. Such understanding does much to eliminate fear of the unknown and unpredictable in the world, and frees one for perceiving interrelationships which bring together man and nature. (82:2)



Thus, the WAP can be considered a valuable educational tool, in that by merely placing an individual in the natural setting and providing him/her the skills for comfortably existing in the outdoors, he/she is able to inspect nature in the frame of reference most conducive to the understanding of that realm. This, in turn, can be important in the development of a greater awareness of the environment, which has been considered by some as a necessary prerequisite to the change in values and attitudes that must occur in order to better cope with environmental problems.

### Wilderness Adventure Programs as a therapeutic tool

A number of individuals associated with the fields of psychology and the environment have viewed outdoor survival training as a potential tool for improving mental health and personal functioning. (49:3:46.) Previous studies on therapeutic camping, along with the few investigations dealing with WAPs and their effect upon juvenile delinquents and the emotionally disturbed, suggest that there are certain characteristics of WAPs which are conducive to therapy. When compared to the more traditional modes of therapy conducted in institutional environments, two qualities can be considered unique to the WAP approach to therapy. One is the use of the wilderness as setting for activities, the other is the rather small, isolated groups in which participants function.

When considering the wilderness as a backdrop to the activities pursued in a WAP, a few characteristics of the setting lend themselves to possibly aiding in the therapeutic sense. Relative to the man-made, machine-built environment in which most individuals spend most of their time, the wilderness can be considered as much more 'simple' in a number of ways. Perceptually, the configurations of stimuli found in the wilderness are not as 'complex' as that found in the man-made environment, i.e. there are less sharp, defined angles and lines; less defined boundaries between objects. This observation has been noted by Wohlwill in his studies concerning the preferences of individuals for natural versus machine-built scenes. (87.) Bernstein has also noted the factors of lower density population, lower levels of noise and movement and a slower rate of change as other characteristics differentiating the wilderness setting from the man-made. (50.)

When compared to the "hustling-bustling" city, the wilderness is an environment in which the stimuli are of a more subtle nature. Rather than being bombarded by honking horns, streets cluttered with advertisements, windows, wires

and bright colors, the perceived natural setting is quite the opposite. For the most part, colors are more subdued, movement is less rapid and varied, and noise, such as wind through trees or rushing water, is more consistent and predictable. This 'predictability' has been regarded as being an important factor in the ability of an individual to understand more of the physical occurrences in the wilderness than in the man-made setting, i.e. he/she is able to comprehend occurrences via more simple cause and effect relationships. Introduction of new stimuli occurs at a much faster rate in the man-made setting; so fast, in fact, that we are not capable of understanding the causes of all the stimuli we perceive. In the wilderness, on the other hand, varying stimuli are fewer in number, and an individual is more capable of learning to identify a stimulus and the cause behind it.

Furthermore, Wohlwill has pointed to yet another characteristic of the wilderness worth noting:

A typical wilderness area represents an ideal case of an environment that makes no detectable response to the individual entering it, and it is conceivable that this quality represents a real source of satisfaction for the individual seeking a wilderness experience. The wilderness does not react to a person, does not argue with him, attack him, or fight back when attacked-- at least not in any directly discernible sense. More generally, it does not lock the person into a feedback loop, in which any response sets off a counter response. (88:2)

Thus, the wilderness setting may be considered as one which is more simple and predictable, and less 'responsive' than the environment in which we normally exist.

Why are such characteristics effective in therapy? Bernstein, in suggesting the use of the wilderness as a tool for the treatment of chronic schizophrenics, suggests a number of reasons. The wilderness stimuli construct a "behavior setting" where 'coping' behavior is evoked over 'defensive' behavior. (50.) In coping behavior, one deals directly with threatening stimulus either by handling it or avoiding it. Generally, this discretion in behavior is served by the ease in being able to identify the source of any threat. In defensive behavior, one deals through defensive mechanisms, i.e. repression and denial, or in more extreme cases; social withdrawal. (50.) Defensive behavior is most demanded in an urban setting, where there are so many stress or threat stimuli which must be accommodated in some fashion. The more chaotic and reactive, and less predictable nature of the man-made environment makes it essentially impossible to behaviorly 'cope' with each

set of stimuli.

On the other hand, the wilderness, with its limited amount of stimuli and non-responsiveness, lends itself to more 'readability,' and thus tends to evoke more coping behavior. Chronic schizophrenics have exceedingly high defensive levels, due to their inability to cope with the large amount of threatening stimuli perceived. One of the necessary prerequisites to effective therapy is to create an environment for the patient in which the stimuli are more identifiable, thus reducing the number of situations evoking defensive behavior. The characteristic of the wilderness might be considered as effective in this regard. (50.)

As an extension to this, consideration should be made for the relationship between the individual and the wilderness, and with other group members.

Due to the less complex nature of the setting, most individuals sharply contrast their span of attention when they move into the wilderness. Rather than having to deal with the social pressures of the urban environment, a participant in a WAP may focus his energies upon a few functions necessary to living comfortably in the outdoors. Staying warm and dry, getting from one place to another, and enjoying a good meal are the more simple pursuits of wilderness living. Because of this simplicity, the outcome of one's behavior is not confounded by a complex environment. If an individual is cold, it becomes obvious that a fire must be built. A person quickly learns the requirements of successfully building a fire, and that not carrying out the proper procedure results in a continuation of being cold. A certain behavioral pattern will produce the extreme and simple satisfaction of becoming warm, whereas another behavior will lead to extreme discomfort. The nonresponsive characteristic of the natural setting also limits the places on which an individual can place the 'blame' for negative occurrences. One can curse a wet piece of wood for not being suitable for producing fire, but the piece of wood will not respond either tauntingly or sympathetically. (Please excuse my gross anthropomorphism.)

With experience, an individual finds that rather than acting defensively with nature, he/she must accept its passivity and modify one's own behavior in order to achieve goals. This, of course, can become confounded by the rather unique situations in WAPs of living in small, isolated groups. In an environment which is nonresponsive, yet must be responded to in order to be comfortable, an individual places much emphasis on maintaining a state of physical comfort. There are a number of ways in which a group can work together to efficiently satisfy the basic needs of outdoor living. For example, it is easier for eight people to divide and attend to the actions of wood gathering, fire building and maintenance than for each to build his/her own fire.

Thus group interdependency develops, and due to the extreme importance placed upon the attainment of comfort, each individual holds a great amount of responsibility to the rest of the group. Not only is a person's failure to do his part quickly noted, but the results of such behavior are often considered as a direct impairment of one's personal comfort. This often produces a situation in which individuals blame one another of personally infringing upon one's well-being, leading to rather negative interpersonal feelings and behavior.

Based upon my experiences with outdoor living in groups of various sizes, I believe this to be the cause of many of the disagreements prevalent among those with limited experience in living outdoors.

