A PROPOSED CAMPCRAFT PROGRAM
FOR BOYS AND GIRLS

by

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CHAPTER I

PRESENTATION OF THE PROBLEM

INTRODUCTION

In America people are living in a complex society accompanied by a feeling of uncertainty which has been created by an ever-changing technology and science. In substantiating this view it is necessary only to mention some of the evidences which are present in the everyday living of today's average American. Current periodicals are constantly informing our citizenry of the need for more and more scientists if America is to keep abreast of world competition in technological and scientific discoveries; television is presenting materials relating to such subjects as national defense; and daily conversations are verbalizing the problems of world unrest.

Society has been defined by The American Peoples Encyclopedia as follows:

Includes all the relations of man to other men. The whole complex of human relationships is effected by such biological and physical factors as heredity and environment, as well as by philosophical and religious ideas, artistic techniques, and technology and science. Society is organized; its components are linked together by a variety of bonds. The components of society do not behave independently of one another but are in constant cooperation or competition. The main factors which determine
the organization of society are kinship, sex, occupational groups, religious and social organizations, clan and government (3, p. 423).

In the last fifty years our society has moved from an agrarian to a technological setting. This change has caused the migration of many people from rural areas to urban sub-divisions clustered around large industrial centers. The speed of living has shifted from a leisurely pace to one set to meet the demands of efficiency and high speed production. Moving with the advancement of technology, scientists have made almost unbelievable strides for the betterment of man, such as in the field of medicine; but they have also designed instruments for man's destruction, such as the hydrogen bomb. Additional technological and scientific advancements in communication and transportation have aided a growing awareness of the world as a unit instead of individual nations.

Failure on the part of social institutions and thought to keep pace with these and similar advancements have produced a gap commonly termed a "cultural lag." If a way of living is to be devised to fill this cultural lag, the needs of individuals must be evaluated in terms of current situations, and means must be devised to meet these needs. In discussing "need" Prescott said: "The structure and dynamic processes of the human organism imply the need for certain things, for certain conditions and for certain activities of the body if physical and
mental health are to be maintained (58, p. 193)."

Defining the need concept in another way, Cowell says, "The simplest definition of need is the absence of something which if present would tend to give satisfaction. A need is the immediate outcome of certain internal and external occurrences and is therefore basically related to culture (12, p. 242)."

Inherent in our American culture is the democratic principle based upon the belief in the dignity and worth of the individual, and within this principle a means for meeting our current needs has been expressed:

The civil liberties, the institutions of democratic government, indeed democracy itself are founded on a faith that every human being has possibilities for beneficial growth in mind and spirit, which can be realized if the conditions favorable to growth are provided. Out of this faith grows the primary purpose of democratic education, which is the welfare of all the people. Out of this faith arises the concern for one's fellow man which lies at the heart of the great religions and of all humanitarian enterprises (23, p. 68).

In discussing education Stella Henderson states that education is:

... a process of growth and development taking place as a result of the interaction of an individual with his environment, both physical and social, beginning at birth and lasting as long as life itself -- a process in which social heritage as part of the social environment becomes a tool to be used toward the development of the best and most intelligent persons possible (36, p. 44).

It has been recognized that "The individual and the culture
are an 'orchested unity', each making the other. They cannot be separated unaltered, and therefore cannot be understood or studied one apart from the other (11, p. 91)."

In an attempt to meet the demands of these concepts and others of a similar nature, the Educational Policies Commission of the National Education Association has formulated the following statement known as the "Imperative Educational Needs of Youth."

1. All youth need to develop salable skills and those understandings and attitudes that make the worker an intelligent and productive participant in economic life. To this end, most youth need supervised work experience as well as education in the skills and knowledge of their occupations.

2. All youth need to develop and maintain good health and physical fitness.

3. All youth need to understand the rights and duties of the citizen of a democratic society, and to be diligent and competent in the performance of their obligations as members of the community and citizens of the state and nation.

4. All youth need to understand the significance of the individual and society and the conditions conducive to successful family life.

5. All youth need to know how to purchase and use goods and services intelligently, understanding both the values received by the consumer and the economic consequences of their acts.

6. All youth need to understand the methods of science, the influence of science on human life, and the main scientific facts concerning the nature of the world and of man.

7. All youth need opportunities to develop their capacities to appreciate beauty in literature, art, music, and nature.
8. All youth need to be able to use their leisure time well and to budget it wisely, balancing activities that yield satisfactions to the individual with those that are socially useful.

9. All youth need to develop respect for other persons, to grow in their insight into ethical values and principles, and to be able to live and work cooperatively with others.

10. All youth need to grow in their ability to think rationally to express their thoughts clearly, and to read and listen with understanding (22, p. 216).

Our definition of learning has broadened from one based upon a philosophy that learning was merely the acquisition of knowledge to a philosophy based on the "organismic concept." The term organismic is based on evidence which has proven that there is no separation of mind and body; the individual reacts in toto to his surroundings.

All learning, so it is believed, is what we build into behavior from an experience; we learn best those things that help us solve a problem, meet a situation, attain a desire, satisfy a want, or fulfill an interest (55, p. 13).

Dewey in describing experience has said:

Experience always involves a dynamic interaction between an organism and his environment. It involves a doing or trying — and an undergoing. The organism is said to have had an experience when the connection between the doing and the undergoing is sensed. Thus more activity is not experience. It is what results when the activity is interpreted in terms of the return wave of consequences which flow from it (18, p. 163-64).

Individuals learn by experience. Behavior cannot be
confined merely to the area of mental activity but, instead, involves the individual as a whole. Thus, education must design its curriculum to provide experiences which effect the total organism.

With this change in our cultural pattern and the new educational concepts of learning, have come many additions to teaching methods such as the use of audio-visual aids, classroom projects portraying the application of theories learned, field trips and many other experience-centered activities as described by Irwin when he stated:

> Recent trends in education such as the activity school and the community centered school are efforts on the part of educators to push aside the restricting walls of the traditional classroom. In their efforts to meet the aims of education, they have brought material from real life into the classroom for experiences with actuality at its source. By enlisting the cooperation of all educative agencies in a community they are attempting to achieve the end product everyone so desires -- that of an educated citizen (37, p. 23).

School directed experiences conducted outside the classroom which include activities that can be best learned through direct experiences in contact with native materials and life situations have been defined as outdoor education.

Fairly new to the scene of outdoor education is school camping which is recognized as a tool by which dynamic living can be taught. Gilliland stated that:

> Many skills and attitudes needed by young people today apparently can be taught more effectively out-of-doors than indoors. Educators do not
claim that the school camp is a panacea for all the ills of society. They do contend, however, that some of the direct experiences needed by young people are best found in a school camping environment (27, p. 2).

It is perhaps significant to note here that the organized camping movement had its beginning in the United States as part of a school's summer program. However, it has been only in the last thirty years that public school systems have started to explore and utilize the educational potentialities of the organized camp. Many states, among them, Michigan, California and New York, now include organized camping experiences as a part of the regular public school curriculum. The school camp is not regarded as a frill or extra, but as a means by which the goals of education can be achieved.

Camping provides opportunities for the teaching of democracy through actual application of democratic principles and provides situations for real life experiences. It has, in addition, made a distinct contribution to today's youth in use of leisure time and appreciation of nature in outdoor activities.

It is true in camping, as in many other activities, that the fullest possible value cannot be obtained unless the participants in the activity have acquired certain skills and knowledges. Camping skills and knowledge have been labeled "campcraft." Burns has defined campcraft as
"the art of taking care of one's self and others in the outdoors and getting joy and inspiration from it (6, p. 94)."

Materials designed to aid the individuals development of skills and knowledges of outdoor living for both their own sake and to enable the individual who possesses these skills and knowledges to achieve more intangible goals through comfortable, safe and healthful outdoor experiences have received considerable attention. Youth agencies, and individuals considered to be experts in this field, have printed many materials explaining the skills and knowledges of campcraft. However, a survey of the literature reveals little information on the progressive development of campcraft skills and knowledges.

It was from this area of campcraft that the problem of this paper was selected. It is hoped, by devising a progressive program designed to assist individuals in acquiring those knowledges and skills necessary to enjoy camping at the fullest, that a contribution will be made to the needs of the youth of the United States and thus to our society as a whole.

The Problem

Origin of the study

In a review of the related literature in the field of camping there appears to be a lack of research in the
area of defining the skills and knowledge of a progressive campcraft program. It is important to recognize that many individuals and groups have defined such programs, but have not validated them by accepted research methods. Among the better known of these are the programs defined by Catherine Hammett (33, p. 28-37) and by the Junior Main Guides (49, p. 8-24). Catherine Hammett, in 1955, requested the aid of members of the Oregon State College Women's Physical Education Department to study progressive campcraft programming, through the teaching of their camping education courses. A study was started and then dropped when the American Camping Association selected as a national leadership training project the training of campcraft counselors based on a three-level program of skill development which they announced in the April, 1956 edition of Camping Magazine (1, p. 36). The American Camping Association program is aimed at the counselor level and is designed eventually to evolve into a standardized training and certification program for the training of campcraft leaders.

The apparent need for research in the area of campcraft progression programs and the current interest in such programs as indicated by the American Camping Association form the bases upon which this study was selected. To avoid duplication of work to be accomplished the emphasis of this study is
placed upon a campcraft skills and knowledges program for boys and girls.

Purpose of the study.

The purpose of the study was to define the skills and knowledges thought to be essential to include in a three-level progressive campcraft program, for boys and girls based upon the opinions of a selected group of members of the A.C.A. located in the nine western states.

Nature of the Study

The study centers around an analysis of skills and knowledges considered essential for the boy or girl to achieve in the development of campcraft skills and knowledges. The analysis included a review of the related literature, gathering information from all available resources, and finding out the opinions of those currently engaged in working with boys and girls in situations where campcraft is included in the program of activities. The interpretation of the analysis has resulted in a proposed campcraft program for boys and girls for use by them as individuals, as a family, as club groups or as a part of the program of activities in a camp.

Definition of Terms

For the purpose of this study several terms have been selected for definition. These terms are organized camping, an organized day camp, an organized resident camp, and campcraft.
Organized Camping

... any definition of organized camping includes at least five elements -- out-of-doors, recreation, group living, education, social adjustment -- for camping is a recreational experience in the out-of-doors which provides special opportunity for education and for social adjustment through group living. In camping the primary focus is on the camper and the utilization of all the facilities of the camp, both personal and physical, for the pleasure, growth and welfare of the camper in terms of his interests and needs (46, p. 2).

In describing the kind of experience camping should offer its participants the American Camping Association states:

Organized camping is a creative, education experience in cooperative group living in the out-of-doors. It utilizes the resources of the natural surroundings to contribute significantly to physical, mental, spiritual and social growth. It is a sustained experience under the supervision of trained leadership.

Camping contributes:
- to good health through supervised activity, sufficient rest, good food and wholesome companionship;
- to spiritual development by helping campers to recognize and appreciate the handiwork of God; in nature;
- to social development by providing experience in which campers learn how to deal practically and effectively with living situations;
- to citizen training, providing through its community of campers the medium for democratic participation in decision making, planning and carrying out of activity;
- to the development of self-reliance and resourcefulness by providing instruction and experience in which campers acquire knowledge and skills essential to their
well-being.¹

An Organized Day Camp

Organized day camping is an experience in group living in a natural environment. It is organized as a sustained experience carried on during the daytime under the supervision of trained leadership. It provides a creative educational experience in cooperative group living in the out-of-doors. It utilizes the resources of the natural environment to contribute significantly to mental, physical, social and spiritual growth.²

An Organized Resident Camp

Organized resident camping provides an experience in group living in a natural environment. It is a sustained experience under the supervision of trained leadership. Camping provides a creative educational experience in cooperative group living in the out-of-doors. It utilizes the resources of the natural surroundings to contribute significantly to mental, physical, social and spiritual growth (2, p. 3).

