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HOWENSTINE, William Lester. AN
EVALUATION OF CONSERVATION
EDUCATION IN RELATION TO THE
TOTAL PROGRAM OF EIGHT
SCHOOL CAMPS.

University of Michigan, Ph. D., 1959
Education, general

Negative microfilm received
from university.

AN EVALUATION OF CONSERVATION EDUCATION IN RELATION
TO THE TOTAL PROGRAM OF EIGHT SCHOOL CAMPS

by
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A dissertation submitted in partial fulfillment
of the requirements for the degree of
Doctor of Philosophy in the
University of Michigan
1958

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PREFACE

In the spring of 1948, three classes from the Cleveland Heights City School District, Ohio, spent one week each at Hiram House Camp, Chagrin Falls, Ohio, initiating a program of school camping for their schools. Through the good fortune of being associated with Hiram House Camp at that time, I was introduced to this new educational program. In the following year, when Cleveland Heights extended its school camping program, I became associated with it as a staff member, and, in one way or another, I have remained directly connected with the school camping field ever since.

It has been challenging and exciting to be involved in the early development of this outdoor education movement, which is having an impact upon education throughout the country. It was this feeling of exploring and pioneering which contributed greatly in leading me to the University of Michigan and the research reported in this dissertation.

I am deeply indebted to the many people who have helped to guide me along this trail -- fellow campers, counselors, camp directors, teachers, and professors. Each, in his own way, has helped to shape my thinking and research. I am particularly grateful to Viola L. Stevens, the first director of the Cleveland Heights School Camp, for the encouragement, inspiration, and counsel which she has given me.

The cooperation of the eight schools included in this study has been unfailing. The staff members of these school camps gave

patiently and freely of their time in the interest of the research. Without question, one of the most impressive observations has been to note the dedicated spirit of these school camping leaders. However, much one might criticize details of program organization, there can be nothing but admiration for the enthusiasm and sincerity of these people. There exists among them an esprit de corps which is exceptional and inspiring. Not only am I appreciative of the practical help they have given in this research, but also I am thankful to have had this opportunity to know them personally.

It is difficult to express one's feeling of appreciation toward the members of his doctoral committee. Their insight and guidance have been invaluable to the study. But, beyond the scholarly assistance of this committee, there emerges a personal quality in their counseling which will be of lifelong value. I have found it to have ever-growing significance for me, becoming one of those standards by which to live. I am particularly grateful to the chairman of my committee, Richard L. Weaver, for his friendship and assistance during these past years.

Finally, I would like to express gratitude to the members of my family for the help they gave in so many ways. To my wife, Alice, I express special appreciation; because of her professional camping experience and sympathetic understanding, she has been a constant and unfailing aid.

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CHAPTER I

THE PURPOSE AND PROCEDURES OF THE STUDY

Introduction

During the decade of 1930 to 1940, Tappan Junior High School in Ann Arbor, Michigan, the Atlanta, Georgia, Public Schools, and several other schools conducted short-term camping programs during the school year. In 1940, the first extended camping program operated by a school during the school year was initiated at Battle Creek, Michigan.¹ Thus was started an educational program, known as school camping, which, as it has developed, has had a profound effect upon public school education in many parts of the country.

For many years organized camps for children have been a familiar part of summer vacation activities. However, the unique aspect of camping as embodied in the modern school camp program is the acceptance of a camp experience as part of the school curriculum. School camping is a resident experience in an outdoor setting, sponsored by a school system during the school year as part of the school curriculum.

The advocates of school camping have stated many objectives for the program, but from the early days of this movement one of the more important objectives has been that of conservation or resource-

¹Helen K. MacIntosh, Camping and Outdoor Experiences (Washington: Office of Education, Federal Security Agency, 1947), pp. 16-22.

use education.

In 1947, Julian Smith and Eugene Elliott (then State Curriculum Consultant and State Superintendent of Public Instruction, respectively) stated that one of the major objectives of the Michigan program in outdoor education (including school camping) sponsored by the Department of Public Instruction, the Department of Conservation and the W. K. Kellogg Foundation, was:

Better utilization of natural resources and the outdoors in providing real and direct learning experiences

- A. Development of effective policies of interaction between the Departments of Public Instruction and Conservation
- B. Greater use of the state's natural resources by the schools in enriching the curriculum
 - 1. State lands for exploration, camping, field trips, excursions
 - 2. Parks, recreation areas, and other state lands for community recreation programs
 - 3. Use by the schools of natural resources and the services of state agencies, especially the Department of Conservation
 - 4. An expanded adult education program in the wise use of natural resources¹

James Clarke, in his account of the San Diego, California, school camping program (1951) emphasized "conserving and improving the environment" as an important part of the camp program.

An increasingly important part of modern education consists of experience in conservation and other work needed for the long-term good of all. Clearly, the best way to learn about this work is to have a share in it; next best is the observation of adults who are engaged in it. The camp environment offers valuable opportunities for arranging such experiences.²

George Donaldson of the Tyler (Texas) School Camp, in 1952,

¹Julian Smith and Eugene B. Elliott, "The Michigan Program in Action," The Bulletin of the National Association of Secondary-School Principals, XXXI (May, 1947), pp. 62-63.

²James Mitchell Clarke, Public School Camping (Stanford, California: Stanford University Press, 1951), pp. 87-88.

listed conservation as one of the five experience areas significant for school camps.¹ He stated further:

Nearness to nature and natural forces should be the essential physical characteristic of the educational camp. One of its prime objectives should be that of teaching about the natural environment in which man lives. Understanding that environment comes best from repeated, intimate contacts with it and the forces operating in it.²

. . . the natural environment is meaningless except when related to human beings.

The use of good conservation information and practice is by far the best method of nature instruction--conservation defined as nature facts plus social conscience. Attitudes toward the outdoor environment without the necessary knowledge to put them to work are as useless as the facts themselves. Attitudes plus facts will guarantee wise and constructive use of natural resources.