Such a situation is probably not very positive as a therapeutic setting. With proper supervision, however, such 'reactivity' can be held to a minimum. By beginning with an environment in which comfort requirements are minimal (i.e. warm versus cold weather), and keeping group demands to a minimum; development of responsibility can be better attended to. A building situation can be created with the proper introduction of more demands and challenges, premised upon successful functioning at previous demand levels.

Trained leaders who understand the optimum amount of interaction and passivity can not only ensure that the group experiences success at each level, but also enhance the personal satisfaction of each group member with positive reinforcement. In this way, both the individual and the group can experience satisfaction, which is easily related to the behavior which was used to produce the experience.

Most individuals studying the therapeutic value of group dynamics feel that the benefits of the successes experienced by individuals within the 'readable' interdependent group context outweigh the heightened reactivity associated with an isolated group. (49:4;78.) For individuals who have problems coping with the relatively complicated social interactions of the urban environment, small group living in the wilderness represents a much more simple social situation.

With a more readable environment of both setting and society, the results of one's behavior are easier to isolate and more apparent than in the complicated setting. To the therapists, who strives to attain a situation in which the patient can be most aware of his place in the physical and social environment, WAPs offer a valuable setting. Furthermore, research indicates that such therapeutic situations do have a carry-over to the environment to which individuals return. (See "Research- Problem youth" pg.50)

In conclusion of this section, some mention should be

be made of the possible 'therapeutic' value of a WAP in providing an environment to which the normal individual can either 'escape' from the man-made realm; or satisfy a need for challenge.

Says Drasdo, in an excellent essay entitled Education and the Mountain Centers: "Outdoor recreation, in both its active and passive styles, has sometimes been called a form of escapism. Certainly the wild places have always offered, for some temperaments, an inviolable refuge from care." (8:35). He points out, however, that there are many individuals who do not need a different setting in order to escape, they simply mentally shut away the rest of the world.

For those who feel the need to get away from the complicated urban environment, the wilderness represents a positive change, as evidenced by previous discussion. Wohlwill cites a potential restorative power of the wild, in providing "the feeling of freedom, as well as the sense of oneness with nature." (88:3) Rather than the reactive, defensive environment of the city, the natural setting is a place, for some, to 'unwind' and enjoy a less complicated existence.

The wilderness can also be a place which provides a type of challenge or stress not found in everyday life. A Time Magazine article entitled "The Thrill Seekers" popularized the idea that the urban dweller seeks the personal challenge and 'flirting with death' stress experienced in adventure activities such as rock climbing and white-water canoeing. The more mundane and mechanical nature of occupations, with few outlets for achievement or satisfaction, may, in part, account for this. (42:44-51) Adventure activities can provide this physical excitement and stress, and further, more, when pursued in the non-reactive wilderness setting, may give the participant a heightened sense of accomplishment attributable to oneself and not the environment. (88:3)

The fact that urbanites frequent the wild more than rural people, along with the rise in popularity of adventure activities, suggest a relationship between the qualities of the wilderness and the needs felt by urban people not satisfied by the city. Thus the Wilderness Adventure Program, which incorporates adventure activities in the wilderness setting, might be important in providing an environment in which individuals can satisfy such needs.



## Wilderness Adventure Programs as a unique recreational experience

In an earlier paper (Sept., 1975), I presented some ideas on the stages of experience in recreation. In this section, I would like to reiterate this scheme in order to show how WAPs offer an experiential setting which is complimentary to the recreational 'needs' of persons with varied backgrounds.

The ideas on different types of recreational experiences resulted from considerations made of the activity classification scheme proposed by Mr. Christianson of Pennsylvania State University. (106.) The typology divided activities into the classes of "kinetic," "situational," and "harvest." Kinetic recreational activities were defined as those which were rewarding to a participant because of motion through space. Situational activities referred to activities in which the environmental location and setting was of primary importance. (Harvest included those activities in which pleasure was derived from an exchange with the environment. This class is not relevant to this discussion.) With such a classification scheme, such motion-oriented activities as bicycling and sky-diving would be kinetic. Mountain climbing, canoe camping, etc., which are dependent upon a mountain summit or wilderness lakes, would be situational.

With the rather loose definitions given above, closer inspection of this classification system reveals that these two categories are not mutually exclusive. As an example, we can consider the sport of cross-country skiing. The beginner, who usually lacks the coordination to move efficiently, probably receives pleasure from experiencing the beauty and peace of a snow-covered forest. A more experienced skier, who has developed the stamina and skill to 'run' through the woods, may derive pleasure out of the kinesthetic experiencing of motion.

If Christianson's typology refers to what an individual experiences, then cross-country skiing would fall under both categories, dependent upon the individual participating in the activity. The activity may be considered to have two realms of experience; one which is "outward," in the sense that the environment is the focus of one's attention; and the other as "inward," in which the inner, sensual feelings are the source of satisfaction.

As it turns out, many recreational activities can be seen to have these two components. Ask one rock climber what the beauty of the experience is, and he will refer to the fantastic views and the situation of being on a massive, vertical slab of rock. Ask another, and he will speak of the



strength and fluidity which one must have in order to efficiently move upward. This division of experiences appears to hold true for all forms of outdoor recreation.

In considering my own recreational experiences (and the experiences of others who have attempted to relate them to me with words), it appears that an individual can experience both the kinetic and the situational components of an activity, sometimes dependent upon the degree of familiarity with the activity. In the case of cross-country skiing, the beginner may initially experience the situational component, and, through practice, can come to focus more upon the kinetic experience.

An interesting observation is of the experiences related by individuals with a very high degree of familiarity with an activity. It appears that there is a third realm of experience which is considered as a total, all-encompassing experience. In skiing, the ultimate experience is often related as one in which pleasure is not derived from either the situation or the kinetics, but a combination of the two. The 'ultimate run' is <sup>not</sup> one in which one particular source of pleasure can be defined; rather, it is a sum-total of the sensual pleasures within and without.

Thus, our experiential realms take on a third dimension; that of a combinative kinetic-situational experience (kin-sit). The fact that a kin-sit experience is generally expressed only by those individuals with an extensive familiarity with an activity suggests that it is of a more developed nature than the other two realms. It seems that beginners can have an immediate kinetic or situational experience; but not an immediate kin-sit. Furthermore, it appears that in order to experience kin-sit, one must first experience the kinetic and situational realms. Thus, we might say that a kin-sit experience is premised upon the other two:



This does not imply that kin-sit is the terminal realm of experience of an activity, that from the moment of the first kin-sit, all experiences following will be of that nature. Rather, it refers to the fact that an individual can go through a varying progression of experiential dimensions, of which kin-sit may be a part, though the kin-sit can only occur after experiences in both the kinetic and situational senses.