Campercraft

Burns has defined campercraft as "... the art of taking care of one's self and others in the outdoors and getting joy and inspiration from it (6, p. 94)." Implied in this definition are the following concepts:

1. The camper possesses the skills and knowledges necessary for comfort, safety, and health.

2. The camper takes advantage of the athletic enjoyment and spiritual enrichment made possible by the out-of-doors through these abilities (6, p. 94).

¹From a statement adapted by the Board of Directors of the American Camping Association, October 19, 1956. Bradford Woods, Martinsville, Indiana.

²Ibid.
Organization of the Remainder of the Study

The resources for the study are described in Chapter II. The procedure for collecting and analyzing the data is described in Chapter III. An analysis of the study is presented in Chapter IV. Implications of the study and the proposed campcraft progression program resulting from the study are found in Chapter V.

A summary of the study and suggestions for further study are found in Chapter VI.
CHAPTER II

RESOURCES FOR THE STUDY

The materials in this chapter are presented for a dual purpose. First, to briefly orient the reader to the growth and current trends in the camping field and, second, to present the resources which form the immediate background information for the problem of this study. The first half of the chapter deals with historical and philosophical backgrounds of organized camping. The second portion of this chapter includes a brief discussion of the philosophy underlying a campcraft program, and a review of three existing campcraft programs.

Historical and Philosophical Background

A history of camping is as long as the story of the life of man. From man's earliest beginnings, outdoor living has played a role in our way of life. Primitive man's way of life was one long campout with his very existence dependent upon his skills and knowledge in outdoor ways. The pioneer settlers, coming to this country from European civilizations, owe their survival to the accumulated knowledge of outdoor living passed on to them by the American Indian. Many of the present day authorities, among them Seton and Sargent, are of the opinion
that the survival of present day society is dependent upon
the knowledges of the ways of nature. Conservationists,
and others in related fields, are emphasizing with a grow-
ing intensity the need for public awareness in conserving
natural resources. Considerable time and effort has been
spent on developing educational programs aimed particularly
at the wise uses of our natural environment. A statement
from the introduction of Wisconsin’s outdoor education
program serves to further substantiate this point of view:

It should be clear to all of us that man is absolutely dependent upon the resources which he can find upon this planet. The everyday needs of his life can be supplied only by drawing upon these resources. Some of them are renewable, but some cannot be replaced as man uses them. Upon their quality and abundance depends the social as well as economic well-being of man.

During the centuries in which our civilization has been developing, the rapid and intensive utilization of natural resources has been the sources of the economic power of the nation. History has shown us that the downfall of other and powerful civilizations may be attributed to the exhaustion of their natural resources. Here in the United States, the original abundance of natural resources led to a frame of mind that deemed the storehouse of our treasures inexhaustible. It is only comparatively recently that we have been forced to realize that the forest is not endless, the fertility of the soil is not boundless, the replacement of slaughtered game is not limitless, and the purity of our lakes and streams is not inviolable. The complete loss of some of our resources and the accelerated rapidity with which others are disappearing or disintegrating make it imperative for us to urge proper conserv-

ation more forcefully than ever (71, p. 7).
Manley and Drury point out the potential role organized camping has to play in implementing such educational programs.

Camping is outdoor experience and offers opportunities to know the outdoors, which would include how to live in it, with it, preserve it for others. The natural resources of the nation will be respected and preserved when all children have opportunity to know and understand such things as the effect that cutting forests has on erosion, floods, and food supply...

(50, p. 19).

Providing the setting for learning to conserve natural resources is only one of the contributions offered to our present society by organized camping.

Growth of Organized Camping

Even before the expansion of the frontier of the United States was completed, organized camping had made its beginning. Explanations for the desire of people to get out and away from city and urban areas are varied. In discussing these motivations, Dimock said:

The forces and influences that have generated organized camp, stimulated its development, and brought it to its present dimensions and status in American life are numerous. Foremost probably, are the industrialization and urbanization of our society, which have tended to deprive persons of sense of their kinship with the natural world. There is a growing recognition of the impoverishing consequences of an exclusively city experience and education, and an accentuated desire to supplement these with fresh and vital experiences in outdoor living.

(20, p. 25).
As early as the seventeen-hundreds a Swiss educator, Johann Heinrick Pestalozze, mentions the values to be found in an outdoor group experience (66, p. 10). However, the organized camp as we know it today is predominately American. States located in and around the geographic area of New England are credited with the origin and initial growth of the camping movement in this country beginning in 1861 with Frederick Gunn's school camp for boys. Following closely was the first private camp founded by Dr. Joseph Rothrock in 1875, the first church camp in 1880, and the first agency camp founded by the Young Men's Christian Association in 1885. Camping for girls began with Camp Kehonka in 1892 (50, p. 6-8).

Since the initial beginning of camping, many individuals and groups have come to recognize the opportunity to further their objectives through organized camping. In 1952, the first census of camping was made which gave a report of camping practices throughout the nation. At this time it was estimated there were more than 12,600 organized camps operating in the United States serving approximately 4,000,000 campers annually (5, p. 11).

Campcraft Program Philosophy

Objectives underlying the establishment of organized
camps may vary with the sponsoring agency or individual's philosophy, but all agree that to achieve their goals, objectives must be realized through the organization of their camp program. As stated by Burns: "... programming consists of planning, developing or implementing, integrating and coordinating, supervising, and evaluating (6, p. 31)." All organized camp programs, regardless of underlying objectives and philosophies, have the factor of an outdoor setting in common.

The milieu, in and through which the results of camping accrue must remain basic in planning for outdoor living. Since city ways are not camping ways, the adaptation from one type of thinking, acting, and living to another type is pregnant with interest and program possibilities (6, p. 92-93).

While the degree of emphasis placed on the outdoor living phase of program may vary with the situation, all camp administrators and staffs are faced with the need to help those in their care adapt themselves to the pattern of life in the out-of-doors before other camp objectives can be achieved. In camps where this program phase has been emphasized or developed into a separate program area the skills and knowledges of outdoor living have been designated as campcraft, sometimes called pioneering, woodcraft, wildcraft and real camping.

Even a limited survey of camp programs will reveal an almost endless variety of activities provided for
campers. Some of these are team sports, swimming, handi-
craft, horseback riding and boating, and could be learned
in places outside of camping situations. However, camp-
craft is one activity in which the camp setting offers an
unparalleled richness for development of skill. In dis-
cussing the place of campcraft in the camping program an
article in the Camping Magazine states "campcraft activi-
ties should be available to all ages -- from eight years
up. However, the program must suit the age and ability
of the child (11, p. 15)."

Development of Campcraft Programs

Authorities in the camp program area feel that certain
guides are basic to the development of a successful camp-
craft program in an organized camp. The summary statement
as presented by Barbara Ellen Joy, one of the recognized
authorities, seems to best reflect and summerize their
thinking.

1. Campcraft is an activity which should be done
well or not at all. There are too many dangers
inherent in it -- mental as well as physical --
to allow it to be done in a haphazard manner.

2. The aim of a campcraft program is to help
children feel comfortable and safe out-of-
doors and to make the experience entirely
satisfactory so that they will wish to keep
on with camping interests and abilities.

3. Camping-out activities are not a test of
endurance or of one's ability to stand discomfort,
confusion and untidy living conditions, but an unique situation in which campers and counselors can by their own skills and knowledge, adapt themselves to primitive conditions sanely, safely, and healthfully, and in the spirit of fun and adventure.

4. Campers should learn by doing, but the greater part of the learning process should be carried on in or near the main camp under skilled leadership (41, p. 202-03).

In order to carry out this philosophy to successful completion current trends in the training of counselors, as shown by the American Camping Association certification program for campcraft leaders, seem important to consider. This program indicates that in order to become proficient in campcraft skills one must begin his learning with the fundamentals and progress to increasingly more difficult and complex phases. It would then seem that those currently engaged in developing plans for teaching campcraft skills and knowledges to others have selected the progressive program method as the one most suited to achieve this purpose.

Building upon the foregoing beliefs, those who operate campcraft programs should consider the age, experience and skills of the campers, safe conditions which provide an increasingly more difficult and complex program of skills and a greater degree of responsibility on the part of the participants and skilled leadership.
The Junior Maine Guide program recognizes these in the introduction to their syllabus for outdoor living.

The Maine Junior Guide program is Outdoor Living. It is a way of life which offers fun, adventure, relaxation, an opportunity to find one's self in natural surroundings and the realization of success through the attainment of certain skills . . . It recognizes the fact that certain basic skills are the foundation of successful outdoor camping. These appear in a simple manner in the earliest units and develop gradually as the campers carry out more extended activities. They should be the result of happy living experiences, an outgrowth of the activities so planned that the particular group can easily acquire these skills gradually (49, p. 7).

Review of Existing Programs and Materials

The following programs which present skills and knowledges of campcraft in progressive programs have been selected for review in this study. They include a program developed for use in a private camp, one outlined for use in the state of Maine and one designed for use in all parts of the United States.

The Joy Program

This program was defined for a private girls' camp located in Wisconsin. The campcraft program is based upon Trip Requirements progressing from beginning to more complex skills. The persons involved in the development of this program believed that a goal, such as a trip activity, would add motivation. Responsibility for the
implementation of the total program rests with the camp
director and head campcraft counselors. Specific program
responsibilities are delegated to other staff members.
Travel skills, designated as enabling skills, are assigned
to other program phases such as canoeing, hiking or horse-
back riding. Skills and knowledges are developed by prac-
tice sessions, actual trips and written projects.

Trip requirements are outlined, beginning with basic
skills and progress to more advanced ones. Each succeed-
ing trip requirements include the qualification "in
addition to the previous requirements". Also, included
is a less difficult list of skills to be achieved by
those groups going to a camp-out spot near camp. Require-
ment lists include skills and knowledges in the use and
care of the knife, hatchet and axe, firebuilding and
devices, equipment and gear, cooking and food, lashing
and knots, sanitation, map and compass, weather and flora
and fauna (41, p. 6-25).

The Junior Maine Guides Program

The idea for this program was originated by a group
of camp directors in the state of Maine. The group was
officially created by the State of Maine Legislature in
March, 1937. Any boy or girl attending a Maine camp who
is between the ages of fourteen and twenty-one may attend
the central training camp upon recommendation of his camp
director. If he proves proficient in outdoor woodcraft and related activities he passes the test and becomes a member of the Junior Maine Guides.

This program is divided into five units. The program manual states that the first four units are offered as suggestions for groups preceding the Junior Guide level. They are designed to be adapted to varying camp situations. Unit I can be done in one summer period of camping; other units may be spaced over a longer period of time depending upon the age and skill of the campers. Unit V is the Junior Maine Guide program, a test constructed to measure one's ability to actually live in the wilderness and care for a group successfully. It is for campers at least fourteen years of age, preferably those sixteen to twenty-one years old, who have had previous training in outdoor camping and who are mature enough to assume responsibility.

The program introduction states that the basic skills appear in each unit and increase in difficulty as the camper progresses. As these are not labeled in any way one must assume that the skills included under the following headings are those considered to be basic by the proponents of the program. The first four units include pre-trip planning and preparation; encampment techniques; axemanship; fire use and building; cooking; lashing and knots; sanitation; nature; weather; and orientation to the out-of-
doors. In addition, Unit I includes first aid and travel techniques; Unit II, outdoor entertainment and building of a permanent camp structure; Unit III, first aid and transportation skills; and, Unit IV, first aid and outdoor entertainment skills.

Unit V training takes place in the form of an actual living experience and is the test for the Junior Maine Guide rating. A sample of this test given in the manual includes encampment techniques, fires, tree use and identification, maps and mapping skills, trips, axemanship, canoe skills, first aid knowledges, game regulations, water safety, riflery, a three-day wilderness camping trip and a general knowledge about the topography, industries and tourist services of the state of Maine. The program outline is followed by a syllabus of reference materials (49, p. 8-24).

The Hammett Program

This program, or "Campcraft Skills Check-list" as it is called, was devised by Catherine Hammett as an aid to boys and girls, or adults, in developing campcraft skills. The principle aim is to aid those who do not have other guides available to assist in the development of ourdoor living skills.