No camp can exist, if it is truly a camp, without facing a multitude of conservation problems.³

The 1955 Handbook for Teaching of Conservation and Resource Use of the National Conservation Committee of the National Association of Biology Teachers gave emphasis to school camping as one of the ways in which the teacher could use the community in conservation education.

Many schools are now engaging in camping during the regular school term. Teachers and pupils spend a week at camp learning to enjoy the outdoors, studying conservation, science and geography, and engaging in camp improvement projects. Such school camps have greatly increased the amount and the quality of the conservation being taught in many schools.⁴

In 1957, a committee of the American Association for Health, Physical Education, and Recreation published the following statement

¹George Donaldson, School Camping (New York: Association Press, 1952), p. 56.

²Ibid., p. 43.

³Ibid., p. 64.

⁴Richard L. Weaver (ed.), Handbook for Teaching of Conservation and Resource Use (Danville, Ill. : The Interstate Printers and Publishers, Inc., 1955), p. 405.

about the school camp program:

Its content is centered in the out of doors; it should give campers a fuller understanding of our natural resources and how to use them, and teach them to solve some of their own problems connected with man's basic needs for food, clothing, shelter, group living, and spiritual uplift.¹

The involvement of conservation education in the school camping movement has been constantly in evidence, and the support of conservation educators has undoubtedly added greatly to the rapid development of this new educational program. Certainly in Michigan it would be difficult to imagine such a large school camping movement² were it not for the cooperation of the Michigan Department of Conservation in making group camp sites and resource personnel available to school camp programs. Yet in these early years of the school camping movement there has been very little in the way of an appraisal of school camping as an agency for conservation education.

Purpose of the Study

The purpose of this study is the evaluation of the status of conservation education in a selected group of eight school camps. The problem evolved into major questions.

1. What emphasis is placed on conservation education in comparison with other phases of the camp program?
2. What relationships exist between conservation education

¹"Outdoor Education for American Youth", The Bulletin of the National Association of Secondary-School Principals, XII, (May, 1957), p. 33. Also published as a book, Outdoor Education for American Youth (Washington: American Association for Health, Physical Education, and Recreation, 1957).

²According to the Annual Report of Group Camping--1955 (Lansing: Michigan Department of Conservation, Parks, and Recreation Division, 1955) 134 school permits, involving 8,672 persons, were issued in that year.

and the leaders involved in the camp program?

General Procedures

To obtain some answers to the first question regarding the emphasis on conservation education in relation to other aspects of the camp program the following studies were conducted:

1. A time study was made of the program of each of the selected camps to determine the amount of time spent on different program activities.
2. A detailed recording of program activities was made to facilitate analysis of program content.
3. An analysis was made of the relative emphasis put upon teaching of relationships and of isolated facts in camp natural science. (It is assumed that an ecological approach to natural science and natural resources is basic to conservation.)¹

In securing information relative to the second question, that regarding the relationships between conservation education and staff members, the staff members of the eight camps were classified according to employment status, and the following studies were made:

1. The school camping objectives of the staff members were determined and analyzed according to staff groupings.
2. Staff members were observed and compared in regard to teaching methods which they used.

Selection of Camps

The first criterion used in selecting camps for this study was that they be elementary school camps. This confined the study to the school level most often involved in school camping and eliminated problems of analysis which might arise because of the great differences

¹For an explanation of this "ecological approach" refer to pp. 101-102.

between elementary and secondary school camping (e.g., the lack of self-contained classroom groups in secondary schools). Within the field of elementary school camping an attempt was made to include a variety of forms of camp organization.

Selection was made to include many types of staff members. Classroom teachers were involved at each camp. Special teachers, permanent camp staff members, and college students participated in four of the camps. One camp used high school students, and one camp used parents. Other resource people were used in seven of the camps.

Three of the camps were long-term camps, operating twenty weeks or more of the school year; one camp operated six weeks of the school year; and the remaining four camps were short-term camps operating one to four weeks out of the school year.

Although all of the classes observed in camp for this study were either fifth or sixth grade, three of the camps served younger or older children at other times of the year.

The camp sites represented a variety of ownership patterns -- one being school-owned, three being state-owned, two being owned by social agencies, and one being privately owned. (Two schools used the same camp site.)

The eight school camps and the camp sites they used are as follows:

Ann Arbor (Michigan) School Camp, Cedar Lake Camp (state-owned), Waterloo Recreation Area, Chelsea, Michigan..

Battle Creek (Michigan) School Camp, Clear Lake Camp (school-owned), Dowling, Michigan.

Cleveland Heights (Ohio) School Camp, Red Raider Camp (privately owned), Novelty, Ohio.

Dearborn (Michigan) School Camp, Mill Lake Camp (state-owned),

Waterloo Recreation Area, Chelsea, Michigan

Orange (Ohio) School Camp, Hiram House Camp (social agency), Chagrin Falls, Ohio.

Plymouth (Michigan) School Camp, Island Lake Camp (state-owned), Island Lake Recreation Area, Brighton, Michigan.

South Euclid-Lyndhurst (Ohio) School Camp, River Road YMCA Camp (social agency), North Chagrin Metropolitan Park, Cleveland, Ohio.

Warren (Ohio) School Camp, Hiram House Camp (agency), Chagrin Falls, Ohio.

Period of Trial Study

During the spring of 1954, trial observations were made at the Ann Arbor Elementary School Camp, the Ann Arbor High School Camp, and the Cleveland Heights School Camp to develop techniques of observing and recording. A tentative observation form¹ was used and evaluated.

It was found to have several weaknesses. First, it was impractical to attempt to observe an activity, record these observations, and record the objectives of the staff member(s) all on one form. Secondly, the fact that this form was not established for a given block of time made difficulties in tabulating data from it. Thirdly, the lack of a grid system for drawing lines representing minutes slowed down the recording process so much that accuracy of the observations became questionable. Finally, the system of recording the number of questions the leader and the campers asked proved too much of a burden for one observer.

As a result of this trial observation the final observation form² was developed. Determination of the objectives of the staff

¹Appendix I, pp. 135-136.