Though I have limited this discussion to experiences of a recreational nature, these ideas may have application to other areas. A number of humanistic psychologists have suggested similar ideas. In particular, Maslow (1968) has developed ideas regarding certain levels of cognition, including one which deals with the concept of "peak experiences." Descriptions of this concept strike definite notes of similarity with 'kin-sit':

The wholeness of the experience is striking; the object(s) of the perception is exclusively attended to, completely absorbing the participant who undergoes an egoless, self-forgetful state associated with disorientation of time and space, often feeling that he has been fused into the object becoming part of a larger, more whole, superordinate unit which is seen detached from its human usefulness, expediency and purpose. (40:235)


Maslow has suggested that such an experience is one in which an individual can mature, develop new personal insights, and become more aware of one's potential (self-actualization):

Perceptions are enhanced, becoming detailed and oceanic yet simultaneously abstract and concrete in form. Dichotomies, polarities, conflicts are fused, transcended, or resolved leading to new and creative insights, awareness, and alignments. During the experience the person is closest to his identity or true self and feels the event to be self-validating and of intrinsic value. (40:235)

I would venture to say that there is a connection between kin-sit and this expansion of awareness suggested by Maslow. Individuals I know who have expressed experiences of kin-sit appear to be more mature, aware and 'self-actualized' than those lacking such an experience. Many of the writers associated with the wilderness (Thoreau, Muir, Leopold) have been described as 'self-actualized;' and it has been suggested by Scott that "peak experiences aided in their understanding of the wilderness."\* If this is so, then recreation which includes the kin-sit realm may be considered as a tool for aiding an individual's development toward environmental awareness. \* (40:236)

Now, I would like to suggest a slightly different framework in which to consider this idea of kin-sit. The definition of 'kinetic' will now refer to any recreational experience in which an individual's awareness is focused within, including perceptions resulting from interactions with other. This might be thought of as person-based. 'Situational' will

refer to experiences in which the natural setting is the focus of awareness; i.e. natural environment-based. As the sum total, of these, kin-sit is an awareness of not only oneself and the outdoors, but of other individuals also. These experiential activities are no longer limited to one activity. Development of kin-sit may be based upon kinetic experiences from one activities and situational experiences in another.



This implies an interesting dichotomy. Are some recreational activities more kinetic 'oriented' and others more situational-oriented? Certainly that recreation which makes no use of the natural setting as a resource lacks any opportunity for a situational experience. The focus of awareness in such activities is more oriented toward self and others. Thus recreation in the city, with its social orientation and lack of a natural setting, is probably more conducive to kinetic experiences. On the other hand, recreation in the natural setting certainly acts as an ample resource for the situational realm, though it may be limited in the kinetic sense.

These forms of recreation seem to be reflected by the nature of the individuals participating in them. City people, who participate in recreation of a kinetic nature, are, in my opinion, more 'tuned-in' to feelings of self and others, though they are not very aware of the natural environment. 'Pure' country people, on the other hand, know the outdoors as though it were part of themselves, but do not appear to have as much awareness of self and group, relative to urban dwellers.

Admittedly, there are numerous exceptions to this; but, in general, I would say that city-dwellers are more 'kinetic oriented', and rural people are more 'situation oriented'. Furthermore, the recreation taking place in these two settings shows the same division.

It was mentioned earlier that the kin-sit experiences may aid in an individuals understanding of the environment. It makes sense that an understanding of the environment is pre-vised upon an awareness of self, mankind in general and the natural world. Kinetic experiences are more conducive to the development of awareness in the first two areas, whereas situational experiences are more conducive to development in the last.

Environmental awareness in the individuals of our society has been considered necessary to our ability to cope with the environmental problems of today. If kin-sit experiences are a step in this direction, than the field of outdoor recreation has a responsibility in assisting individuals in their development toward kin-sit. With further study related to the interplay of these three realms of experience, it may be possible to determine the 'needs' of an individual in terms of their progression toward a kin-sit experience. Maybe recrea-

ation for city-dwellers should include more situational emphasis, and vice versa for country folk. The 'needs' of each individual is dependent upon his/her background.

WAPs have an interesting connection to this. Whereas many forms of recreation are oriented toward either the kinetic realm or the situational realm, the WAP is an activity which provides ample opportunities for both forms of experience. The use of the wilderness setting makes it an ideal activity for situational experiences. Also, the emphasis of inner-growth and group interaction provides a setting conducive to experiences of the kinetic type. Thus, the WAP appears to be favorable in both realms.

Should this be the case, then regardless of an individual's background, the 'complimentary' experience necessary for their development toward kin-sit (i.e. that experiential realm which is lacking in their background), is available in a WAP. A country person will have an opportunity to develop an awareness of self and others through the self and group-dynamics emphasis; whereas the urban dweller will find a setting conducive to experiencing nature.

By providing this opportunity, a WAP may be regarded as important in the sense that it is a recreational activity which can provide experiences leading toward the development of an awareness of the environment. Furthermore, WAPs are unique in the sense that they provide a potential for all the experiential "realms" of recreation, and therefore compliment the experiential background of any individual.

### Conclusion

Hopefully, this chapter has made clear the need for further research into the roles WAPs presently play in our society, in order to better assess their potential for the future.

The relatively small amount of empirical studies undertaken thus far have done little to enhance our understanding of the implications of an experience in a WAP. Such knowledge is necessary, however, if we are to apply these programs to specific aims, some of which were presented in the latter part of this chapter.

Studies such as the long-term effects of programs, differences of the experience relative to the background of an individual, and differences between programs presently in existence; would greatly add to our understanding of the place of WAPs in our society.

If it can be shown that Wilderness Adventure Programs are valuable as tools for the attainment of goals considered as important to our society, then the necessity of providing these programs will become clear; as will the necessity of preserving the environment on which they are based.

71.