The skills and knowledges are grouped into four levels, ranging from beginning to more complex. Emphasis is placed on the fact that the program is just a beginning stage of
campcraft knowledge and skills. The introduction notes that certain items will not be suitable in all parts of the country and suggests that the user substitute other skills more suited to local needs when this situation arises. The list of activities is designed for use, by individuals, families or other groups, or as part of the program of activities in an organized camp, in all parts of the United States.

Materials included in the program cover firecrafts, cookery, care and use of tools, lashing and knots, equipment and gear and their use and care, planning and executing of outdoor events, conservation and outdoor citizenship, study of flora and fauna, weather, map and compass, outdoor entertainment and appreciation of the out-of-doors (33, p. 28-37).

Other Camprcraft Resources

There are numerous sources of material on campcraft, but for the most part they take the form of printed reference material for use by those engaged in the planning and carrying out of campcraft programs. Some groups, such as the Girl and Boy Scouts include campcraft skills in the requirements for badges or honors. No defined campcraft progression program is found. One of the most comprehensive lists of references on campcraft may be found in Camp Counseling by Mitchell and Crawford.
(56, p. 181-390). Additional campcraft references used in this study are listed in the bibliography.

Summary

This chapter has presented a brief historical and philosophical view of organized camping in this country which forms the background for the study and the immediate resources used in the development of the idea for the study.

The following chapter deals with the procedures followed in the development of a progressive program of campcraft skills and knowledges.
CHAPTER III

RESEARCH PROCEDURES

Research procedures for the study were designed to validate a suggested progressive program of campcraft skills and knowledges. A review of the literature and the comments and suggestions of a selected group of authorities formed the basis for the study; but the final decision on the items to be included in the program and their placement in the progression levels was determined by means of an inquiry sent to qualified individuals currently involved in planning camp programs. The first part of this chapter contains a description of the development of the progression; the second portion describes the selection of the population and the method employed in the collection of data.

Development of the Progressive Program of Campcraft Skills and Knowledges

A survey of the camping literature revealed extensive printed material on campcraft but very little information on progressive programs designed for use by boys and girls. One existing program, Catherine Hammett's "Campcraft Skills

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1 Refer to Chapter II of this paper for a summary of materials.
Check-list was selected to form the nucleus for the development of the suggested program used in this study.

Catherine Hammett, considered by many to be a national authority in the campcraft program area, is currently engaged in implementing a nationwide campcraft leadership training program for the American Camping Association. The campcraft progression, as defined by Miss Hammett, was selected because it has been widely circulated throughout the United States, having appeared in both regular and pocketbook editions and because of its wide acceptance.

Changes and additions with the approval of Miss Hammett, were made as a result of surveying other progressive campcraft programs, resource materials and the author's own ideas. The result was a suggested progressive campcraft skills and knowledges program designed to provide a starting point for the study. The suggested program tentively grouped campcraft skills and knowledges into three levels ranging in difficulty from beginning to more complex skills. Upon completion of the suggested program, it was sent to individuals considered to be authorities -- defined as a "jury-of-experts" -- in campcraft.
Selection of the Jury-of-Experts

The following criteria was developed to serve as a guide for the selection of the jury-of-experts. In developing this criteria an effort was made to include representatives of all types of camp programs which include campcraft and to include those who would best represent both the theoretical and practical aspects of campcraft. The criteria are:

1. Administrators or coordinators of camping programs at national or at local levels of youth serving agencies such as the Boy Scouts, Girl Scouts, Camp Fire Girls, Young Women's Christian Association and Young Men's Christian Association.

2. Individuals who have defined campcraft programs.

3. Camp directors presently engaged in camp administration.

4. Educators concerned with camping curriculum at the college or university level.

Aid of the jury was sought in the preliminary stages of the program development for several reasons. It was felt important to obtain information from a group whose opinions have been based on years of experience in camp programming in a wide variety of situations. Such opinions would add to the more theoretical background of the program which the writer gained from library sources and whose opinions would aid the writer in defining a progression
of campcraft skills and knowledges. Refer to Appendix A for a complete list of the jury-of-experts.

Members of the jury were contacted by a letter asking for their cooperation in this study. Upon receiving their approval, the suggested progressive program was sent. Fifteen inquiries containing the suggested program were sent, and thirteen were returned. A copy of this inquiry is to be found in Appendix B of this paper.

Results of the Jury Inquiry

The inquiry sent to the jury requested their opinions on the content and format of the suggested progressive campcraft skills and knowledges program. The jury was requested to rate items as essential, desirable or non-essential to a basic campcraft program and to place each item in the progression level they considered most suitable. The inquiry also invited any additions to or comments on this suggested program.

A tabulation of the ratings and the progression level indicated as most suitable was completed. Those items receiving at least a fifty-percent agreement of the jury-of-experts were retained in the program. Only one item was rated as non-essential. A fifty-percent level of agreement was applied in the placement of items at various progression levels. When at least fifty-percent
of the jury agreed on the most suitable level the item was retained in its original place.

Additions and comments made by the jury were compiled, and after consulting a research expert on correct procedure, all additions or changes indicated by the jury were incorporated into the refined program. Chart I, pages 31, 32, 33, 34, and 35 of this study includes the three-level progressive campcraft program resulting from the procedures outlined in the preceding portion of this chapter.
A SUGGESTED CAMP CRAFT PROGRAM FOR BOYS AND GIRLS

LEVEL I BEGINNER

A. Nature and Conservation
1. Know the conservation pledge.
2. Show that you know five things to do to leave the outdoor areas you use in better condition than you found them.
3. Learn to identify three wild animals common to your locality and one reason why each lives in this area.
4. Learn to identify three plants common to your locality and their uses in outdoor living.
5. Discuss what could happen if one kind of plant and/or animal life ceased to exist and how it would affect all life.

B. Firecraft
1. Show that you know the proper care and use of matches.
2. Know the uses of tinder, kindling, firewood and/or charcoal fuels.
3. Demonstrate how to build a foundation fire correctly. Keep it burning for three minutes.
5. Demonstrate how to build and use a tepee fire and/or a criss-cross fire and/or a fire using charcoal.
6. Know three woods in your locality and use in firecraft.
7. Show that you know how to find and protect fuels in inclement weather.
8. Show that you can build a fire using only natural materials.

C. Cookery
1. Plan and pack a bike lunch.
2. Prepare a simple one-pot meal so that it looks and tastes good.
3. Show that you can cook one item by stick cookery.
D. Ropecraft
   1. State the characteristics of a good knot.
   2. Demonstrate how to tie and use a square knot and a clove hitch and how to whip the ends of a rope.

E. Toolcraft
   1. Show that you know how to care for and use a pocket knife.
   2. Make a simple camp utensil using a knife you have sharpened.
   3. Show that you know how to use and care for a hand-axe.
   4. Make an eating or cooking utensil from a tin can.

F. First Aid, Safety and Sanitation
   1. Show that you know five fire safety measures -- including building a fire circle and putting out a fire correctly.
   2. Demonstrate proper disposal of garbage.
   3. Demonstrate how to build a grease pit.
   4. Show that you know how to keep your cooking utensils clean in the outdoors.
   5. Show that you can identify the poisonous reptiles, insects and plants in your locality.
   6. Demonstrate a simple remedy for burns, cuts and blisters.
   7. Know the precautions to take for your safety before starting on a hike -- such as what to do if you become lost.
   8. Show that you know the proper precautions to provide safe drinking water.
   9. Know what to do in case of a forest fire.

G. Map and Compass
   1. Show that you know how to box the compass.
   2. Demonstrate how to find NORTH by the stars, the sun and by the compass.
   3. Show that you can identify and follow trail markers common to your locality.
CHART I (continued)

H. Equipment and Gear
1. Show that you know how to dress properly for an outing considering the activity, terrain and weather.
2. Make some piece of equipment -- such as a bag for a meal kit.
3. Show that you can make a blanket roll.
4. Demonstrate that you know how to pack your gear for an overnight.

I. Trip Planning (in a group of 8 to 10)
1. Go on a all-day hike on a well-marked trail or road, carrying all of your equipment and including the planning and carrying out of a cookout, demonstrating as many of the above skills as is possible in carrying out your plans.
2. Afterwards discuss the outing with your fellow campers selecting the good and bad points to assist in further planning.
3. Learn one song, game or story based upon the outdoors.

LEVEL II INTERMEDIATE

A. Nature and Conservation
1. Find out about and/or visit a state or federal conservation project such as a fish hatchery, tree farm or game refuge. Include in your findings why it is needed.
2. Learn three ways animals depend upon each other to live and how this helps keep wildlife in "balance".
3. Learn about soil erosion and why it is harmful to the conservation of natural resources.
4. Find out what happens to animals and plants if their water supply becomes polluted.
5. Make a collection of three types of soil and/or rocks and be able to identify and tell the use of one.
CHART I (continued)

B. **Cookery**
   1. Show that you can cook a meal which combines pot and stick cookery methods.
   2. Show that you can bake in foil and in a reflector oven and/or in a Dutch oven.
   3. Help plan three well-balanced outdoor meals for one day.
   4. Help cook a meal without adult supervision.
   5. Show that you can make a food cache safe from wild animals.

C. **Firecraft**
   1. Demonstrate that you know how to build and use a reflector fire and a trench fire.
   2. Demonstrate how to make two types of fuels from man-made materials.

D. **Ropecraft**
   1. Demonstrate how to tie a half-hitch, a sheet band and a bowline.
   2. Make one article using one form of lashing -- square, round, diagonal or continuous.

E. **Toolcraft**
   1. Make some kind of camp equipment using tools you have learned to handle.
   2. Make some kind of cooking device, such as simple crane or turning spit.

F. **First Aid, Safety and Sanitation**
   1. Show that you know how to build a simple latrine for an overnight.
   2. Show that you know the first aid for sprains, sunstroke and sunburn.
   3. Make a hike first aid kit and demonstrate how to use its contents.
   4. Show that you know how to make a simple outdoor food cooler.

G. **Map and Compass**
   1. Demonstrate how to set and sight with a map and compass.
   2. Demonstrate that you know how to lay and follow a trail.
CHART I (continued)

G. Map and Compass (continued)
3. Show that you can find your way using the sun and stars as indications of direction.

H. Equipment and Gear
1. Know the various packs desirable for you to use.
2. Show that you know how to select and prepare a site for pitching a tent.
3. Add an additional piece of equipment to your gear -- such as a sleeping bag, hiking boots or pack-sack -- and show that you know how to care for it.

I. Trip Planning (in a group of 8 to 10 with leadership)
1. Show that you know how to select and set-up an overnight camping site.
2. Assist in the planning and carrying out of an overnight trip demonstrating as many of the above skills as possible in carrying out your plans.
3. Tell a story, teach a song or help plan a ceremony campfire based on the outdoors.
4. Afterwards, discuss the outing with your fellow campers selecting the good and bad points to assist in further planning.

LEVEL III ADVANCED

A. Nature and Conservation
1. Assist in the planning and carrying out of a conservation project such as improving a part of a camping site.
2. Learn to identify three game animals -- fish, bird and mammal -- common to your locality and why there are laws to protect them.
3. Show that you are able to identify and use native edible plants found in your locality.
4. Learn three ways nature keeps soil from wearing out and what happens if soil wears out.
A. Nature and Conservation (continued)
   5. Learn about clouds, wind and other natural forces that cause weather conditions in your locality.

B. Firecraft
   1. Show that you can build and keep a fire burning in the rain.
   2. Show that you know how to build fire sites for imu, plank and spit cookery.

C. Cookery
   1. Assist in the planning and preparation of meals for a three-day backpacking trip which includes the use of dehydrated foods.
   2. Demonstrate that you know how to cook something by each of the following methods -- boiling, baking, frying and broiling -- that you have not shown before.

D. Ropercraft
   1. Demonstrate that you can tie two additional useful knots.
   2. Assist in the making of a permanent camp fixture to improve a camp site.

E. Toolcraft
   1. Show that you know how to properly select and put into condition the tools necessary to carry on a backpacking trip.
   2. Demonstrate proper care and use of a sheath knife.
   3. Demonstrate proper care and use of a bucksaw.