²Appendix I, pp. 137-139.

members was separated from the observation of specific activities; a card selection device and a questionnaire¹ were used to determine objectives. These will be described in further detail later.

Length of Observations

Another result of this trial observation period was the selection of one entire week as the basic time period for observing a camp. (At two camps, Ann Arbor and Cleveland Heights, some extra time was arranged, and at two other camps, Warren and South Euclid-Lyndhurst, the observer had to divide a week-- a half week in each camp-- in order to fit them into his schedule.

Shorter visits were found to have two disadvantages. First, the short period does not allow enough time for staff members or campers to overcome any self-consciousness they may feel in the presence of the observer. Second, because of the great variety of activities and the lack of regular, formal schedules in a camp program the short visit may give a very erroneous impression of the total program.

The observations of the eight school camps in this study took place during the 1954-55 school year.

Classification of Staff Members

One aspect of camp organization which has manifested itself in a great variety of ways is the recruitment of the educational staff. This has been due, in part, to differing ideas as to the optimum form of a school camp program and, in part, to compromises which have been effected because of financial problems. In some cases the leadership

¹Appendix I, pp. 139-140.

in the camp program is supplied entirely from school employees; in other cases leadership may come from other professions or may represent students in training.

For the purposes of this study educational staff members were divided into seven groups on the basis of their employment. These groups are as follows:

1. Classroom teachers. Leaders in this group are those employees of a board of education who are in charge of one class on a full-time basis. In all the elementary school camps studied by this observer the campers attended camp as a class group along with their classroom teacher. Therefore, this type of leader was the most prevalent of all those studied.

2. Special teachers. These are also employees of the board of education, but they are not fundamentally in charge of a classroom group; nor are they employed by the board of education specifically to work at camp. They may be art teachers, physical education teachers, principals, or others who are assigned duties at camp in addition to their regular work. This type of staff member is common in school camps which operate for only a few weeks at a time.

3. Permanent camp staff. This is the final group of regular school employees functioning in school camp programs. They are school teachers who are hired specifically for the camp work and for whom school camp teaching is one of the main responsibilities. This type of staff member is common in school camps which operate for a period of six weeks or longer at a time.

4. College students. A number of school camps use college students for educational leadership at school camp. They may be

serving in the role of student teachers, or they may be serving as regular employees between periods of college class work, e.g., Antioch College (Ohio) student cooperative plan. (Eight students from a graduate conservation course at the University of Michigan participated in the Ann Arbor School Camp, but were recorded as "resource persons" since they were at camp for very short periods of time to teach specific subjects. Seven of these eight students were interviewed.)

5. High school students. A few school systems utilize high school students from their school system as assistants to the regular teachers. Although their responsibilities are limited they, nevertheless, provide educational leadership for the younger campers. Only one camp using high school students was included in this study.

6. Parents. Some school camps use parents of the children in camp as educational staff members. Again, just one school system was observed which uses this group.

7. Other resource persons. A resource person may be defined as one who is utilized as a leader in a school camp program on a short-term basis in a role supplementary to the regular staff. Thus, it is seen that parents and college students may function in the role of a resource person at times. However, with the exception noted above under "college students", the term "resource person" will refer, henceforth, only to persons other than those listed in the first six categories. The resource person is particularly common in school camps in Michigan where some personnel from the Department of Conservation are regularly assigned a certain number of days of the year to serve as resource people in school camp programs. Soil Conservation

Service agents, Audubon Society members, scout leaders, college faculty members, and representatives of museums are other examples of resource people.

(One staff member of the Plymouth School Camp fitted none of these classifications well. He was a high school graduate, but not a college student, and worked at camp all week. He was assigned arbitrarily to the resource person group.)

Determination of Objectives of Staff Members

An effort was made to interview as many as possible of the various staff members observed working in the school camp programs. During these interviews two devices were used to obtain information regarding a person's school camping objectives.

One was a card selection device in which the person was to rate twenty-eight possible school camping objectives (each on a separate card) in three groups according to importance.

The second tool was a questionnaire¹ which obtained background information about the staff member and answers to questions not adaptable to the card selection procedure.

Details about these methods and the results obtained follow in Chapters II and III.

Program Observations

Observations of program activities were recorded on a grid chart² permitting one observer to make narrative notes of a given activity as well as recording the number of minutes given to that

¹Appendix I, pp. 139-140.

²Appendix I, pp. 137-139.

activity, the number of minutes of participation by campers and leaders of different types, and the type of instructional method used by that leader during the activity. Details about the use of this chart and the results obtained from it follow in Chapter IV.

Summary of Procedures

The objective of this study was an appraisal of the status of conservation education in eight selected school camps serving elementary school children. The relative stress placed upon conservation education in comparison with other camp activities and subjects and the relationships between conservation education and the camp staff members were the two basic areas of investigation.

During a trial observation period forms for recording information were perfected and the procedure of investigation was developed.

Camps were selected with the aim of having representation from a variety of organizational forms in elementary school camping. Approval for making the study was obtained from each camp director (or from the school principal or superintendent in those camps not having a camp director) and a week was arranged for visitation.

Detailed records were made of the week's program as observed in each camp, including a time study of all activities, notes on teaching methods and program organization, and a continuous log of activities. The form used for this purpose is given in Appendix I.¹

Interviews were held (during or following the observation period) with most of the camp staff members who were observed. The primary purpose of these interviews was to obtain information about

¹Supra, p. 138.

the school camping philosophy, especially the objectives, of the staff members. A card selection device and the form in Appendix I¹ were used in obtaining this information. Finally, for purposes of analyzing these data, staff members were grouped according to their employment status.

¹Supra, p. 140.

CHAPTER II

OBJECTIVES OF SCHOOL CAMP STAFF MEMBERS

It has already been pointed out that conservation education ranks as one of the important objectives of school camping among many of the leaders of the movement. However, it seemed important to determine the objectives of the staff members of the school camps under study with particular reference to the relative position of conservation and other objectives.