APPENDIX I

EASES AND NATURAL RESOURCES OF  
SURVEYED MAPS

<u>School</u>	<u>Ease</u>	<u>Resources</u>
Outward Bound: Colorado	Denver, Co.	Rocky Mountains S.E. Utah deserts Colorado, Yampa, Green Rivers
Hurricane Island	Rockland, Me.	Penobscot Bay and surrounding waters
Minnesota	Ely, Minn.	Quetico-Superior Wilderness Area
North Carolina	Morganton, N.C.	Southern Appalachians Great Smoky Mts.
Northwest	Eugene, Ore.	Oregon Wilderness Areas North Cascade Mts. Sawtooth Wilderness Area
Southwest	Santa Fe, N.M.	Deserts of S.W. U.S. Sea of Cortez Baja, California Rio Grande
Dartmouth	Hanover, N.H.	White Mts. Connecticut Lakes Nova Scotia
National Outdoor Leadership School	Lander, Wyo.	Red Desert, Lake Powell Wind River Range Tetons Yellowstone Park Baja, California Prince William Sound Mt. McKinley
Asheville School	Asheville, N.C.	Appalachian Mts. Great Smokeys Wind River Range Grand Tetons Beartooth Mts., Mont.
Mt. Adams Wilderness Institute	Glennwood, Wash.	Mt. Adams Wilderness Area
Rainbow Camp	Anaconda, Mont.	Pintlar Wilderness Area

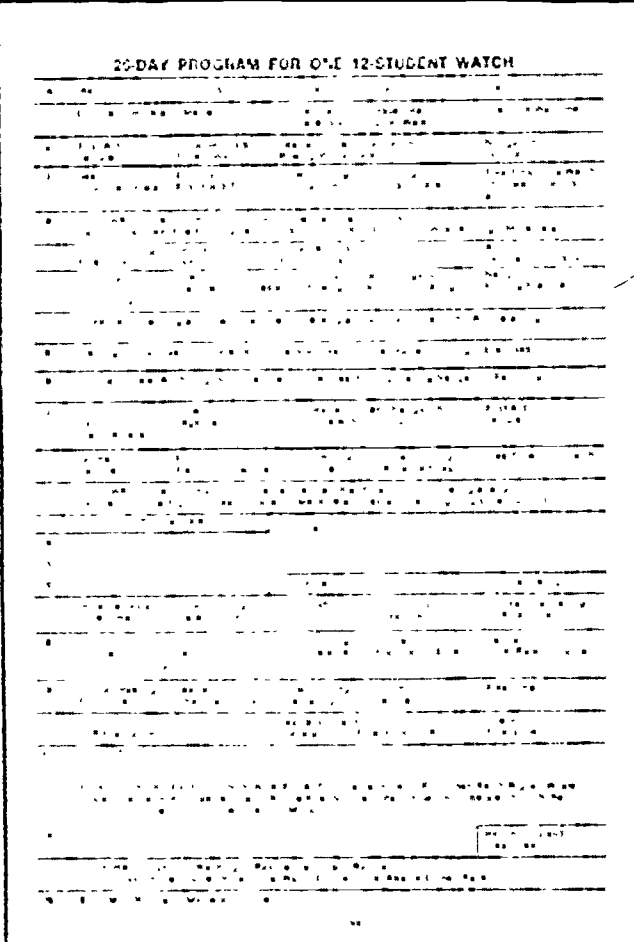


## APPENDIX II

### EXAMPLES OF WAP COURSE CONTENT

Course format for Hurricane  
Island Outward Bound School:

20-DAY PROGRAM FOR ONE 12-STUDENT WATCH



Day	Activity
1	
2	
3	
4	
5	
6	
7	
8	
9	
10	
11	
12	
13	
14	
15	
16	
17	
18	
19	
20	

From Yachting, March 1969, pg.140

Topics covered at the National  
Outdoor Leadership School:

#### CAMPING

- Shelter location and construction
- Use of fires and stoves
- Nutrition
- Cooking and baking
- Mountaineering first aid
- Emergency procedures

#### TRAIL TECHNIQUE

- Packing methods
- Energy conservation
- Foot care and blister prevention
- Topographic mapreading
- Compass use
- Off-trail routefinding
- Time control planning

#### ENVIRONMENT

- Flora and fauna
- Track and scat identification
- Edible plants
- Ecology
- Geology
- Meteorology
- Astronomy

#### MOUNTAINEERING

- Bouldering
- Knots and rope handling
- Belays, anchors, and rappels
- Tyrolean traverses
- Snow climbing
- Piton and chock protection
- Rescue techniques

#### FISHING

- Spin and fly casting
- Fish habitats
- Cleaning and cooking methods

#### EXPEDITION DYNAMICS

- Planning and logistics
- Equipment selection
- Expedition behavior
- Judgment
- Leadership
- Outdoor teaching methods

From 1975 NOLS Brochure

APPENDIX III

STANDARD STUDENT EQUIPMENT FOR COBS SUMMER COURSE

- 1-Candle
- 1-Canteen Cup
- 1-Carabiner
- 1-Carabiner, Locking
- 1-Compass
- 1-Diary
- 1-Ensolite Pad, 1/4"
- 1-Gaiters
- 1-Ground sheet, 4 mil.
- 1-Hard Hat
- 1-Helly Hansen Jacket
- 1-Ice Axe
- 1-Matchbox with Matches
- 1-Pack Frame
- 1-Pack Sack
- 1-Personal Effects Packet
- 1-Poncho
- 1-Prussik Sling, 5.5mm x 8'
- 1-Sleeping Bag, Summer
- 1-Sleeping Bag Liner, Nylon
- 1-Spoon
- 1-Stuff Sack
- 1-Water Bottle
- 1-Webbing Sling, 1" x 18'
- 1-Whistle

STANDARD TEAM GROUP EQUIPMENT FOR SUMMER COURSE

- 1-Alpine cord hank 40' Long
- 1-Climbing Rope, 11mm x 150'
- 3-Fuel Bottle, 1 quart (one per student)
- 1-Scrubbie
- 1-Sno Seal, 7½ oz.
- 1-Stove 111 B with Funnel
- 1-Tarp, Nylon

STANDARD PATROL EQUIPMENT FOR SUMMER COURSE

- 1-First Aid Belt
- 1-Final Expedition First Aid Kit
- 1-Folding Pick or Folding Shovel

STANDARD COURSE EQUIPMENT FOR SUMMER COURSE

- 1-Climbing Equipment Locker
- 1-Equipment Resupply Locker
- 1-First Aid Resuppl. Box
- 1-Personal Effects Locker with Locks
- 1-Stokes Litter
- 1-Tool Kit

- Crescent Wrench
- Electric Tape
- Flathead Screwdriver
- Phillips Screwdriver
- Hammer
- Needle & Thread
- Pliers
- Vice grips

STANDARD COURSE CLIMBING EQUIPMENT LOCKER

4-Horizontal Pitons

2-Angle Pitons, 5/8"

2-Angle Pitons, 3/4"

8-Carabiners, Steel

2-Figure 8 Descenders

1-Ammo Box

1-Hammer Holster

6-Nylon Slings, 1" x 5'