F. First Aid, Safety and Sanitation
   1. Demonstrate proper selection and packing of clothing to take on a backpacking trip.
   2. Demonstrate ability to pass the American Red Cross standard first aid course.
CHART I (continued)

G. Map and Compass
1. Go on a one mile cross-country hike by use of map and compass.
2. Show that you know how to read and use a topographical map.

H. Equipment and Gear
1. Demonstrate that you know how to properly pack your gear and equipment for a three day back-packing trip.
2. Add a piece of camping equipment -- such as a pack board or a ground cloth.
3. Know the maximum poundage for you to carry.
4. Learn how to make a temporary shelter using a ground cloth or poncho.

I. Trip Planning (in a group of 6 to 10 with leadership)
1. Assist in the planning and carrying out of a two or three day back-packing trip demonstrating as many of the above skills in carrying out your plans.
2. Afterwards discuss the trip with your fellow campers selecting the good and bad points to assist in further planning.
3. Learn a hiking song and a story about the outdoors that you have not known before.

As stated in the introduction of this chapter the final decision on the items to be included in the proposed progressive program and the placement in progression levels was determined by means of an inquiry sent to qualified individuals currently engaged in camping programming. The remainder of this chapter contains an explanation of the selection of the population used in this study, the method employed in gathering data and tabulation procedures followed in compiling this data.
Selection of the Population

A Probability Research Method was employed in the selection of the population for this study. The initial criterion for selection was individuals currently engaged in the operation of campcraft programs. Members selected from Region VII, comprising the nine Western states of the American Camping Association presented the most readily accessible group. A random sample of two-hundred-and-eight individuals was taken from this group. (See Appendix D).

Data Gathering Instruments

An Opinionnaire Inquiry was used to gather data from those participating in this part of the study. A copy of this inquiry is included in Appendix C of this paper. Approval for the study and permission to mail inquiries was obtained from the National Studies and Research Chairman of the American Camping Association. A complete mailing list for Region VII was obtained from the national headquarters of the Association. Tabulation procedures and an analysis of the results are described in Chapter IV.

Summary

This chapter has included the research procedures followed in this study. The steps included: first, the
development of a proposed progressive campcraft skills and knowledges program based on a survey of the literature and Catherine Hammett's program; second, the refinement of this program by a jury-of-experts; third, submitting the refined program to a selected population for their opinions; fourth, revision of the proposed progression campcraft skills and knowledges program.
CHAPTER IV

ANALYSIS OF DATA AND A SUGGESTED CAMPCRAFT PROGRESSION PROGRAM

This chapter deals with an analysis and interpretation of the data obtained from the survey made of the population selected for the study and the proposed progressive campcraft program resulting from this survey.

The purpose of the study was to determine items considered to be essential to a basic campcraft program, and the placement of these items in the progression level considered to be most suitable by those qualified individuals responding to the survey. Individuals holding camp memberships in the American Camping Association and currently engaged in campcraft programming were judged to be the most readily available group meeting the criterion of the study. To arrive at a population within the scope of the study selection was narrowed to those holding camp memberships in Region VII. Table I shows the total population possible in Region VII and the number and percentage selected by the random sample.
The device used to determine what items were essential to a basic progression program and the placement of each in a progression level took the form of an inquiry. The inquiry tentatively grouped items into three program levels. Items were further grouped into nine areas within each level in an effort to provide a systematic pattern of activities throughout the progression program.

Each person completing the inquiry was requested to check one column opposite each item under the leadings of Group I and Group II according to whether an item was, in their opinion, essential or non-essential and at which progression level it should be included. Space was provided for additional items to be included. A copy of the complete questionnaire appears in Appendix C of this study.

Definitions were worked out so there would be a common understanding on the part of those responding. The meaning of the terms: Essential; Non-essential; Beginner;

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**TABLE I**

**NUMBER AND PERCENT OF TOTAL POPULATION SELECTED IN THE RANDOM SAMPLE**

<table>
<thead>
<tr>
<th>INDIVIDUALS</th>
<th>NUMBER</th>
<th>PERCENT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Possible</td>
<td>377</td>
<td>100</td>
</tr>
<tr>
<td>Population</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Random Sample</td>
<td>208</td>
<td>55</td>
</tr>
</tbody>
</table>


Intermediate; and Advanced were defined as follows:

**GROUP I**

*Essential* means necessary to include in the program.

*Non-essential* means unnecessary to include in the program.

**GROUP II**

**Level I**  
*Beginner* means those skills and knowledge considered to come first and which are basic to other levels.

**Level II**  
*Intermediate* means those skills and knowledge normally expected to achieve beyond Level I and necessary before progressing to more advanced levels.

**Level III**  
*Advanced* means skills and knowledge considered essential to become a master craftsman.

Table II shows the number of inquiries mailed and the number and percent returned.

<table>
<thead>
<tr>
<th>TABLE II</th>
</tr>
</thead>
<tbody>
<tr>
<td>NUMBER AND PERCENT OF INQUIRIES MAILED AND RETURNED</td>
</tr>
<tr>
<td>-----------</td>
</tr>
<tr>
<td><strong>INQUIRIES</strong></td>
</tr>
<tr>
<td>Total Sent</td>
</tr>
<tr>
<td>Total Returned</td>
</tr>
<tr>
<td>Total Tabulated</td>
</tr>
</tbody>
</table>

Twelve inquiries were discarded for one of three reasons:  
Either the individual returned a blank inquiry, failed to follow directions for the completion of the inquiry, or
failed to answer the question concerning his experience in campcraft programming. Tabulation was based upon seventy inquiries. Differences in tabulation are due to omissions in completing the inquiries.

Summary of the Tabulation

The inquiry, as stated earlier, was designed to obtain two responses on each item included in the suggested program. To simplify completion these were labeled Group I and Group II. Group I was concerned with whether those completing the inquiry felt the items were essential or non-essential to a basic campcraft program. Using a fifty per cent level of acceptance, established after consulting a research expert,¹ the tabulation results showed that those surveyed felt all items except one in the suggested program were essential to include. Those items pertaining to Group I are summarized in Table III, page 45 of this paper.

Group II was designed to obtain opinions on the progression level thought most suitable for the placement of each item in the inquiry. The inquiry responses pertaining to Group II are summarized in Table III, page 45. Opinions varied in the placement of items in the three

¹Riley Jenkins Clinton, Doctor of Education, Professor of Education, School of Education, Oregon State College
levels. Upon summerizing the results of the inquiry the following method was employed in determining final placement of the items in the progression level. First, items receiving a fifty-percent agreement on placement in the responses were placed at the level so indicated. However, not all items had a fifty percent level of agreement. These items were then placed by one of two methods. Items receiving a simple majority for one level were placed at the level so indicated. Items which received an equal number of responses for two or more levels were retained at the level in which they originally appeared in the suggested program.
### TABLE III

SUMMARY OF THE TABULATION OF THE INQUIRY RESPONSES FOR GROUP I AND GROUP II

<table>
<thead>
<tr>
<th>ITEMS1 (As listed in Inquiry)</th>
<th>GROUP I</th>
<th>GROUP II</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>E</td>
<td>NE</td>
</tr>
<tr>
<td>LEVEL I</td>
<td>---------</td>
<td>----------</td>
</tr>
<tr>
<td>A. Nature</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1.------</td>
<td>43</td>
<td>21</td>
</tr>
<tr>
<td>2.------</td>
<td>70</td>
<td>0</td>
</tr>
<tr>
<td>3.------</td>
<td>61</td>
<td>7</td>
</tr>
<tr>
<td>4.------</td>
<td>65</td>
<td>2</td>
</tr>
<tr>
<td>5.------</td>
<td>46</td>
<td>21</td>
</tr>
<tr>
<td>B. Firecraft</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1.------</td>
<td>69</td>
<td>0</td>
</tr>
<tr>
<td>2.------</td>
<td>68</td>
<td>2</td>
</tr>
<tr>
<td>3.------</td>
<td>61</td>
<td>7</td>
</tr>
<tr>
<td>4.------</td>
<td>49</td>
<td>18</td>
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<td>5.------</td>
<td>54</td>
<td>11</td>
</tr>
<tr>
<td>6.------</td>
<td>58</td>
<td>10</td>
</tr>
<tr>
<td>7.------</td>
<td>61</td>
<td>6</td>
</tr>
<tr>
<td>8.------</td>
<td>63</td>
<td>6</td>
</tr>
<tr>
<td>C. Cookery</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1.------</td>
<td>66</td>
<td>3</td>
</tr>
<tr>
<td>2.------</td>
<td>68</td>
<td>0</td>
</tr>
<tr>
<td>3.------</td>
<td>57</td>
<td>11</td>
</tr>
<tr>
<td>D. Ropecraft</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1.------</td>
<td>56</td>
<td>12</td>
</tr>
<tr>
<td>2.------</td>
<td>57</td>
<td>4</td>
</tr>
<tr>
<td>E. Teocraft</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1.------</td>
<td>68</td>
<td>1</td>
</tr>
<tr>
<td>2.------</td>
<td>22</td>
<td>9</td>
</tr>
<tr>
<td>3.------</td>
<td>65</td>
<td>3</td>
</tr>
<tr>
<td>4.------</td>
<td>52</td>
<td>17</td>
</tr>
<tr>
<td>F. First Aid</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1.------</td>
<td>67</td>
<td>2</td>
</tr>
<tr>
<td>2.------</td>
<td>67</td>
<td>2</td>
</tr>
<tr>
<td>3.------</td>
<td>51</td>
<td>16</td>
</tr>
</tbody>
</table>

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1. Detailed description of items included under each main heading of the inquiry may be found on page 31 of this study.

2. Essential; Non-essential; Beginner; Intermediate; Advanced
### TABLE III (continued)

<table>
<thead>
<tr>
<th>ITEMS(^1) (As listed in Inquiry)</th>
<th>GROUP I</th>
<th>GROUP II</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>E</td>
<td>NE</td>
</tr>
<tr>
<td><strong>LEVEL I (continued)</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>F. First Aid (continued)</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4.-----</td>
<td>57</td>
<td>3</td>
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\(^1\) Detailed description of items included under each main heading of the inquiry may be found on page 33 of this study.

\(^2\) Essential; Non-essential; Beginner; Intermediate; Advanced.
TABLE III (continued)

| ITEMS¹ (as listed in Inquiry) | 2 GROUP I |  |  |  |  |  |
|-------------------------------|----------|---|---|---|---|
|                               | E | NE | BEG | INT | ADV |

LEVEL II (continued)

D. Ropecraft
1.------- 61 8 13 33 12
2.------- 57 11 7 35 14

E. Toolcraft
1.------- 55 13 9 41 13
2.------- 57 11 10 40 13

F. First Aid, Safety
1.------- 65 1 16 36 11
2.------- 66 0 14 41 8
3.------- 63 4 21 35 11
4.------- 57 10 5 37 22

G. Map and Compass
1.------- 56 11 14 33 19
2.------- 62 5 17 38 8
3.------- 59 9 8 31 11

H. Equipment
1.------- 56 10 14 36 16
2.------- 60 5 15 36 14
3.------- 51 14 10 34 17

I. Trip Planning
1.------- 64 4 13 32 21
2.------- 64 3 5 32 21
3.------- 49 13 13 34 13
4.------- 57 9 10 30 24

LEVEL III

A. Nature
1.------- 63 3 13 14 36
2.------- 64 9 17 20 27
3.------- 59 6 6 12 43
4.------- 57 10 10 12 38
5.------- 54 13 13 12 40

¹Detailed description of items included under each main heading of the inquiry may be found on page 35 of this study.
²Essential; Non-essential; Beginner; Intermediate; Advanced.
TABLE III (continued)

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1Detailed description of items included under each main heading of the inquiry may be found on page 35 of this study.

2Essential; Non-essential; Beginner; Intermediate; Advanced.
Summary of the Analysis of the Data

All items were considered essential to a basic camp-craft progressive program for boys and girls.