Methods of Obtaining Data

As one means of determining this information a card selection device was utilized. From literature on school camping, a list of objectives and values was formed, and this then was broken into categories of similar objectives. Finally, these were rephrased and stated as specifically as possible, forming a final list of twenty-eight potential objectives for school camping. For each objective an example was listed where it was thought this might clarify the meaning, and each objective and its example were listed on a separate card. The cards were numbered consecutively on the rear side so that persons being interviewed would not see the number, but permitting the arrangement of the cards in identical order for each person.

Each staff member was then asked to read the objectives and to rank them into three groups according to importance. Each person was asked to make the rankings according to his own beliefs and not

according to what he thought were the objectives of the school or of other staff members.

Of the 107 staff members observed in action, 86 completed the selection of objectives. Of the 21 not included, 6 were classroom teachers, 6 were special teachers, and 9 were resource persons.

Potential School Camp Objectives

The twenty-eight objectives are as follows:

1. To enlarge the range of interests of the campers, e.g., outdoor cooking as a hobby, forestry as an educational pursuit.
2. To teach a sense of responsibility for the common welfare, e.g., in caring for group equipment, cooperating in group projects, fulfilling group tasks.
3. To teach physical education as a function of daily living, e.g., hiking on a field trip to an abandoned farm, chopping wood for chores, climbing trees for recreation.¹
4. To bring out the creative ability of the camper, e.g., in arts and crafts, language arts, music.
5. To develop appreciation of people with varying backgrounds-- racial, religious, economic, etc.
6. To promote a concern for safety in daily activities, e.g., in using sharp tools, in working with animals.
7. To build an appreciation of work, e.g., to realize the

¹It is realized that physical education and physical activity are not the same thing. The examples listed for this objective were not intended to be equated with physical education, but to be representative of some teaching situations for physical education in the camp setting. There was some misinterpretation of the intent of the wording of this objective; this is discussed further on p. 33.

connection between work and life, to know the satisfaction of doing a job well.

8. To help the camper become an effective participant in group planning.

9. To establish habits of health, e.g., cleanliness in dealing with food, rest in the proper amounts.

10. To foster religious growth, e.g., in vespers, grace before meals.

11. To form new friendships.

12. To provide functional learning of the principles of conservation, e.g., to teach the wise use of our natural resources through care of them in the camp setting.

13. To encourage the camper's independence and self-reliance, e.g., to enable him to get along without his parents.

14. To develop patterns of effective social living, e.g., courteous manner, the "social graces", the ability to work cooperatively.

15. To increase sensitivity to the beauty of nature.

16. To develop a greater sense of responsibility in the camper for handling his personal affairs, e.g., keeping his belongings in order, maintaining personal cleanliness.

17. To teach citizenship in a democratic community, e.g., in determining group policy, in caring for public property.

18. To emphasize relationships in nature, e.g., the effect of an animal upon its habitat, the relationship between geologic forces and present land forms.

19. To aid the camper in achieving emotional stability, e.g.,

in the development of relationships with children and adults of both sexes, in the acquisition of strength to withstand adversity, in the lessening of nervous tension.

20. To provide first-hand knowledge of material normally studied in classroom subjects, e.g., observing animal life and plant life in their natural surroundings, learning the rigors of pioneer life by cutting firewood and cooking on an outdoor fire.

21. To give experience in processes of evaluation, e.g., evaluation by a group of an exploration trip, self-evaluation by an individual of his camping experience.

22. To correlate the camp activities as much as possible with the activities of the classroom.

23. To aid campers in developing abilities of leadership and followership.

24. To foster desirable patterns of recreation--including the choice of an activity, the manner of participation, a "sense of fair play", etc.

25. To increase teacher-pupil understanding--to help teacher and pupils to know each other better.

26. To increase the ability to solve real problems, e.g., in waiting on a dining table most efficiently, in reading stories in layers of rocks; in solving bunkroom quarrels.

27. To provide pupils a change from classroom routine.

28. To develop a greater appreciation of one's home and family.

An attempt has been made to make these objectives as specific as possible and to phrase them in such a way that selection of them

would require thought rather than the mere approval of well-worn cliches and fine-sounding terms. Examples have been inserted frequently to clarify meanings, to stimulate thought, and thus to escape the pitfalls of vague generalities.

It may be noted that a number of these objectives are rather closely related. Because of the different shades of meaning attached by people to the same words it was felt that the rating on a constellation of objectives would be more reliable than the rating for a single objective. For example, although there is only one objective which specifically mentions "conservation" there are four objectives which bear a relationship to conservation and natural resources. In evaluating the outcomes of the objectives selection, six groupings were considered. Some specific objectives apply to more than one grouping, and therefore, are listed more than once below.

Six Groups of Objectives

A. Conservation and natural resources. The following objectives were included:

#12. To provide functional learning of the principles of conservation, e.g., to teach the wise use of our natural resources through care of them in the camp setting.

#15. To increase sensitivity to the beauty of nature.

#17. To teach citizenship in a democratic community, e.g., in determining camp policy, in caring for public property.

#18. To emphasize relationships in nature, e.g., the effect of an animal upon its habitat, the relationship between geologic forces and present land forms.

Objective #15 is obviously not synonymous with conservation but has been included because of the considerable number of people who believe that appreciation of nature and the outdoors is a first step

in conservation education.

Objective 17 is a rather general one--"citizenship", including so many things. It has been included here partly because of the example of "caring for public property" which is tied so closely to concepts of conservation. More important, however, is the fact that in a democracy, the basic responsibility for conservation rests on the citizenry. Resource management, in the last analysis, is the citizen's responsibility.

Although objective 18 is essentially an ecological objective the word "ecology" was purposely not used because it was felt that many people would not be familiar with the term and might withdraw from this objective because of this.

Health, safety, physical education and recreation. The following objectives were included:

#3. To teach physical education as a function of daily living, e.g., hiking on a field trip to an abandoned farm, chopping wood for chores, climbing trees for recreation.¹

#6. To promote a concern for safety in daily activities, e.g., in using sharp tools, in working with animals.