1-Padlock

2-Piton Hammers

2-Sets 1-10 Hexcentrics with Cord or Titons & Webbing

2-Sets 1-7 Stoppers with Cords

STANDARD COURSE RESUPPLY CHECKLIST FOR SUMMER COURSE

24-Candles	2-Helly Hansen Jackets
4-Carbiners	16-Plastic Food Bags 18" x 24"
4-Carbiners-Locking	16-Plastic Food Bags 8" x 10"
8-Compasses	1-Climbing Rope 7/16" x 150'
2-Ensolite 1/4" x 21" x 41"	2-Cook Kits
8-Golf Pencils	4-20' lengths of Alpine Cord
2-Hard Hats, Adjustable	8-7oz. cans of Sno Seal
12-Match Boxes	2-Stoves, 111B
8-Boxes of Matches	4-Funnels
2-Pack Frames	4-1 qt. Fuel bottles
2-Pack Sacks	2-Tarps, Nylon 11' x 12'
4-Back Bands	4-Ground Sheets, 4 mil x 36" x 72"
4-Shoulder Straps	1- ice axe
4-Waist Belts	1- entrenching Tool
8-Sleeping Bag Straps	
12-Pins	
12-Rings	
4-Metal Canteen Cups	
4-Prussik Slings	
2-Sleeping Bags	
2-Sleeping Bag Linens	
12-Spoons	
4-Stuff Sacks	
4-Water bottles	
4-Webbing Slings 1" x 18'	
12-Washcloths	
4-Pair Cutters	

77



APPENDIX IV

ADDRESSES OF SUPPLIERS  
AND INFORMATION RECEIVED THROUGH CORRESPONDENCE

Response Code:

E/R- Brochures received    R/U- returned unopen (defunct)  
N/R- No reply (as of 11/9/75)

The Asheville School  
Mountaineer Travel Camp  
Asheville, N.C. 28806  
B/R

Brigham Young University  
242 H.R. Clark Building  
Provo, Utah 84601  
R/U

Challenge/Discovery  
Prescott College  
Prescott, Az. 86301  
R/U

High Horizons  
Box 42; Banff,  
Alberta, Canada  
N/R

Mt. Adams Wilderness Institute  
Flying L Ranch  
Glenwood, Washington 98619  
B/R

National Outdoor Leadership Sch.  
Box AA  
Lander, Wyo. 82520  
B/R

North American Wilderness  
Survival School (NAWSS)  
205 Lorraine Avenue  
Upper Montclair, N.J. 07043  
R/U

Outward Bound, Inc.  
165 West Putnam Ave.  
Greenwich, Conn. 06830  
B/R

Colorado Outward Bound School  
P.O. Box 9038  
Denver, Colorado 80209  
B/R

Minnesota Outward Bound School  
330 Walker Ave.  
South, Wayzata, Minn. 55391  
N/R

Hurricane Island Outward  
Bound School  
P.O. Box 429  
Rockland, Me. 04841  
B/R

Northwest Outward Bound School  
3200 Judkins Rd.  
Eugene, Ore. 97403  
B/R

North Carolina Outward  
Bound School  
P.O. Box 817  
Morganton, N.C. 28655  
B/R

Outward Bound Center  
Dartmouth College  
P.O. Box 50  
Hanover, N.H. 03755  
B/R

Rainbow Camp  
Box 413  
Anaconda, Montana  
(No attempt at correspondence)

Rick Horn Wilderness Expeditions  
Box 471  
Jackson Hole, Wyo. 83001  
N/R

Rocky Mountain Expeditions  
P.O. Box 576  
Buena Vista, Colo. 81212  
N/R

The Wilderness Institute, Inc.  
P.O. Box UU  
Evergreen, Colo. 80439  
B/R

Daniel H. Lowenstein  
c/o Man-Environment Relations  
S-126 Henderson Bldg.  
Pennsylvania State University  
State College, Pennsylvania

To Whom It May Concern:

I would like to introduce myself as a Graduate Student here at Penn State. In the course of study I am presently involved with, that is, the study of the relationship between man and the natural environment, I am now concentrating on the fields of outdoor education and outdoor experiences.

Having been personally involved in schools and programs of your type, both as student and instructor, I place much importance upon the educational experience involved. Its value is not only in the personal development of the individual, but also toward the improvement of the attitudes of society toward the natural environment as a whole. By developing the relationship between the individual and nature, as your programs do, we can better the entire attitude of man vs. nature.

Because of my interest and belief in the values of such programs, I have decided to do a bit of research on the subject. Specifically, I would like to find out, in detail, the history of the idea of the "outdoor experience" schools, their programs, plans, the type of people involved (students and instructors), economic situation, etc., etc.. Through this information, I hope to better understand the role of such programs, and hopefully understand their future.

Information of the above type from your program would be invaluable and of tremendous help to my study. I would appreciate it very much if you could send me any available information as soon as possible, since I hope to do a preliminary paper in the next two months. I would also be very interested in any personal comments or suggestions you might have about the philosophies and ideas about the "outdoor experience" programs of your type.

Thank you very much.

Sincerely yours,

*Daniel H. Lowenstein*

## APPENDIX V

### REVIEW OF RESEARCH CONCERNED WITH STANDARD COURSES OF WILDERNESS ADVENTURE PROGRAMS

Clifford and Clifford (1967). Research of WAPs began when Clifford and Clifford administered tests to 36 boys ranging from 16 to 21, attending a Colorado Outward Bound course. Questionnaires involving self-rating, self and ideal descriptive scales, and a word-meaning test, were administered upon arrival and prior to departure of students. Results indicated that after the course, participants tended toward a greater degree of positive self rating and self description, though pre and post-test difference was attributed largely to a relatively poor initial self concept. It was concluded that participants showed less of a discrepancy between real and ideal self concepts after the course, and real self concepts became more positive. (79:37)

Schulze (1970). Schulze, in 1970, identified more specifically some areas of possible improvement. Through interviews and questionnaires, Dartmouth students and high school students were evaluated as to their general impressions of participation in Outward Bound. Schultz concluded that: 1) mental and emotional stresses were perceived by participants as more self enhancing than the physical stress, 2) the group activities of the program were conducive to respect and tolerance for others, 3) mutual dependence and trust was elicited by the survival situation, and 4) there was a sense of accomplishment and achievement arising from the successful completion of an Outward Bound experience. (79:40)

Fletcher (1970). The first long range study was undertaken in 1970 by Fletcher, involving the Outward Bound schools in England. Questionnaires were sent to 3,000 students and their sponsors, of which approximately 78% of the students and 86% of the sponsors responded. 86% of the participants felt they had changed positively regarding self confidence, and 67% thought the changes would last forever. The increased self confidence was noted by 70% of the sponsors. The vast majority of the students considered the courses successful. Fletcher pointed to important limitations in the study, however, in that it was difficult to determine the proper elapsed time for the follow-up study, and it was hard to isolate singular causes for positive changes. (71.)

Smith (1971). Smith investigated the effects of Outward Bound upon selected personality factors and behavior of high school juniors. The studies compared a group of 50 juniors who attended a three-week Outward Bound course as part of their curriculum to a control group who had a regular course curriculum. It was found that the students involved in the Outward Bound experience did improve significantly in their classroom attendance (considered a goal of the program), and also improved significantly in positive thought about self. It was noted, however, that no long lasting changes appeared to occur, and teachers of the students saw no significant differences between the two groups. (83.)