Using the procedure outlined earlier in this chapter the data showed that those surveyed felt all items with the exception of seven should be included at the progression level in which they appeared in the suggested program. Tabulation of the data indicated that the following items should be moved from Beginner to Intermediate level.

A. Nature and Conservation
   5. Discuss what could happen if one kind of plant and/or animal life ceased to exist and how it would affect all life.

E. Toolcraft
   4. Make an eating or cooking utensil from a tin can.

F. First Aid, Safety and Sanitation
   3. Demonstrate how to build a grease pit.
   4. Show that you can identify the poisonous reptiles, insects, and plants in your locality.

G. Map and Compass
   2. Demonstrate how to find NORTH by the stars, the sun, and by the compass.

I. Trip Planning
   1. Go on an all-day hike on a well-marked trail or road, carrying all of your equipment and including the planning and carrying out of a cookout, demonstrating as many of the above skills as is possible in carrying out your plans.
   2. Afterwards discuss the outing with your fellow campers selecting the good and bad points to assist on further planning.

The purpose of this study was to develop a proposed progressive campcraft program of skills and knowledges.
for boys and girls ten years of age or older. The final step in the research procedure was to survey a selected group of individuals currently engaged in some form of campcraft programming. As a result of the analysis of the data, the program was revised. The following portion of this chapter presents the proposed campcraft skills and knowledge program for boys and girls.

A Proposed Progression Campcraft Program for Boys and Girls

LEVEL I BEGINNER

A. Nature and Conservation
1. Know the conservation pledge.
2. Show that you know five things to do to leave the outdoor areas you use in better condition than you found them.
3. Learn to identify three wild animals common to your locality and one reason why each lives in this area.
4. Learn to identify three plants common to your locality and their uses in outdoor living.

B. Firecraft
1. Show that you know the proper care and use of matches.
2. Know the uses of tinder, kindling, firewood and/or charcoal fuels.
3. Demonstrate how to build a foundation fire correctly. Keep it burning for three minutes.
5. Demonstrate how to build and use a tepee fire and/or a criss-cross fire and/or a fire using charcoal.
6. Know three woods in your locality and their use in firecraft.
LEVEL I (continued)

B. **Firecraft (continued)**
   7. Show that you know how to find and protect fuels in inclement weather.
   8. Show that you can build a fire using only natural materials.

C. **Cookery**
   1. Plan and pack a hike lunch.
   2. Prepare a simple one-pot meal so that it looks and tastes good.
   3. Show that you can cook one item by stick cookery.

D. **Ropecraft**
   1. State the characteristics of a good knot.
   2. Demonstrate how to tie and use a square knot and a clove hitch and how to whip the ends of a rope.

E. **Toolcraft**
   1. Show that you know how to care for and use a pocket knife.
   2. Make a simple camp utensil using a knife you have sharpened.
   3. Show that you know how to use and care for a hand-axe.

F. **First Aid, Safety and Sanitation**
   1. Show that you know five fire safety measures -- including building a fire circle and putting out a fire correctly.
   2. Demonstrate proper disposal of garbage.
   3. Show that you know how to keep your cooking utensils clean in the outdoors.
   4. Demonstrate a simple remedy for burns, cuts and blisters.
   5. Know the precautions to take for your safety before starting on a hike -- such as what to do if you become lost.
   6. Show that you know the proper precautions to provide safe drinking water.
   7. Know what to do in case of a forest fire.

G. **Map and Compass**
   1. Show that you know how to box the compass.
LEVEL I (continued)

G. Map and Compass (continued)
   2. Show that you can identify and follow trail markers common to your locality.

H. Equipment and Gear
   1. Show that you know how to dress properly for an outing considering the activity, terrain and weather.
   2. Make some piece of equipment -- such as a bag for a meal kit.
   3. Show that you can make a blanket roll.
   4. Demonstrate that you know how to pack your gear for an overnight.

I. Trip Planning (in a group of 8 to 10)
   1. Learn one song, game or story based upon the outdoors.

LEVEL II INTERMEDIATE

A. Nature and Conservation
   1. Find out about and/or visit a state or federal conservation project such as a fish hatchery, tree farm or game refuge. Include in your findings why it is needed.
   2. Learn three ways animals depend upon each other to live and how this helps keep wildlife in "balance".
   3. Learn about soil erosion and why it is harmful to the conservation of natural resources.
   4. Find out what happens to animals and plants if their water supply becomes polluted.
   5. Make a collection of three types of soil and/or rocks and be able to identify and tell the use of one.
   6. Discuss what could happen if one kind of plant and/or animal life ceased to exist and how it would affect all life.

B. Cookery
   1. Show that you can cook a meal which combines pot and stick cookery methods.
B. **Cookery (continued)**

2. Show that you can bake in foil and in a reflector oven and/or in a Dutch oven.

3. Help plan three well-balanced outdoor meals for one day.

4. Help cook a meal without adult supervision.

5. Show that you can make a food cache safe from wild animals.

C. **Firecraft**

1. Demonstrate that you know how to build and use a reflector fire and a trench fire.

2. Demonstrate how to make two types of fuels from man-made materials.

D. **Ropecraft**

1. Demonstrate how to tie a half-hitch, a sheet bend and a bowline.

2. Make one article using one form of lashing -- square, round, diagonal or continuous.

E. **Toolcraft**

1. Make some kind of camp equipment using tools you have learned to handle.

2. Make some kind of cooking device, such as simple crane or turning spit.

3. Make an eating or cooking utensil from a tin can.

F. **First Aid, Safety and Sanitation**

1. Show that you know how to build a simple latrine for an overnight.

2. Show that you know the first aid for sprains, sunstroke and sunburn.

3. Make a hike first aid kit and demonstrate how to use its contents.

4. Show that you know how to make a simple outdoor food cooler.

5. Demonstrate how to build a grease pit.

6. Show that you can identify the poisonous reptiles, insects and plants in your locality.
LEVEL II (continued)

G. Map and Compass
1. Demonstrate how to set and sight with a map and compass.
2. Demonstrate that you know how to lay and follow a trail.
3. Show that you can find your way using the sun and stars as indications of directions.
4. Demonstrate how to find NORTH by the stars, the sun and by the compass.

H. Equipment and Gear
1. Know the various packs desirable for you to use.
2. Show that you know how to select and prepare a site for pitching a tent.
3. Add an additional piece of equipment to your gear -- such as a sleeping bag, hiking boots or pack-sack -- and show that you know how to care for it.

I. Trip Planning (in a group of 6 to 10 with leadership)
1. Show that you know how to select and set-up an overnight camping site.
2. Assist in the planning and carrying out of an overnight trip demonstrating as many of the above skills as possible in carrying out your plans.
3. Tell a story, teach a song or help plan a ceremony campfire based on the outdoors.
4. Afterwards, discuss the outing with your fellow campers selecting the good and bad points to assist in further planning.

5. Go on a all-day hike on a well-marked trail or road, carrying all of your equipment and including the planning and carrying out of a cookout, demonstrating as many of the above skills as is possible in carrying out your plans.

6. Afterwards, discuss the outing with your fellow campers selecting the good and bad points to assist in further planning.
LEVEL III ADVANCED

A. Nature and Conservation
1. Assist in the planning and carrying out of a conservation project such as improving a part of a camping site.
2. Learn to identify three game animals -- fish, bird and mammal -- common to your locality and why there are laws to protect them.
3. Show that you are able to identify and use native edible plants found in your locality.
4. Learn three ways nature keeps soil from wearing out and what happens if soil wears out.
5. Learn about clouds, wind and other natural forces that cause weather conditions in your locality.

B. Firecraft
1. Show that you can build and keep a fire burning in the rain.
2. Show that you know how to build fire sites for imu, plank and spit cookery.

C. Cookery
1. Assist in the planning and preparation of meals for a three-day backpacking trip which includes the use of dehydrated foods.
2. Demonstrate that you know how to cook something by each of the following methods -- boiling, baking, frying and broiling -- that you have not shown before.

D. Ropcraft
1. Demonstrate that you can tie two additional useful knots.
2. Assist in the making of a permanent camp fixture to improve a camp site.

E. Toolcraft
1. Show that you know how to properly select and put into condition the tools necessary to carry on a backpacking trip.
2. Demonstrate proper care and use of a sheath knife.
LEVEL III (continued)

E. Toolcraft (continued)
   3. Demonstrate proper care and use of a bucksaw.

F. First Aid, Safety and Sanitation
   1. Demonstrate proper selection and packing of clothing to take on a back-packing trip.
   2. Demonstrate ability to pass the American Red Cross standard first aid course.

G. Map and Compass
   1. Go on a one mile cross-country hike by use of map and compass.
   2. Show that you know how to read and use a topographical map.

H. Equipment and Gear
   1. Demonstrate that you know how to properly pack your gear and equipment for a three day back-packing trip.
   2. Add a piece of camping equipment -- such as a pack board or a ground cloth.
   3. Know the maximum poundage for you to carry.
   4. Learn how to make a temporary shelter using a ground cloth or poncho.

I. Trip Planning (in a group of 6 to 10 with leadership)
   1. Assist in the planning and carrying out of a two or three day back-packing trip demonstrating as many of the above skills in carrying out your plans as possible.
   2. Afterwards discuss the trip with your fellow campers selecting the good and bad points to assist in further planning.
   3. Learn a hiking song and a story about the outdoors that you have not known before.
Summary of the Chapter

This chapter has dealt with the analysis of the returns of the survey made of a selected group of individuals currently engaged in the operation of campcraft programs. This survey was the final stage of the research procedure designed to develop a proposed progressive campcraft program for boys and girls ten years of age or older.

Chapter V will present the proposed campcraft progression program resulting from this study.
CHAPTER V

IMPLICATIONS OF THE STUDY

The problem was to determine the campcraft skills and knowledges campers should possess and to propose a progression program, based on these findings, which could be used as a basis for a campcraft program in an organized summer camp.

The procedure utilized in obtaining the data was described in Chapter III. The analysis and evaluation was described in Chapter IV. This chapter is concerned with the latter of the above problems as stated, and is an attempt to propose a campcraft progression program for boys and girls.

Summary of the Development of the Program

The initial step in the development of the program proposed by the study was a survey of the camping literature. One progressive campcraft scale, written by Catherine Hammett, was selected as a starting point. Upon securing Miss Hammett's approval this scale was expanded and changed using materials from other resources and the writer's own opinions. This procedure resulted in the formation of the suggested progression program used in this study. The suggested program was then sent to a group of authorities -- defined as a "jury of Experts"
in the campcraft field for their comments and additions. Using the materials obtained from the jury, the original suggested program was refined.

This refined suggested program was placed in inquiry form and sent to a selected group of individuals currently engaged in the operation of campcraft programs in Region VII of the American Camping Association. Information resulting from the tabulation and analysis of the survey was compiled. The remainder of this chapter is a proposed solution to the problem undertaken in this study and is based upon the data obtained from a review of the camping literature, the opinions of campcraft authorities, and the survey made of those currently engaged in campcraft programs.

Program Changes and Additions Resulting from the Survey

Analysis of the returns of the survey showed that those responding agreed that all items included in the suggested program were essential to include. This analysis also showed that those surveyed felt seven items should be moved from the beginning to the intermediate level. In the formulation of the final proposed program these items were moved as indicated by the analysis of the survey. Among the items moved were the two dealing
directly with a culminating trip experience and evaluation procedures to follow. These items, now included as the survey indicated at the Intermediate level, are as follows:

1. Go on an all-day hike on a well-marked trail or road, carrying all of your equipment and including the planning and carrying out of a cookout, demonstrating as many of the above skills as is possible in carrying out your plans.

2. Afterwards discuss the outing with your fellow campers selecting the good and bad points to assist in further planning.

In the writer's opinion, this change left the beginner's level without a necessary terminating group experience. This point of view is based on information obtained from a survey of the camping literature, the opinions of the jury of experts, and the results of the final survey which indicated that such an experience was important to include at the other two levels.