#9. To establish habits of health, e.g., cleanliness in dealing with food, rest in the proper amount.

#24. To foster desirable patterns of recreation--including the choice of an activity, the manner of participation, a "sense of fair play", etc.

School subjects. Several of the objectives when taken together make a grouping of objectives which might represent school content subjects as a whole, in comparison with objectives relating to personal values or to "group living" values. Most of them were included in the

¹See footnote on p. 15.

two previous categories, but some of the previous ones have been deleted and two new ones have been added. They are as follows:

#3. To teach physical education as a function of daily living, e.g., hiking on a field trip to an abandoned farm, chopping wood for chores, climbing trees for recreation.

#4. To bring out the creative ability of the camper, e.g., in arts and crafts, language arts; music.

#6. To promote a concern for safety in daily activities, e.g., in sharp tools, in working with animals.

#9. To establish habits of health, e.g., cleanliness in dealing with food, rest in the proper amounts.

#12. To provide functional learning of the principles of conservation, e.g., to teach the wise use of our natural resources through care of them in camp setting.

#15. To increase sensitivity to the beauty of nature.

#18. To emphasize relationships in nature, e.g., the effect of an animal upon its habitat, the relationship between geologic forces and present land forms.

#20. To provide first-hand knowledge of material normally studied in classroom subjects, e.g., observing animal life and plant life in their natural surroundings, learning the rigors of pioneer life by cutting firewood and cooking on an outdoor fire.

All of these objectives apply to material normally studied as part of school subjects in the classroom. It is true that some subjects (e.g., arithmetic) have been omitted from any mention, but it is believed that the above objectives when rated by staff members will give some idea of the degree of importance placed upon content learning as a whole in the school camp program.

Classroom correlation. Three objectives are concerned with the amount of correlation that may exist between the school camping program and the ongoing program in the classroom. These are as follows:

#27. To provide first-hand knowledge of material normally studied in classroom subjects, e.g., observing animal life and plant

life in their natural surroundings, learning the rigors of pioneer life by cutting firewood and cooking on an outdoor fire.

#22. To correlate the camp activities as much as possible with the activities of the classroom.

#25. To increase teacher-pupil understanding--to help teachers and pupils to know each other better.

There are some people in the school camping movement who feel that the camp experience should be definitely connected to the classroom experience--that it should be a laboratory for the class and its work as truly as the traditional indoor laboratory is. Others believe that it makes no difference whether or not there is any close connection between the camp experience and the classroom program. In some camps the classroom teacher may not even accompany his class to camp. The ratings of this group of objectives should give some indication of the importance placed upon this correlation by the staff members of the school camps under study.

Personal values. The following objectives relate to values sought for the individual without consideration for "group living" values.

#1. To enlarge the range of interests of the campers, e.g., outdoor cooking as a hobby, forestry as an educational pursuit.

#4. To bring out the creative ability of the camper, e.g., in arts and crafts, language arts, music.

#7. To build an appreciation of work, e.g., to realize the connection between work and life, to know the satisfaction of doing a job well.

#13. To encourage the camper's independence and self-reliance, e.g., to enable him to get along without his parents.

#16. To develop a greater sense of responsibility in the camper for handling his personal affairs, e.g., keeping his belongings in order, maintaining personal cleanliness.

#19. To aid the camper in achieving emotional stability, e.g., in the development of relationships with children and adults of both

sexes; in the acquisition of strength to withstand adversity; in the lessening of nervous tension.

#21. To give experience in processes of evaluation, e.g., evaluation of an exploration trip; self-evaluation by an individual of his camping experience.

#26. To increase the ability to solve real problems, e.g., in waiting on a dining table most efficiently; in reading stories in layers of rocks; in solving bunkroom quarrels.

These objectives are of a different order from the last group, labeled as "social objectives". This latter group, while still seeking changes in individual personalities, is concerned with maintaining society and with personal attributes essential for this maintenance.

Social objectives. The following seven objectives may be classified here:

#2. To teach a sense of responsibility for the common welfare, e.g., in caring for group equipment; cooperating in group projects; fulfilling assigned tasks.

#5. To develop appreciation of people with varying backgrounds-- racial, religious, economic, etc.

#8. To help the camper become an effective participant in group planning.

#11. To form new friendships.

#14. To develop patterns of effective social living, e.g., courteous manner; the "social graces"; the ability to work cooperatively.

#17. To teach citizenship in a democratic community, e.g., in determining group policy; in caring for public property.

#23. To aid campers in developing abilities of leadership and followership.

These, then, are the groupings by which the ratings of objectives were analyzed. It should be noted that "conservation-natural science" and "physical education-health-safety-recreation" are the only two "subject areas" of school curriculum included in these groupings. Categories have not been made for art, arithmetic, social

studies, language arts, etc. There are two reasons for limiting subject area considerations to these two fields. First of all, it would seem, a priori, that outdoor education would especially appeal to a study of natural science and physical education, for nature, relatively undisturbed by man, is found outdoors, and the outdoor spaces, of necessity, require physical exertion to be utilized. It would seem that no better place could be found to pursue the study of certain aspects of natural science and conservation--that no better place could be found to develop physical fitness, than a camp setting where nature abounds and unlimited opportunities are presented for outdoor sports, physical activity, and the practice of health habits in a twenty-four-hour day living experience.

The second reason that these subject areas have been stressed in this study of objectives is that support for school camping has come particularly from people working in these two fields. Mention has already been made of the important role of the Michigan Conservation Department in the development of school camping in that state and of the support of school camping by the National Association of Biology Teachers.¹ Elsewhere in the country similar support by groups and individuals interested in natural science and conservation has been instrumental in the development of school camping.