Klocke (1971). A rather involved study of "Self-Actualization in Females" was made by Klocke and van der Wilt. The purpose was to see whether Outward Bound would assist in the self-actualization process, an idea fostered by Maslow (1954, 1962). His self-actualized person has been defined as "one who is more fully functioning and lives a more enriched life than does the average person." Using a specially designed inventory system, questionnaires were formulated to measure a certain number of traits related to a self-actualized person. Results, based upon responses of 20 participants in the Minnesota Outward Bound school, indicated that the Outward Bound experience contributed significantly in the self-actualization process of the female participants, though little change was noted in male participants. This difference was attributed to the possibility that Outward Bound may force females to assume an unfamiliar role; one more stressful and masculine than that to which they are used to. Actual interviews appeared to confirm this hypothesis. (36.)

Gillette (1971). Also in 1971, Gillette attempted to identify attitude changes in participants of an Outward Bound Mountain Ski School. The tested attitudes were related to the objectives and goals of the Outward Bound experience as interpreted by two instructors of the program. A questionnaire, containing 60 statements which were felt to be consistent with expressed Outward Bound goals, was administered to participants immediately before and after the course. Analysis showed improvement in attitudes toward the areas of 1) assuming initiative, 2) changing pace, 3) doing as others do, and 4) teaching that emphasizes lecture. On the other hand, there was a negative change toward 1) being concerned with over-population, 2) being democratic, 3) sharing, 4) supporting law and order in a liberal manner, and 5) supporting minority groups in their attempt to attain equality. Four attitudes were found unchanged, related toward 1) being involved, 2) doing things on one's own, 3) having time to reflect and 4) learning at one's own



pace. Considering the amount of attitudinal changes relative to the level of significance attributed to the test, Gillette concluded that no positive attitudinal changes occurred. (73.)

Lovett (1971). Lovett, through application of ideas from the field of guidance counseling, created a study aimed at comparing the attitudes toward self and others of Outward Bound and non-Outward Bound students. A questionnaire, comprised of open-ended statements, was given to junior and senior students at Woodward High School in Toledo, Ohio. Results were based upon responses received 28 Outward Bound students and 21 control students. The study indicated that "students who participated in Outward Bound appeared to be more positively aware of self, more confident in decision making, and more confident in interactions with others than the control group of non-participants." (79:41)

Henry (1973). The National Outdoor Leadership School was the object of a study carried out by Henry, who investigated the reasons individuals participated in the 1972 NOLS Wilderness Expeditions. His review of literature related to the topic of study showed that an ORRRC report of 1962 reported that the reasons people sought the wilderness were, in order of importance, 1) exit civilization, 2) aesthetic, religious values, 3) health, 4) sociability, and 5) seeking the pioneer spirit. A similar study by Bultena and Taves (1961) showed 1) recreation, 2) fascination, 3) sanctuary, 4) heritage and 5) personal gratification as the most important motives. Henry based his evaluation upon a questionnaire which listed numerous statements relating to motives a participant might have in attending the NOLS course. Table VII lists the motives, in order of importance, which were cited as reasons individuals participated.

TABLE VII

- |                           |                        |
|---------------------------|------------------------|
| 1. Learn about Wilderness | 8. Physical Challenge  |
| 2. Perfect Outdoor Skills | 9. Fun                 |
| 3. Experience Wilderness  | 10. Sense Nature       |
| 4. Exploration            | 11. Affiliation        |
| 5. Adventure              | 12. Sense of Place     |
| 6. Tranquility            | 13. Temporary Escape   |
| 7. Leadership             | 14. Self-testing       |
|                           | 15. Status Recognition |

It was also found that sex, income, region and regional background and previous wilderness experience were important independent variables affecting and individuals choice of motives. Experiencing the Wilderness was an especially prominent motive for females. Exploration, Tranquility and the Wilderness Experience were motives common to people from

medium-sized cities. Students from the mid-west and plains sought out the adventure aspect of the program, individuals of high income sought the tranquility, and low income participants wanted to 'sense nature.' The study concluded that there were six motivational areas to which the participants ascribe: 1) Achievement, 2) Curiosity, 3) Affiliation, 4) Independence, 5) Stress Reduction and 6) Power. (76.)

Matthai (1973). An interesting study carried out by Matthai dealt with the Effect of Outward Bound on Sense of Competence. The idea of competence is one developed by White, who theorized that man possesses an internal, inherent motivation to be a cause; to have an effect on the environment. The focus of this study was to determine the changes in a person's sense of competence, i.e. a feeling that one has some degree of control over the environment. Since White argued that a sense of competency depends not on what is done to or for a person, but on what he does for himself, "competency is evoked in intrinsically challenging situations." (81: ) Matthai hypothesized that, due to the challenge nature of an Outward Bound course, a student is likely to undergo a significant change in his sense of competence. Pre and post-test questionnaires were given to 78 participants of the Hurricane Island Outward Bound school, with items pertaining to background; and self rating scales on outdoor sense of competency, scholastic sense of competency and general sense of competency. Findings showed that, as a group, participants showed significant changes in all three scales, though no correlation to age, socio-economic or skill background was noted. Persons showing the greatest increase in sense of competence were those who initially rated themselves low in athletic ability. This was attributed to the fact that a person who was already reasonably competent in athletic abilities would not find much room for improvement in that particular area. (81.)

Koepke (1973). An in-depth study of the effects of Outward Bound participation upon anxiety and self-concept was made by Koepke in 1973. The purpose of the investigation was to determine if participation in a physically and psychologically stressful experience had any effect upon anxiety and self concept. State anxiety was defined as a "transitory emotional state or condition of the human that is characterized by subjective, consciously perceived feelings of tension and apprehension and heightened autonomic nervous system activity." (Spielberger, 1970) Trait anxiety was interpreted as meaning a relatively stable difference between one person and another as to their tendency to respond to situations perceived as threatening. Koepke relates 'self concept' as being the sum total of all feelings about self. Change in self concept may be gradual and subtle, and may be inhibited because people 1) ignore experiences contrary to self concept and 2) select perceptions which fit.

(Doms and Snyers, 1959). The procedures of the study entailed administering a "State-Trait Anxiety Inventory" to measure anxiety, and the Gough Adjective Checklist to measure self concept. (This involves a list of adjectives, scaled according to a number of personality characteristics; i.e. dominance, order, aggression, etc..) The subjects were from a standard 21 day course at the Colorado Outward Bound School, and were given the tests immediately before and after the course.