The trip activity items were originally included in the progression program to provide a group planned and executed experience using the skills and knowledges included in other areas of each progression level. Organized camping by definition is a group experience in the out-of-doors. It is felt by the writer that the goals of this study should be in harmony with this important fundamental belief of camping and that this cannot
be fully achieved unless some form of experience embodying planning, executing, and evaluating of an activity by a group is included at each level.

For these reasons two additional items defining a trip and evaluation experience more suited to the abilities of the group at this level were added by the writer in formulation of the final proposed progression campcraft program. These two items are:

1. Plan and carry out a combined one-mile hike and cookout, demonstrating as many of the above skills as is possible in carrying out your plans.

2. Afterwards discuss the outing with your fellow campers selecting the good and bad points to assist in further planning.

The proposed campcraft progression program designed for use by boys and girls in organized summer camps resulting from the research undertaken in this study follows.

A PROPOSED CAMPRAFT PROGRESSION PROGRAM FOR BOYS AND GIRLS

LEVEL I BEGINNER

A. Nature and Conservation

1. Know the conservation pledge.
2. Show that you know five things to do to leave the outdoor areas you use in better condition than you found them.
3. Learn to identify three wild animals common to your locality and one reason why each lives in this area.
4. Learn to identify three plants common to your locality and their uses in outdoor living.
LEVEL I (continued)

B. Firecraft
1. Show that you know the proper care and use of matches.
2. Know the uses of tinder, kindling, firewood and/or charcoal fuels.
3. Demonstrate how to build a foundation fire correctly.
5. Demonstrate how to build and use a tepee fire and/or a criss-cross fire and/or a fire using charcoal.
6. Know three woods in your locality and their use in firecraft.
7. Show that you know how to find and protect fuels in inclement weather.
8. Show that you can build a fire using only natural materials.

C. Cookery
1. Plan and pack a hike lunch.
2. Prepare a simple one-pot meal so that it looks and tastes good.
3. Show that you can cook one item by stick cookery.

D. Ropcraft.
1. State the characteristics of a good knot.
2. Demonstrate how to tie and use a square knot and a clove hitch and how to whip ends of a rope.

E. Toolcraft
1. Show that you know how to care for and use a pocket knife.
2. Make a simple camp utensil using a knife you have sharpened.
3. Show that you know how to use and care for a hand-axe.

F. First Aid Safety and Sanitation
1. Show that you know five fire safety measures -- including building a fire circle and putting out a fire correctly.
2. Demonstrate proper disposal of garbage.
LEVEL I (continued)

F. First Aid, Safety and Sanitation (continued)
3. Show that you know how to keep your cooking utensils clean in the outdoors.
4. Demonstrate a simple remedy for burns, cuts and blisters.
5. Know the precautions to take for your safety before starting on a hike -- such as what to do if you become lost.
6. Show that you know the proper precautions to provide safe drinking water.
7. Know what to do in case of a forest fire.

G. Map and Compass
1. Show that you know how to box the compass.
2. Show that you can identify and follow trail markers common to your locality.

H. Equipment and Gear
1. Show that you know how to dress properly for an outing considering the activity, terrain and weather.
2. Make some piece of equipment -- such as a bag for a meal kit.
3. Show that you can make a blanket roll.
4. Demonstrate that you know how to pack your gear for an overnight.

I. Trip Planning (in a group of 3 to 10)
1. Plan and carry out a combined one-mile hike and cookout, demonstrating as many of the above skills as is possible in carrying out your plans.
2. Afterwards discuss the outing with your fellow campers selecting the good and bad points to assist in further planning.
3. Learn one song, game, or story based upon the outdoors.

LEVEL II INTERMEDIATE

A. Nature and Conservation
1. Find out about and/or visit a state or federal conservation project such as a fish hatchery, tree farm or game refuge. Include in your findings why it is needed.
A. Nature and Conservation (continued)

2. Learn three ways animals depend upon each other to live and how this helps keep wildlife in "balance".
3. Learn about soil erosion and why it is harmful to the conservation of natural resources.
4. Find out what happens to animals and plants if their water supply becomes polluted.
5. Make a collection of three types of soil and/or rocks and be able to identify and tell the use of one.
6. Discuss what could happen if one kind of plant and/or animal life ceased to exist and how it would affect all life.

B. Cookery

1. Show that you can cook a meal which combines pot and stick cookery methods.
2. Show that you can bake in foil and in a reflector oven and/or in a Dutch oven.
3. Help plan three well-balanced outdoor meals for one day.
4. Help cook a meal without adult supervision.
5. Show that you can make a food cache safe from wild animals.

C. Firecraft.

1. Demonstrate that you know how to build and use a reflector fire and a trench fire.
2. Demonstrate how to make two types of fuels from man-made materials.

D. Ropecraft

1. Demonstrate how to tie a half-hitch, a sheet bend and a bowline.
2. Make one article using one form of lashing -- square, round, diagonal or continuous.
LEVEL II (continued)

E. Toolcraft
1. Make some kind of camp equipment using tools you have learned to handle.
2. Make some kind of cooking device, such as a simple crane or turning spit.
3. Make an eating or cooking utensil from a tin can.

F. First Aid, Safety and Sanitation
1. Show that you know how to build a simple latrine for an overnight.
2. Show that you know the first aid for sprains, sunstroke and sunburn.
3. Make a hike first aid kit and demonstrate how to use its contents.
4. Show that you know how to make a simple outdoor food cooler.
5. Demonstrate how to build a grease pit.
6. Show that you can identify the poisonous reptiles, insects and plants in your locality.

G. Map and Compass
1. Demonstrate how to set and sight with a map and compass.
2. Demonstrate that you know how to lay and follow a trail.
3. Show that you can find your way using the sun and stars as indications of direction.
4. Demonstrate how to find NORTH by the stars, the sun and by the compass.

H. Equipment and Gear
1. Know the various packs desirable for you to use.
2. Show that you know how to select and prepare a site for pitching a tent.
3. Add an additional piece of equipment to your gear -- such as a sleeping bag, hiking boots or pack-sack -- and show that you know how to care for it.
LEVEL II (continued)

I. Trip Planning (in a group of 8 to 10)
   1. Show that you know how to select and set-up an overnight camping site.
   2. Go on a all-day hike on a well-marked trail or road, carrying all of your equipment and including the planning and carrying out of a cookout, demonstrating as many of the above skills as is possible in carrying out your plans.
   3. Afterwards discuss the outing with your fellow campers selecting the good and bad points to assist in further planning.
   4. Assist in the planning and carrying out of an overnight trip demonstrating as many of the above skills as possible in carrying out your plans.
   5. Tell a story, teach a song or help plan a ceremony campfire based on the outdoors.
   6. Afterwards, discuss the outing with your fellow campers selecting the good and bad points to assist in further planning.

LEVEL III ADVANCED

A. Nature and Conservation
   1. Assist in the planning and carrying out of a conservation project such as improving a part of a camping site.
   2. Learn to identify three game animals--fish, bird and mammal--common to your locality and why there are laws to protect them.
   3. Show that you are able to identify and use native edible plants found in your locality.
   4. Learn three ways nature keeps soil from wearing out and what happens if soil wears out.
LEVEL III (continued)

A. Nature and Conservation (continued)
   5. Learn about clouds, wind and other natural forces that cause weather conditions in your locality.

B. Firecraft
   1. Show that you can build and keep a fire burning in the rain.
   2. Show that you know how to build fire sites for imu, plank and spit cookery.

C. Cookery
   1. Assist in the planning and preparation of meals for a three-day backpacking trip which includes the use of dehydrated foods.
   2. Demonstrate that you know how to cook something by each of the following methods -- boiling, baking, frying and broiling -- that you have not shown before.

D. Ropecraft
   1. Demonstrate that you can tie two additional useful knots.
   2. Assist in the making of a permanent camp fixture to improve a camp site.

E. Toolcraft
   1. Show that you know how to properly select and put into condition the tools necessary to carry on a backpacking trip.
   2. Demonstrate proper care and use of a sheath knife.
   3. Demonstrate proper care and use of a bucksaw.

F. First Aid, Safety and Sanitation
   1. Demonstrate proper selection and packing of clothing to take on a backpacking trip.
   2. Demonstrate ability to pass the American Red Cross standard first aid course.

G. Map and Compass
   1. Go on a one mile cross-country hike by use of map and compass.
LEVEL III (continued)

G. Map and Compass (continued)
   2. Show that you know how to read and use a topographical map.

H. Equipment and Gear
   1. Demonstrate that you know how to properly pack your gear and equipment for a three day back-packing trip.
   2. Add a piece of camping equipment -- such as a pack board or a ground cloth.
   3. Know the maximum poundage for you to carry.
   4. Learn how to make a temporary shelter using a ground cloth or poncho.

I. Trip Planning (in a group of 6 to 10 with leadership)
   1. Assist in the planning and carrying out of a two or three day back-packing trip demonstrating as many of the above skills in carrying out your plans.
   2. Afterwards discuss the trip with your fellow campers selecting the good and bad points to assist in further planning.
   3. Learn a hiking song and a story about the outdoors that you have not known before.

Summary

This chapter has presented the procedures followed in developing the proposed campcraft progression program designed for use by campers in an organized summer camp, resulting from this study. This procedure included a survey of the camping literature, obtaining the advice of authorities in the campcraft field and a survey of those currently engaged in the operation of campcraft programs.
Data obtained from these sources formed the basis upon which the campcraft progression program proposed by this study was formulated.

Chapter VI will include the summary and conclusions of this study and recommendations for further study.
CHAPTER VI
SUMMARY, CONCLUSIONS AND RECOMMENDATIONS FOR FURTHER STUDY

This study on campcraft deals with an investigation of the opinions of authorities and leaders in the field of camping to select skills and knowledges felt important to include in a basic progression campcraft program for boys and girls ten years of age or older. The purpose of this investigation was to determine what items are considered most important to include in a campcraft progression scale and their levels of progression.

The remainder of this chapter deals with a summary of the methods employed in the selection of sources, collection and treatment of data, interpretation and conclusions based on analysis of the data, and finally, recommendations for further study.

Summary of the Study

Sources of Data

Development of the study began with a survey of the camping literature. This survey revealed a considerable amount of printed resources dealing with campcraft skills and knowledges but very little information on progressive campcraft programs. One existing program presented by
Catherine Hammett was selected as a starting point. Upon securing Miss Hammett's approval the progression program was revised using materials from other campcraft resources, and the writer's own opinions. The resulting suggested progression program of skills and knowledges was placed in inquiry form and sent to a group of authorities -- defined as a "jury-of-experts" -- in campcraft. A refined suggested program resulted from the comments and additions made by this jury. This refined suggested program was then sent to those individuals most qualified to participate in this study. An inquiry was selected to obtain data.

**Selection of the Population**

A probability research method was employed in the selection of the population for the study. The initial criterion for the selection was individuals currently engaged in the operation of campcraft programs. Persons holding camp memberships in Region VII of the American Camping Association, screened for their current participation in campcraft programming, were the most readily available individuals meeting this criterion. A random sample of two-hundred-and-eight persons was made of the total population in Region VII. Upon the approval of the Chairman of the National Studies and Research Committee of the American Camping Association, inquiries were mailed
to this group. Eighty-two inquiries were returned. Twelve inquiries were discarded for various reasons, leaving a total of seventy usable returns. Tabulation and analysis of the data obtained from this survey formed the final step in the research procedures used for development of a progression campcraft program for boys and girls.

**Tabulation and Analysis of the Data**

Tabulation of the inquiries revealed that all items included in the suggested program were essential to a basic campcraft program for boys and girls. Further, the tabulation showed that all but seven items should be retained at the progression level in which they appeared in the suggested program. These items were shifted, as indicated by the survey, from the beginner to intermediate level. From these results a suggested progression skills and knowledges program was formulated.

**Interpretation of Data and Formulation of a Suggested Program**

The findings of the study indicate there is considerable agreement on skills and knowledges which should be included in a basic campcraft program for campers and the order of progression in which these skills should be
Presented. Moving seven items from Level I to Level II constituted the only changes made in the original progression program. Since this left the beginner level without a terminating experience in the final proposed progression program, a less difficult trip activity was added by the writer of this study.