The other large group supporting school camping is composed of persons interested in physical education and recreation. The American Association for Health, Physical Education and Recreation has supported school camping for many years and recently has cooperated with

¹Supra, pp. 1-4.

the Associated Fishing Tackle Manufacturers and the Sporting Arms and Ammunition Manufacturer's Institute to sponsor an outdoor education project for leadership training, program development, and interpretation for schools and colleges.¹

For these reasons it has seemed wise to limit intensive study of objectives relating to specific school subjects to these two groupings.

It should be further noted that the following three objectives did not fall into any of the above categories and have been dealt with separately.

#10. To foster religious growth, e.g., in vespers, grace before meals.

#27. To provide pupils a change from classroom routine.

#28. To develop a greater appreciation of one's home and family.

Statistical Procedure

Staff members who participated in this selection of objectives rated a given objective as first, second, or third choice. A score of 2 was given to all first choices, 1 to all second choices, and those objectives rated lowest were given a zero score. The rating of a given objective by a given group of staff members was then expressed in terms of the mean rating. For example, 38 people rated Objective 1 first; 30 people rated it second choice; and 18 people rated it last choice (86 staff members participated in this selection). Thus, Objective 1 received a raw score total of 106 with a mean rating of 1.23.

¹The Outdoor Education Project, American Association for Health, Physical Education and Recreation (1956), 7 pp.

These mean ratings were computed for each objective as selected by the total group of staff members, as selected by the seven different types of staff members, and as selected by the staff members of each of the eight camps being studied. The statistical significance of the differences between the mean rating made by the total group of staff members and the mean ratings made by the various sub-groups was calculated for each objective.¹ These mean ratings and significance levels are listed in Table 1.

Similarly, the mean ratings were computed for each of the six groups of objectives listed above, and significant differences between sub-groups means and the total group means were figured. These data are given in Table 2. Included in Table 2, also, are the data for the specific objective (12) on conservation because of its importance in this study.

Results of Selection of Objectives

Analysis of the ratings of objectives by staff members brought out the following facts:

1. High rating for conservation and natural science. The teaching of conservation was rated as one of the most important objectives by almost every group of staff members. Considering the objectives individually, it is seen (Table 3) that Objective 12, "to provide functional learning of the principles of conservation", received the second highest rating (tied with Objective 13, "to encourage

¹Significance was computed according to the procedure outlined by Henry E. Garrett, "The Significance of the Difference Between Means Derived from Independent or Uncorrelated Measures or Scores--When There Are More Than Two Means To Be Compared", Statistics in Psychology and Education (New York: Longmans, Green and Co., 1953), pp. 273-281.

TABLE 1
MEAN RATING OF OBJECTIVES BY STAFF MEMBERS

Staff Member Groups	1	2	3	4	5	6	7
ALL STAFF MEMBERS (86)	1.23	1.59	.60	1.10	1.21	1.21	1.31
Classroom Teachers (18)	1.22	1.72	.67	.94	1.06	.83	1.39
Special Teachers (14)	1.36	1.86	.71	1.21	1.50	1.43	1.79
Permanent Staff (14)	1.50	1.64	.57	1.50*	1.64*	1.21	1.64
College Students (13)	1.38	1.62	.54	1.15	1.15	.92	1.23
High School Students (4)	.75	1.75	.00	.25*	.50	1.25	1.25
Parents (4)	1.25	1.50	1.00	1.25	1.50	1.00	1.25
Resource People (19)	.95	1.21**	.58	1.00	.95	1.00	.74**
Ann Arbor (16)	1.44	1.56	.44	1.19	1.31	1.13	1.38
Battle Creek (13)	1.46	1.69	.77	.92	1.23	1.23	1.31
Cleveland Heights (7)	1.43	1.57	.57	1.14	1.43	1.00	1.71
Dearborn (11)	.82	1.73	.27	1.09	1.18	.73	1.18
Orange (11)	1.18	1.55	1.18**	1.27	1.09	1.36	1.27
Plymouth (13)	.85	1.38	.23	.77	.69*	.77	.92
South Euclid Lyndhurst (10)	1.30	1.50	.70	1.20	1.30	1.00	1.40
Warren (5)	1.60	2.00	1.00	1.60	2.00*	1.60	1.80

*Denotes a mean which differs significantly at the .05 level from the mean of ALL STAFF MEMBERS for this objective.

**Denotes a mean which differs significantly at the .01 level from the mean of ALL STAFF MEMBERS for this objective.

TABLE 1--Continued

Staff Member Groups	8	9	10	11	12	13	14
ALL STAFF MEMBERS (86)	1.47	1.12	.72	1.28	1.51	1.51	1.47
Classroom Teachers (18)	1.44	1.11	.50	1.39	1.56	1.56	1.61
Special Teachers (14)	1.43	1.71**	1.00	1.50	1.71	1.64	1.71
Permanent Staff (14)	1.57	1.14	.79	1.21	1.64	1.36	1.71
College Students (13)	1.77	1.00	.62	1.23	1.38	1.54	1.31
High School Students (4)	1.75	1.00	1.00	1.25	1.00	1.75	.50**
Parents (4)	1.25	.50	1.00	1.25	1.25	2.00	.75*
Resource People (19)	1.21	.89	.63	1.11	1.56	1.32	1.42
Ann Arbor (16)	1.50	1.38	.63	1.00	1.69	1.75	1.63
Battle Creek (13)	1.77	.92	.62	1.15	1.15*	1.38	1.38
Cleveland Heights (7)	1.57	1.14	.86	1.14	1.71	1.43	1.43
Dearborn (11)	1.82	1.00	.82	1.27	1.91*	1.45	1.73
Orange (11)	.82***	1.55	.82	1.55	1.36	1.45	1.36
Plymouth (13)	1.46	.77	.62	1.23	1.38	1.23	1.08
South Euclid- Lyndhurst (10)	1.20	.80	.60	1.40	1.40	1.70	1.50
Warren (5)	1.60	1.60	1.20	2.00*	1.60	1.80	1.80