Analysis of the data showed that following the experience, the participants ascribed significantly fewer unfavorable adjectives to themselves, and were less likely to seek support from others. All changes were interpreted as positive. Koepke concluded that Outward Bound participants 1) view themselves more positively after a course, 2) their perceptions of what they are come closer to what they want to be, 3) they have high anxiety before the course and low anxiety after, and 4) a positive self concept is related to low anxiety.\*

Baker (1975). The object of this study was to determine changes in leadership behavior of participants in basic courses at the National Outdoor Leadership School. Leadership was defined as "that behavior of an individual which initiates and maintains structuring effects in interactions with a social system." (69: ) Subjects were 80 participants in three types of expeditions at NOLS: Wilderness, Mountaineering and Biology expeditions. The Leadership Opinion Questionnaire (Fleischman, 1960) was administered immediately before and after participation. Baker concluded that "No statistically significant changes in attitudes concerning leadership behavior was found for any of the specific courses or the group as a whole." (69.)

\* For more details of this study please contact a substantial amount of information contained in this section.

## REFERENCES

### BOOKS

1. Black, Henry Campbell. Black's Law Dictionary  
St. Paul, Minn.: West Publishing Co., 1968.
2. Brainerd, John. Working with Nature  
New York: Oxford University Press, 1973.
3. Carlson, Reynold Edgar, Theodore K. Deppe, and Janet K. Maclean. Recreation in American Life (2nd Edition)  
Belmont, Cal.: Wadsworth Publishing Co., Inc., 1972.
4. Clawson, Marion and Jack L. Knetsch. Economics of Outdoor Recreation  
Baltimore: The Johns Hopkins Press, 1969.
5. Corpus Juris Secundum #45; "Negligence"  
New York: The American Law Book Co., 1966.
6. Leeker, Gloria W. The Conservation Directory (2nd Edition)  
Wash., D.C.: The National Wildlife Federation, 1975.
7. Douglass, Robert W. Forest Recreation  
New York: Pergamon Press, 1969.
8. Drasdo, Harold. Education and the Mountain Centers  
G.E.: Tyddyn Gabriel, 1972.
9. Driver, B.L. Elements of Outdoor Recreation Planning  
Michigan: University of Michigan Press, 1970.
10. Leopold, Aldo. A Sand County Almanac  
New York: Oxford University Press, 1968.
11. Nash, Roderick. Wilderness and the American Mind  
New Haven: Yale University Press, 1973
12. Odum, Eugene P. Fundamentals of Ecology  
Philadelphia: W.E. Saunders Company, 1971.
13. Pennsylvania State Planning Board. Statewide Comprehensive Outdoor Education Plan. June, 1971
14. Surrency, Erwin C. Research in Pennsylvania Law  
New York: Oceana Publishers, 1965.
15. United States Code Annotated; Title 16: "Conservation"  
St. Paul, Minn.: West Publishing Co., 1964.

16. U.S.C.A.; Title 43: "Public Lands"
17. van der Smissen, Betty. Legal Liability of Cities and Schools for Injuries in Recreation and Parks  
Cincinnati: The W.H. Anderson Co., 1968.

#### Periodicals

18. "Fitting Managers against Nature"; Business Week  
March 16, 1968; pg. 106-107+.
19. "How one Company Trains in the Outdoors"; Business Week  
July 24, 1971; pg. 40-41+.
20. Solimine, Alexander. "Seven-year-olds Meet Challenges of  
Real Wilderness Tripping"; Camping Magazine  
Sept., 1972; pg. 19.
21. Gomolak, Low. "Over the River and Through the Woods to  
Self-Awareness"; College and University Business  
Aug., 1972; pg. 43-45.
22. The Environmental Law Reporter  
1972 and 1973 Bound Volumes
23. Price, Ray. "Outdoor Finishing School"; Field and Stream  
March, 1968; pg. 68-69.
24. Browning, Bill. "Wilderness School for the 'Now' Gener-  
ation"; Field and Stream June, 1972; pg. 62-65.
25. Grossman, Edward. "A Rough Cure for Adolescence";  
Harpers Magazine May, 1967; pg. 69-71+
26. Arnstein, George E. "What is Environmental Education?"  
The Journal of Environmental Education  
Fall, 1971; pg. 7-9.
27. Knapp, Clifford E. "Attitudes and Values in Environmental  
Education"; The Journal of Environmental Education  
Summer, 1972; pg. 26-29.
28. Fartridge, Ernest. "The Lessons of Nature"; J.O.E.E.  
Winter, 1973; pg. 35-37
29. Smith, Julian. "Adventure in Outdoor Education";  
The Journal of Health, Physical Education and Recreation  
(JOHPER) May, 1955; pg. 8-9.
30. "Outward Bound"; JOHPER Nov., 1972; pg. 37-39
31. Rankin, Kelly. "35 Days in the Wyoming Wilderness";  
JOHPER Nov., 1972; pg. 41-43.

32. Warder, Donald S.. "Learning in the Wilderness"; JOHPEK May, 1974; pg. 77.
33. Sheltnire, Jack C.. "Winter Camping on Semester Break"; JOHPEK Sept., 1974 pg. 78,79.
34. Kline, Jim. "Inglemoor High Schools C.E. Recreation Program"; JOHPEK Nov., 1974; pg. 81.
35. Howard, Jane. "Last Mountain Man? Not if He can Help It"; Life Dec. 19, 1969; pg. 48-50+.
36. "The Wilderness System"; The Living Wilderness Magazine Winter, 1974-75; pg. 38-47.
37. Comer, Nancy. "Surviving Outward Bound"; Mademoiselle Oct., 1971; pg. 180-181+.
38. "School in the Wilds"; McCall's June, 1956; pg. 8-10.
39. "Wilderness Survival School"; Montana Education April, 1965; pg. 26.
40. Scott, Neil R.. "Toward a Psychology of the Wilderness Experience"; Natural Resources Journal April, 1974; pg. 231-237.
41. Kurland, Seymour. "Onward and Upward in Outward Bound" The New York Times Oct. 12, 1975; pg.7+.
42. "The Thrill Seekers"; Newsweek Magazine Aug. 18, 1975; pg. 44-51.
43. Earnhart, Lloyd. "Outdoor Recreation and Environmental Attitudes"; Parks and Recreation April, 1973; pg. 48-49.
44. O'Donnell, James. "Snow Trek"; Parks and Recreation April, 1973; pg. 50-51+.
45. Lawrence, Lydia. "Rugged Challenge for Teenagers"; Reader's Digest April, 1963; pg. 183-191.
46. Maynard, Lee. "Nature as Teacher"; Saturday Review May 17, 1969; pg. 76-77.
47. Caesar, Gene. "Outward Bound!"; Seventeen July, 1966; pg. 92+.
48. La Fontaine, Barbara. "Babes in the Woods"; Sports Illustrated July 11, 1966; pg. 44-46+, July 18, 1966; pg. 45+.