Recommendations for Further Study

The research studies in camp programming, and particularly in the area of campcraft progression programs, are limited. The majority of studies completed in camping have dealt with problems in organization and administration, leadership and program in general. Further research is needed in all areas of camping and especially in the program skills area.

Suggestions for further study in campcraft are as follows:

1. A validation study should be made using the items considered to be important as a result of this investigation by applying the study to a similar group of persons engaged in campcraft programming.

2. Further refinement of this skills and knowledge progression campcraft program by experimenting with the application in organized camps.
BIBLIOGRAPHY
BIBLIOGRAPHY


APPENDICES
Appendix A

Members of the Jury-of-Experts
Members of the Jury-of-Experts

The camping authorities serving on the jury-of-experts for this study, their positions and organizations they represent and their addresses are listed below:


2. Mrs. Richard Beckhard
   National Headquarters, Girl Scouts of the United States of America, 155 East 44th Street, New York 17, New York.

3. Arline Broy, Assistant Director of Camping

4. Ford Carr, Director of Camping, Mt. Diablo Council, Boy Scouts of America, 2040 4th Street, Berkeley 10, California.

5. Katherine Dean, Director, Camp Wind Mountain, Portland Girl Scout Council, 1017 S.W. Washington Street, Portland, Oregon.


10. Agnes M. McQuarrie, Assistant Professor of Physical Education, State College of Washington, Pullman, Washington.


12. Jane W. Shurmer, Associate Professor of Physical Education, Chico State College, Chico, California.

13. Mildred Stevens, Director of Recreation, Sacramento State College, Sacramento, California.

14. Francis E. Williamson, Director of Boy Scout Training Center, Portland Council, 1009 S.W. 5th Avenue, Portland, Oregon.
Appendix B

Inquiry Sent to the Jury-of-Experts
To Members of the Jury-of Experts:

In a review of camping literature it was impossible to find a skill progression program of campcraft for boys and girls which has been substantiated by accepted research methods. However, it is recognized that many individuals and groups have defined such programs, the most widely published of these being the one in Your Own Book of Campcraft by Catherine Hammett, and the one by the Junior Maine Guides. In corresponding with Miss Hammett regarding the development of the present skill program she recognizes the need to seek opinions of qualified persons in order to validate the items included in the areas of progression.

Miss Hammett has given permission to use items included in her "campcraft skills and check-list" as the basis for the development of this inquiry. This study is an attempt to substantiate, by accepted research methods, what is believed by the jury-of-experts and persons presently involved in camping, to be a desirable campcraft progression program for use by boys and girls. As a graduate student at Oregon State College I have selected this as my research project for partial fulfillment of the requirements for a master's degree. In order to obtain the necessary data your cooperation is sought in filling out the enclosed inquiry. Copies of the results will be made available to those indicating an interest in this material.

If your busy schedule permits, please fill out the enclosed inquiry and return it to me in the self-addressed envelop by February 25, 1957.

Study Approved by:

Miss Margaret Milliken
Major Professor
Oregon State College

Sincerely yours,

Dr. Lenore C. Smith, Chairman
Studies and Research Committee
American Camping Association

Mary E. Jordan
Rt. 2, Box 304
Sandy, Oregon

Miss Margaret Milliken
Major Professor
Oregon State College
A Proposed Campcraft Program for Boys and Girls

PURPOSE: This inquiry is being submitted to a selected number of persons recognized as authorities in campcraft knowledges and program planning to seek their opinions regarding the content and format of the enclosed proposed program. Upon receiving their suggestions and comments the inquiry will be revised and mailed to the total membership of Region VII, American Camping Association to finally determine a basic campcraft program for boys and girls.

INQUIRY: This inquiry is part of a plan to devise a three-level progressive program of campcraft skills and knowledges for use by boys and girls as individuals as families, as club groups, or as part of the program of activities in an organized camp. Three levels are used in an effort to group the requirements into classifications which progress from beginner to more advanced skills and knowledges. The skills and knowledges have been divided into nine areas within each level to provide a consistent pattern throughout the program.

DIRECTIONS: Please check ( ) in Group I, one column opposite each defined skill or knowledge according to whether you feel it is essential, desirable, or non-essential to include a basic campcraft program for boys and girls.

Please check ( ) in Group II, one column opposite each defined skill or knowledge which indicates the progression level it should be included in the campcraft program.

GROUP I
- Essential - means necessary to include in the program
- Desirable - means worthy, but not necessary to include in the program
- Non-Essential - means unnecessary to include in the program

GROUP II
- Level I - Beginner
- Level II - Intermediate
- Level III - Advanced
If you feel that any additional skills or knowledges should be included, or that skills or knowledges in one area should be in another, or wish to make other comments a space has been provided for your use at the end of each section of the inquiry. The last page of the inquiry contains some additional questions. This inquiry bears a code number to facilitate follow-up.
LEVEL I
Goal: Cookout

A. Nature and Conservation
   1. Know the meaning of the "conservation pledge".
   2. Show that you know five things to do to leave the outdoor areas you use in better condition than when you found them.
   3. Learn to identify three plants common to your locality, and their uses in outdoor living.
   4. Learn to identify three wild animals in your locality.

B. Firecraft
   1. Show that you know the proper care and use of matches.
   2. Know the uses of tinder, kindling and firewood.
   3. Help build a woodpile.
   4. Demonstrate how to build and use a tepee fire and a criss-cross fire.

C. Cookery
   1. Plan and pack a hike lunch.
   2. Plan the menus for well-balanced outdoor meals for one day.
   3. Prepare a simple one-pot meal so that it looks and tastes good.
   4. Show that you can cook one item by stick cookery.

D. Ropecraft
   1. State the characteristics of a good knot.
INQUIRY

LEVEL I
Goal: Cookout

D. **Ropecraft (continued)**
2. Demonstrate how to tie and use a square knot, and a clove hitch and how to whip the ends of a rope.
3. Make one article demonstrating the use of square and diagonal lashings.

E. **Toolcraft**
1. Show that you know how to care for and use a pocket knife.
2. Show that you know how to care for and use a bucksaw or a similar tool.
3. Make a simple camp utensil out of wood with a knife you have sharpened.

F. **First Aid, Safety and Sanitation**
1. Show that you know five fire safety measures -- including building a fire circle and putting out a fire correctly.
2. Demonstrate proper disposal of garbage.
3. Demonstrate how to build a grease pit.
4. Show that you know how to keep your cooking utensils clean in the outdoors.
5. Show that you know how to make a natural food cooler.

G. **Map and Compass**
1. Show that you understand and know the parts of a compass.
2. Demonstrate how to find NORTH by the stars, the sun, and by the compass.
LEVEL I
Goal: Cookout

H. Equipment and Gear
1. Purchase a piece of hiking equipment, such as a meal kit or pocket knife, and know how to take care of it properly.

I. Trip Planning
1. Go on an all-day hike, on a well-marked trail or highway, carrying all of your equipment.
2. Assist in the planning of a cookout demonstrating as many of the above tests as is possible in carrying out your plans.
3. Learn one camp game, song or story based on the outdoors.
4. Discuss the cookout with your fellow campers selecting the good and bad points to assist in further planning.

ADDITIONS AND COMMENTS:
LEVEL II

Goal: Overnight Trip

A. Nature and Conservation
1. Learn about state and federal conservation and forestry projects in your locality.
2. Learn to identify three trees, animals and birds common to your locality.
3. Show that you can identify the poisonous reptiles, insects and plants in your locality.

B. Firecraft
1. Demonstrate that you know how to build and use a reflector fire, a trench fire and altar fire.
2. Demonstrate how to make artificial tinders and fuels.
3. Know the various woods in your locality and their uses in firecraft.

C. Cookery
1. Show that you can cook a meal using advanced skills of stick and one-pot cookery.
2. Demonstrate proper use of aluminum foil and Dutch oven.
3. Cook one item of food using reflector cookery.
4. Show that you know how to make a food cache safe from wild animals.

D. Ropercraft
1. Demonstrate how to tie a half-hitch, a sheet band, and a bowline.
LEVEL II
Goal: Overnight Trip

D. Ropecraft (continued)
2. Demonstrate that you know how to make sheer or round and continuous lashings.
3. Demonstrate that you know how to pitch a tent correctly.

E. Toolcraft
1. Show that you know how to care for and use a hand-axe.
2. Make some kind of camp equipment using tools you have learned to handle.
3. Make some kind of cooking device, such as a simple crane or turning spit.

F. First Aid, Safety and Sanitation
1. Know the precautions to take for your safety before starting on a hike.
2. Show that you know how to build a latrine.
3. Show that you know the first aid for sprains, sunstroke and sunburn.
4. Make a hike first aid kit and demonstrate how to use its contents.

G. Map and Compass
1. Demonstrate how to set and sight with a map and compass.
2. Show that you can identify trail markers common to your locality.
3. Demonstrate that you know how to correctly blaze a trail.
LEVEL II
Goal: Overnight Trip

H. Equipment and Gear
1. Show that you know how to make a bed roll.
2. Know the various packs desirable for you to use.
3. Demonstrate that you know how to properly pack your gear for an overnight.
4. Purchase an additional piece of camping equipment, such as a sleeping bag, hiking boots or pack-sack.

I. Trip Planning
1. Assist in the planning of an overnight trip demonstrating as many of the above tests as is possible in carrying out your plans.
2. Discuss the overnight with your fellow campers selecting the good and bad points to assist in further planning.

ADDITIONS AND COMMENTS:
LEVEL III
Goal: Back-Packing Trip

A. Nature and Conservation
1. Show that you are able to identify natural edible plants in your locality.
2. Assist in the planning and carrying out of a conservation project.
3. Learn to identify any six game animals in your locality.
4. Learn about wind, clouds and other natural forces affecting weather in your locality.

B. Firecraft
1. Show that you know how to find and protect fuels in inclement weather.
2. Demonstrate how to build a fire using natural fuels found in the forest.

C. Cookery
1. Assist in the planning and preparation of meals for a three-day back-packing trip.
2. Demonstrate that you can cook a meal without adult supervision.
3. Demonstrate how to use imu, planking and spit cookery.

D. Ropemaking
1. Demonstrate that you can tie two additional useful knots.
2. Assist in making a permanent camp fixture to improve a camp site.

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<thead>
<tr>
<th>GROUP I</th>
<th>GROUP II</th>
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<tbody>
<tr>
<td>Essential</td>
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LEVEL III
Goal: Back-Packing Trip

E. Toolcraft
1. Show that you know how to properly select the tools necessary to carry on a back-packing trip.
2. Demonstrate proper care and use of a sheath knife.
3. Demonstrate proper care and use of a two-headed axe.

F. First Aid, Safety and Sanitation
1. Demonstrate proper selection and packing of clothing to take on a back-packing trip.
2. Show that you know the proper precautions to provide for safe drinking water.
3. Demonstrate ability to pass the American Red Cross standard first aid course.
4. Know what to do in case of a forest fire.

G. Map and Compass
1. Go on a one mile cross-country hike by use of map and compass.
2. Show that you know how to read a topographical map.

H. Equipment and Gear
1. Demonstrate that you know how to properly pack your gear and equipment for a three-day back-packing trip.
2. Purchase an additional piece of camping equipment, such as a pack-board or ground cloth.
LEVEL III
Goal: Back-Packing Trip

I. Trip Planning
1. Assist in the planning of a three-day back-packing trip demonstrating as many of the above tests as is possible in carrying out your plans.
2. Discuss the back-packing trip with your fellow campers selecting the good and bad points to assist in further planning.

ADDITIONS AND COMMENTS:
ADDITIONAL INFORMATION:

1. Is there a clear division between levels?

2. Would you prefer a program divided into more levels? How many? Why?

3. Does the use of areas within the levels add to the continuity of the program from level to level?

4. Could the terminology used be understood by boys and girls?

5. Is the program too involved to be used in an actual camping situation?

6. Are the areas within each level placed in a logical progression?

FORMAT OF THE INQUIRY:

1. Are the instructions clear? ____yes ____no. If no, why?

2. Are the definitions adequate? ____yes ____no. If no, why?

3. How do you feel about the system for indicating choice of level? Is it ____easy or ____hard to use? Can you suggest a simpler way?