TABLE 1--Continued

Staff Member Groups	15	16	17	18	19	20	21
ALL STAFF MEMBERS (86)	1.41	1.43	1.49	1.43	1.30	1.30	1.07
Classroom Teachers (18)	1.56	1.50	1.50	1.33	1.33	1.28	1.11
Special Teachers (14)	1.57	1.57	1.64	1.50	1.29	1.43	.93
Permanent Staff (14)	1.43	1.57	1.71	1.50	1.79*	1.57	1.21
College Students (13)	1.15	1.31	1.54	1.23	1.31	1.08	1.31
High School Students (4)	1.00	1.75	1.50	.50**	1.00	.50*	.50
Parents (4)	1.75	1.75	1.50	1.50	1.25	1.75	.75
Resource People (19)	1.32	1.11	1.16*	1.74	.95	1.26	1.05
Ann Arbor (16)	1.69	1.25	1.56	1.88*	1.25	1.56	1.00
Battle Creek (13)	1.23	1.23	1.69	1.23	1.62	1.38	1.54*
Cleveland Heights (7)	1.71	1.71	1.43	1.57	1.86*	1.71	1.29
Dearborn (11)	1.36	1.55	1.64	1.36	1.82*	1.09	1.27
Orange (11)	1.27	1.64	1.00*	1.18	.64**	1.18	.73
Plymouth (13)	1.00	1.23	1.46	1.23	.77*	.69*	.92
South Euclid- Lyndhurst (10)	1.50	1.60	1.50	1.50	1.20	1.50	.80
Warren (5)	1.80	1.80	1.60	1.40	1.40	1.60	1.00

TABLE 1--Continued

Staff Member Groups	22	23	24	25	26	27	28
ALL STAFF MEMBERS (86)	1.10	1.35	1.08	1.42	1.29	.38	.63
Classroom Teachers (13)	1.06	1.00	.89	1.39	1.39	.28	.83
Special Teachers (14)	1.43	1.57	1.14	1.57	1.36	.36	.93
Permanent Staff (14)	1.36	1.36	1.21	1.93**	1.64	.29	.64
College Students (13)	1.23	1.38	1.00	1.62	1.23	.62	.38
High School Students (4)	.25*	2.00	1.25	.75	1.75	.00	.00
Parents (4)	.75	1.50	1.25	1.25	.50*	.50	1.25
Resource People (19)	.89	1.32	1.11	1.00	1.00	.47	.37
Ann Arbor (16)	1.25	1.44	1.19	1.25	1.50	.69	.56
Battle Creek (13)	1.08	1.31	1.31	1.77	1.62	.62	.46
Cleveland Heights (7)	1.57	.71*	1.00	1.86	1.71	.29	.71
Dearborn (11)	1.09	1.64	1.09	1.64	1.45	.09	.82
Orange (11)	1.09	1.27	1.09	1.36	1.09	.36	.64
Plymouth (13)	.69	1.54	.92	.69*	.85	.08	.23
South Euclid- Lyndhurst (10)	1.00	1.10	.80	1.60	.70*	.20	.90
Warren (5)	1.40	1.60	1.20	1.60	1.60	.80	1.20

TABLE 2

MEAN RATINGS OF OBJECTIVE GROUPS BY STAFF MEMBERS

Staff Member Groups	Conservation-Nat. Science		P.E. Health Safety Rec.	School Subj.	Class. Corr.	Pers. Values	Social Obj.
	12 only	12, 15, 17, 18					
ALL STAFF MEMBERS (86)	1.51	1.46	.97	1.19	1.28	1.28	1.41
Classroom Teachers (18)	1.56	1.49	.88	1.16	1.24	1.31	1.39
Special Teachers (14)	1.71	1.61	1.25*	1.41	1.48	1.39	1.60
Permanent Staff (14)	1.64	1.57	1.04	1.32	1.62*	1.53	1.55
College Students (13)	1.38	1.33	.87	1.06	1.31	1.31	1.43
High School Students (4)	1.00	1.00*	.88	.69*	.50**	1.13	1.32
Parents (4)	1.25	1.50	.94	1.25	1.25	1.25	1.32
Resource People (19)	1.56	1.42	.89	1.16	1.05	1.01**	1.20*
Ann Arbor (16)	1.69	1.70*	1.03	1.37	1.35	1.34	1.43
Battle Creek (13)	1.15*	1.33	1.06	1.11	1.41	1.39	1.46
Cleveland Heights (7)	1.71	1.61	.93	1.32	1.71*	1.54	1.33
Dearborn (11)	1.91*	1.57	.77	1.10	1.27	1.33	1.57
Orange (11)	1.36	1.21	1.30*	1.26	1.21	1.16	1.23
Plymouth (13)	1.38	1.25	.67*	.86**	.69**	.94**	1.26
South Euclid-Lyndhurst (10)	1.40	1.48	.83	1.20	1.37	1.24	1.36
Warren (5)	1.60	1.60	1.35	1.53	1.53	1.60	1.80*

*Denotes a mean which differs significantly, at the .05 level, from the mean of ALL STAFF MEMBERS for this objective or group of objectives.

**Denotes a mean which differs significantly at the .01 level, from the mean of ALL STAFF MEMBERS for this objective or group of objectives.

TABLE 3

OBJECTIVES LISTED IN ORDER OF IMPORTANCE AS RATED BY ALL STAFF MEMBERS

Objective Number	Rating	Deviation from mean rating*	Objective Number	Rating	Deviation from mean rating*
2	1.59	+ .38	26	1.29	+ .08
12	1.51	+ .30	11	1.28	+ .07
13	1.51	+ .30	1	1.23	+ .02
17	1.49	+ .28	5	1.21	.00
8	1.47	+ .26	9	1.12	- .09
14	1.47	+ .26	22	1.10	- .11
16	1.43	+ .22	4	1.10	- .11
18	1.43	+ .22	24	1.08	- .13
25	1.42	+ .21	6	1.07	- .14
15	1.41	+ .20	21	1.07	- .14
23	1.35	+ .14	10	.72	- .49
7	1.31	+ .10	28	.63	- .58
19	1.30	+ .09	3	.60	- .61
20	1.30	+ .09	27	.38	- .83

*Mean rating for all objectives, 1.21

the camper's independence and self-reliance") by all staff members with a mean rating of 1.51. This is significantly higher at the .05 level than the ratings for the fourteen objectives at the lower end of the list in Table 3. The only objective receiving a higher rating was

Objective 2, "to teach a sense of responsibility for the common welfare", and the difference between these two objectives is not statistically significant.