49. Barcus, Carolyn G. and Bergeson, Roland G.. "Survival Training and Mental Health: A Review"; Therapeutic Recreation Journal First Quarter, 1972; pg. 3-7.
50. Bernstein, Arthur. "Wilderness as Therapeutic Behavior Setting"; Therapeutic Recreation Journal Fourth Quarter, 1972.
51. "Operation Outdoors"; Time Dec. 17, 1974; pg. 30.

Times Educational Supplement of London:

52. "The Short Term Training School"; Feb. 3, 1945; pg. 53.
53. "An opportunity for Adventure"; Apr. 30, 1949; pg. 276
54. "Character and Friendship Through Hardship"; June 16, 1950; 474.
55. "Moray Sea School: A Real Service"; Aug. 29, 1952; pg. 721.
56. "Outward Bound Girls Training Scheme"; Sep. 25, 1959; pg. 321.
57. "Outward Bound in Germany"; June 23, 1961; pg. 1304.
58. "German Outward Bound- Lack of Rigour"; Aug. 25, 1961;
59. "In Corpore Sano- OB Together"; June 1, 1962; pg. 1128.
60. Letter from M. Tedder; July 13, 1962; pg. 55.
61. "Men of the Mountains"; Mar. 29, 1963; pg. 659.
62. "Going British in the Rockies"; Aug. 28, 1964; pg. 275.
63. "Training the Leaders- Adventure Schools"; Aug. 13, 1965; 273.
64. "Outward Bound Course for Blind Boys"; May 15, 1970; pg.
65. "Kurt Hahn: 'Keeper of Gordonstoun's Conscience'"  
Apr. 20, 1973; pg. 18.
66. Vital speeches of Today Sep. 15, 1964; pg. 725-7.
67. Willauer, Peter O.. "To Meet A Challenge"; Yachting .  
March, 1969; pg. 74+.

Papers and Abstracts

68. Adams, Walter Dale. "Survival Training: Its Effects on the Self Concept and Selected Personality Factors of Emotionally Disturbed Adolescents"; Ph.D. Utah State University; 1969.
69. Baker, Edward. "Change of Leadership Behavior Attitudes Effected by Participation in Basic Courses at NOLS"; M.A. Pennsylvania State University; 1975
70. "A Summary Report of Involvement of the COBS in Areas of Social Concern"; Colorado Outward Bound School; 197 .
71. Fletcher, B.A. "Students of Outward Bound School in Great Britain"; University of Bristol, School of Education; 1970.

72. Foster, Herbert L. "An Analysis of an OB Experience and Its Relationship to Teachers Education"; State University of New York, Buffalo; 1971.
73. Billette, James H. "A Study of Attitudinal Changes as a Result of OB Mountain Ski School"; Ph.D. University of Northern Colorado; Spring, 1971.
74. Godfrey, Robert John. "Outward Bound: A Model for Educational Change and Development"; Ph.D. University of Northern Colorado; 1972.
75. Hauserman, Billy Dale. "The Effect of an Orientation to the Outdoors on Teaching Behavior in the Classroom"; Ed.D. State University of New York, Buffalo; 1963.
76. Henry, Wesley Raymond. "Reasons for Participating in the 1972 NOLS Wilderness Expeditions"; M.A. The University of Michigan; 1973.
77. Kelly, Francis J. and Baer, Daniel J. "Outward Bound as an Alternative to Institutionalization for Adolescent Delinquent Boys"; Outward Bound, Inc.; June, 1968.
78. Kesselheim, A. Dona. "A Rationale for Outdoor Activity as Experiential Education- The Reason for Freezin"; Paper presented to the Conference on outdoor Pursuits in Higher Education, Appalachian University; 1974.
79. Koepke, Sharon. "The Effects of Outward Bound upon Anxiety and Self Concept"; M.A. Pennsylvania State University; 1973.
80. Letti, Donna. "The Values of Wilderness Campers"; M.E. Pennsylvania State University; 1972.
81. Lattani, Robert A. "The Effect of Outward Bound on Sense of Competence"; Ph.D. Harvard University; 1973.
82. Leetric, Frederick. "Outward Bound and Higher Education"; Colorado Outward Bound School;
83. Smith, Mary Anne Wakefield. "An Investigation of the Effects of an OB Experience on Selected Personality Factors and Behavior of High School Juniors"; Ph.D. University of Oregon, 1971.
84. Stuckey, James Merit. "Changes in Self-Descriptions of Teachers as a Result of an Outward Bound Experience"; Ph.D. The American University; 1974

85. van der Smissen, Betty. "Legal Aspects of Adventure Activities"; Paper presented at Lorado Taft Campus, Northern Illinois University; 1975.
86. van der Wilt, Robert B. and Klocke, Ronald A.. "Self-actualization of females in an Experimental Orientation Program"; Paper presented in the National Association of Women's Deans and Counselors publication; Spring, 1971.
87. Wohlwill, Joachim. "Factors in the Differential response to the Natural and Man-made Environment"; Paper presented at Meetings of the American Psychologists Association, Montreal; Aug., 1973.
88. Wohlwill, Joachim. "The Virtues of a Non-responsive Environment"; Paper submitted to the 1973 Wilderness Conference.

#### Government Documents

##### Code of Federal Regulations:

89. Title 33: "Navigation and Navigable Waters"
90. Title 36: "Parks, Forests and Public Property"
91. Title 43: "Public Lands-Interior"
92. U.S. Government Publication. A Nationwide Outdoor Recreation Plan; #32-0980, Committee Print; June, 1974.
93. U.S. Government Publication. The Recreation Imperative; #38-6710, Committee Print; Sept., 1974.
94. U.S. Government Publication. The U.S. Courts; #95-1470, Committee Print; 1974.

#### Miscellaneous

95. The Asheville School Brochure; Asheville, N.C.; 1975.
96. Mt. Adams Wilderness Institute Brochure; Glennwood, Wa.; 1975.
97. National Outdoor Leadership School Brochure; Lander, Wyo.; 1975.
99. Hurricane Island Outward Bound School Brochure; Rockland, Me.; 1975.
98. Outward Bound School Brochure; Greenwich, Conn.; 1975

100. KC Park 420 Lecture of Sept. 10, 1975. (P.S.U.)
101. Lecture by Roderick Nash of Sept. 25, 1975. (P.S.U.)
102. Interview with Dr. van der Smissen, Professor, Pennsylvania State University; Sept., 1975.
103. Dartmouth Outward Bound Brochure; Hanover, N.H.; 1975.
104. Correspondence with Outward Bound; Oct., 1975.
105. Adventure Curriculum; Project Adventure.
106. KC Park 420 Lecture of Oct 3, 1975. (P.S.U.)