4. Additional Comments:

Number ____ 4.
Appendix C

Inquiry Sent to the American Camping Association Members
To American Camping Association Members in Region VII:

In a review of camping literature it was impossible to find a skill progression program of campcraft for boys and girls which has been substantiated by accepted research methods. However, it is recognized that many individuals and groups have defined such programs, the most widely published of these being the one in Your Own Book of Camp-Craft by Catherine Hammett, and the one by the Junior Maine Guides. In corresponding with Miss Hammett regarding the development of the present skill program she recognizes the need to seek opinions of qualified persons in order to validate the items included in the areas of progression.

Miss Hammett has given permission to use items included in her "campcraft skills check-list" as the bases for the development of this inquiry. This study is an attempt to substantiate, by accepted research methods, what is believed by a jury-of-experts and persons presently involved in camping, to be a desirable campcraft progression program for use by boys and girls in organized camps. As a graduate student at Oregon State College I have selected this as my research project for partial fulfillment of the requirements for a master's degree. In order to obtain the necessary data your cooperation is sought in filling out the enclosed inquiry. Copies of the results will be made available to those indicating an interest in this material.

If your busy schedule permits, please fill out the enclosed inquiry and return it to me in the self-addressed envelope by April 3, 1957.

Study Approved by:

Dr. Lenore C. Smith, Chairman
Studies and Research Committee
American Camping Association

Miss Margaret Milliken
Major Professor
Oregon State College

Sincerely yours,

Mary E. Jordan
A Proposed Campcraft Program for Boys and Girls

PURPOSE: This inquiry is being submitted to all individuals who hold camp memberships in Region VII of the American Camping Association to seek their opinions on the content of the enclosed program for use in organized camps.

INQUIRY: This inquiry is part of a plan to devise a three-level basic progressive program of campcraft skills and knowledges. The items included in this inquiry have been tentatively grouped into three levels progressing from beginning to more complex skills and knowledges. You are requested to either accept or reject the items as being essential to a campcraft program, and to place each in the progression level you feel most suitable.

DIRECTIONS: Please check (x) in Group I, one column opposite each defined skill or knowledge according to whether you feel it is essential or non-essential to include in a basic campcraft program for boys and girls.

Please check (x) in Group II, one column opposite each defined skill or knowledge which indicates the progression level in which it should appear.

GROUP I

| Essential means necessary to include in the program. |
| Non-Essential means unnecessary to include in the program. |

GROUP II

| Level I Beginner means those skills and knowledges considered to come first and which are basic to other levels. |
| Level II Intermediate means those skills and knowledges normally expected to achieve beyond Level I and necessary before progressing to more advanced levels. |
| Level III Advanced means skills and knowledges considered essential to become a master craftsman. |
If you feel any additional items should be included please write in these items at the end of the corresponding area at the level you feel those items should appear. The last page of the inquiry includes one additional question and a space to indicate if you wish to receive a summary of the findings of the study. This inquiry bears a code number.
A. Nature and Conservation
1. Know the conservation pledge.
2. Show that you know five things to do to leave the outdoor areas you use in better condition than you found them.
3. Learn to identify three wild animals common to your locality and one reason why each lives in this area.
4. Learn to identify three plants common to your locality and their uses in outdoor living.
5. Discuss what could happen if one kind of plant and/or animal life ceased to exist and how it would affect all life.

B. Firecraft
1. Show that you know the proper care and use of matches.
2. Know the uses of tinder, kindling, firewood and/or charcoal fuels.
3. Demonstrate how to build a foundation fire correctly. Keep it burning for three minutes.
5. Demonstrate how to build and use a tepee fire and/or a criss-cross fire and/or a fire using charcoal.
6. Know three woods in your locality and their use in firecraft.
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<tr>
<th>INQUIRY</th>
<th>GROUP I</th>
<th>GROUP II</th>
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<tr>
<td>LEVEL I Beginner</td>
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**B. Firecraft (continued)**

7. Show that you know how to find and protect fuels in inclement weather.

8. Show that you can build a fire using only natural materials.

**C. Cookery**

1. Plan and pack a hike lunch.

2. Prepare a simple one-pot meal so that it looks and tastes good.

3. Show that you can cook one item by stick cookery.

**D. Ropecraft**

1. State the characteristics of a good knot.

2. Demonstrate how to tie and use a square knot and a clove hitch and how to whip the ends of a rope.

**E. Toolcraft**

1. Show that you know how to care for and use a pocket knife.

2. Make a simple camp utensil using a knife you have sharpened.

3. Show that you know how to use and care for a hand-axe.

4. Make an eating or cooking utensil from a tin can.

**F. First Aid, Safety and Sanitation**

1. Show that you know five fire safety measures -- including building a fire circle and putting out a fire correctly.
INQUIRY

LEVEL I (continued)

F. First Aid, Safety and Sanitation
   (continued)
   2. Demonstrate proper disposal of garbage.
   3. Demonstrate how to build a grease pit.
   4. Show that you know how to keep your cooking utensils clean in the outdoors.
   5. Show that you can identify the poisonous reptiles, insects and plants in your locality.
   6. Demonstrate a simple remedy for burns, cuts and blisters.
   7. Know the precautions to take for your safety before starting on a hike—such as what to do if you become lost.
   8. Show that you know the proper precautions to provide safe drinking water.
   9. Know what to do in case of a forest fire.

G. Map and Compass
   1. Show that you know how to box the compass.
   2. Demonstrate how to find NORTH by the stars, the sun and by the compass.
   3. Show that you can identify and follow trail markers common to your locality.

H. Equipment and Gear
   1. Show that you know how to dress properly for an outing considering the activity, terrain and weather.
LEVEL I (continued)

G. Equipment and Gear (continued)

2. Make some piece of equipment--such as a bag for a meal kit.
3. Show that you can make a blanket roll.
4. Demonstrate that you know how to pack your gear for an overnight.

I. Trip Planning (in a group of 8 to 10)

1. Go on a all-day hike on a well-marked trail or road, carrying all of your equipment and including the planning and carrying out of a cookout, demonstrating as many of the above skills as is possible in carrying out your plans.
2. Afterwards discuss the outing with your fellow campers selecting the good and bad points to assist in further planning.
3. Learn one song, game or story based upon the outdoors.

LEVEL II Intermediate

A. Nature and Conservation

1. Find out about and/or visit a state or federal conservation project such as a fish hatchery, tree farm or game refuge. Include in your findings why it is needed.
A. Nature and Conservation (cont.)

2. Learn three ways animals depend upon each other to live and how this helps keep wildlife in "balance."

3. Learn about soil erosion and why it is harmful to the conservation of natural resources.

4. Find out what happens to animals and plants if their water supply becomes polluted.

5. Make a collection of three types of soil and/or rocks and be able to identify and tell the use of one.

B. Cookery

1. Show that you can cook a meal which combines pot and stick cookery methods.

2. Show that you can bake in foil and in a reflector oven and/or in a Dutch oven.

3. Help plan three well-balanced outdoor meals for one day.

4. Help cook a meal without adult supervision.

5. Show that you can make a food cache safe from wild animals.

C. Firecraft

1. Demonstrate that you know how to build and use a reflector fire and a trench fire.
LEVEL II (continued)

C. Firecraft (continued)
2. Demonstrate how to make two types of fuels from man-made materials.

D. Ropecraft
1. Demonstrate how to tie a half-hitch, a sheet bend and a bowline.
2. Make one article using one form of lashing—square, round, diagonal or continuous.

E. Toolcraft
1. Make some kind of camping equipment using tools you have learned to handle.
2. Make some kind of cooking device, such as simple crane or turning spit.

F. First Aid, Safety and Sanitation
1. Show that you know how to build a simple latrine for an overnight.
2. Show that you know the first aid for sprains, sunstroke and sunburn.
3. Make a hike first aid kit and demonstrate how to use its contents.
4. Show that you know how to make a simple outdoor food cooler.

G. Map and Compass
1. Demonstrate how to set and sight with a map and compass.
LEVEL II (continued)

G. Map and Compass (continued)
2. Demonstrate that you know how to lay and follow a trail.
3. Show that you can find your way using the sun and stars as indications of direction.

H. Equipment and Gear
1. Know the various packs desirable for you to use.
2. Show that you know how to select and prepare a site for pitching a tent.
3. Add an additional piece of equipment to your gear--such as a sleeping bag, hiking boots or pack-sack and show that you know how to care for it.

I. Trip Planning (in a group of 6 to 10 with leadership)
1. Show that you know how to select and set-up an overnight camping site.
2. Assist in the planning and carrying out of an overnight trip demonstrating as many of the above skills as possible in carrying out your plans.
3. Tell a story, teach a song or help plan a ceremony campfire based on the outdoors.
4. Afterwards, discuss the outing with your fellow campers selecting the good and bad points to assist in further planning.
LEVEL III Advanced

A. Nature and Conservation
1. Assist in the planning and carrying out of a conservation project such as improving a part of a camping site.
2. Learn to identify three game animals—fish, bird and mammal—common to your locality and why there are laws to protect them.
3. Show that you are able to identify and use native edible plants found in your locality.
4. Learn three ways nature keeps soil from wearing out and what happens if soil wears out.
5. Learn about clouds, wind and other natural forces that cause weather conditions in your locality.

B. Firecraft
1. Show that you can build and keep a fire burning in the rain.
2. Show that you know how to build a fire site for imu, plank and spit cookery.

C. Cookery
1. Assist in the planning and preparation of meals for a three-day back-packing trip which includes the use of dehydrated foods.
2. Demonstrate that you know how to cook something by each of the following methods—boiling, baking, frying and broiling—that you have not shown before.
LEVEL III (continued)

D. Ropecraft
1. Demonstrate that you can tie two additional useful knots.
2. Assist in the making of a permanent camp fixture to improve a camp site.

E. Toolcraft
1. Show that you know how to properly select and put into condition the tools necessary to carry on a back-packing trip.
2. Demonstrate proper care and use of a sheath knife.
3. Demonstrate proper care and use of a bucksaw.

F. First Aid, Safety and Sanitation
1. Demonstrate proper selection and packing of clothing to take on a back-packing trip.
2. Demonstrate ability to pass the American Red Cross standard first aid course.

G. Map and Compass
1. Go on a one mile cross-country hike by use of map and compass.
2. Show that you know how to read and use a topographical map.

H. Equipment and Gear
1. Demonstrate that you know how to properly pack your gear and equipment for a three day back-packing trip.
LEVEL II (continued)

H. Equipment and Gear (continued)

2. Add a piece of camping equipment—such as a pack board or a ground cloth.
3. Know the maximum poundage for you to carry.
4. Learn how to make a temporary shelter using a ground cloth or poncho.

I. Trip Planning (in a group of 6 to 10 with leadership)

1. Assist in the planning and carrying out of a two or three day back-packing trip demonstrating as many of the above skills in carrying out your plans.
2. Afterwards discuss the trip with your fellow campers selecting the good and bad points to assist in further planning.
3. Learn a hiking song and a story about the outdoors that you have not known before.

<table>
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<tr>
<th>GROUP I</th>
<th>GROUP II</th>
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</thead>
<tbody>
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Additional Information:

Name__________________________
Experience in Campract:
____________________________________
____________________________________

I would like to receive a summary of the findings of this study.
yes___ no___

#___
APPENDIX D

Method Used in Random Sample
A probability research method, commonly termed a random sample, was used to select the members of the population used in this study. The sampling method used in this study was as follows. The names of all those individuals holding camp memberships in Region VII of the American Camping Association were written on slips of paper and these slips placed in a container. The slips were then drawn from the container one at a time and the names recorded on a master mailing list for this study. The slips were mixed from time to time during the drawing to insure a non-biased sampling.