When the constellation of objectives dealing with conservation, natural resources, and natural science (12, 15, 17, and 18) is considered, the same high rating is noted. For the total group of staff members the mean for this group of objectives is 1.46, which is significantly higher at the .01 level than that for any other group of objectives except the social objectives.

Reference to Table 2 shows that this high rating for conservation and natural science was consistent among all groups of staff members with only two exceptions. The high school students rated the group of conservation-natural science objectives significantly lower (at the .05 level) than the mean for all staff members. The Battle Creek School Camp staff rated the specific conservation objective (12) significantly lower (at the .05 level) than the mean for all staff members.

Certainly the great majority of the staff members working in these school camps considered teaching about nature and man's relationships with nature of primary importance in a school camping program.

2. Low rating of health-safety-physical education-recreation.

In contrast with the high rating for the conservation-natural science grouping the rating for the objectives dealing with physical education, health, safety, and recreation is very low. From Table 3 it is seen that the highest placement which any of these specific objectives (3, 6, 9, and 24) was given by the total group of staff members is nineteenth place, and this rating (for Objective 9) is significantly lower

(at the .05 level) than the top eleven ratings. Objective 3, dealing specifically with physical education, was rated the second lowest of all the objectives, significantly below (at the .01 level) all other objectives except Objectives 10, 27, and 28. The mean rating of this entire group of objectives by all staff members is .97 (Table 2), which is significantly lower, at the .01 level, than the rating for any other group of objectives.

Furthermore, this low rating for this group of objectives is consistent among the different groups of staff members with only two exceptions. The physical education-health-safety-recreation objectives were rated at 1.25 by the special teachers and at 1.30 by the Orange School Camp staff, both of these being significantly higher, at the .05 level, than the mean for all staff members.

In view of the great support given nationally to school camping by the American Association for Health, Physical Education, and Recreation and by physical education departments in many colleges and universities throughout the country the results of this selection of objectives are surprising to this observer. In the course of their interviews one or two staff members expressed the opinion that if the physical education objective¹ had been worded differently it would have received a higher rating. However, another staff member who had been trained in physical education said that rephrasing would have made little difference in the results. Even if Objective #3, dealing specifically with physical education, is eliminated from the compu-

¹Objective 3: "To teach physical education as a function of daily living, e.g., hiking on a field trip to an abandoned farm, chopping wood for chores, climbing trees for recreation." Additional comment about the wording of this objective is found in the footnote on page 15.

tations, the rating of the health, safety, and recreation group still remains significantly below (at the .01 level) the ratings of all the other groups. In view of the close relationships among the fields of health, safety, recreation, and physical education and of the generally low rating of this entire group of objectives it seems unlikely that the results can be due in any large degree to the choice of wording in the objective.

In explanation of this low rating one might also suspect that the presence or lack of training in physical education on the part of staff members may be the key factor in their choice of objectives. A check on this possibility was made as follows. On the questionnaire submitted to each staff member was the question, "What academic training have you had?" Under this was a place to record "college", "major subjects", and "degree". The responses to this question were tabulated under four categories:

- A. Those staff members whose training was primarily in the field of conservation and/or natural science.
- B. Those staff members whose training included a major amount of work in physical education or recreation.
- C. Those whose college training was in the field of education (elementary or secondary) in general.
- D. Those whose training did not fit into any of the above groupings.

The results of this tabulation are given in Table 4. It is seen from this table that those leaders having a strong background in physical education or recreation number 17 of the 86 staff members and that they are scattered quite evenly among the various camps studied.

TABLE 4

EDUCATIONAL BACKGROUND OF SCHOOL CAMP STAFF MEMBERS

Camp of Employment	Cons. Nat. Sci.	Phys. Ed. Recreation	General Education	Other	Total
Ann Arbor	10	4	2	. . .	16
Battle Creek	2	1	7	3	13
Cleveland Hts.	2	. . .	5	. . .	7
Dearborn	2	4	5	. . .	11
Orange	2	2	5	2	11
Plymouth	3	2	3	5	13
S. Euclid-Lynd.	3	2	1	4	10
Warren	. . .	2	2	1	5
Total	24	17	30	15	86

TABLE 5

MEAN RATINGS OF OBJECTIVE GROUPS BY LEADERS HAVING
PHYSICAL EDUCATION-RECREATION TRAINING AND BY ALL STAFF MEMBERS

Leaders	Conservation-Nat. Science		P.E. Health Safety Rec.	School Subj.	Class. Corr.	Pers. Values	Social Obj.
	12 only	12-15 17-18					
All Staff Members(86)	1.51	1.46	.97	1.19	1.28	1.28	1.41
Physical Educ. Recreation Staff (17)	1.82	1.53	.99	1.23	1.35	1.35	1.55

The responses of this group of seventeen leaders were tabulated and treated as has been described above for the other groupings which we have considered. (See Table 5.) Even with this group the low rating for the health, safety, physical education, and recreation category is evident; in fact, there are no significant differences between the mean ratings of this group and the mean ratings of all staff members.

3. The importance of social objectives. The results of this study indicate that school camp staff members have two primary groups of objectives--of much greater importance to them than any other potential goals. One of these groups has already been dealt with (those objectives relating to conservation and natural science). The second group of objectives is that which has been termed "social objectives".¹

The mean rating given this group of objectives by all staff members is 1.41 (Table 2) which is significantly higher, at the .01 level, than the ratings for all other groups of objectives except the conservation-natural science group. There is no significant difference between the ratings for the social objectives and the conservation-natural science group.

It is interesting that of the two major groups of objectives chosen by these school camp staff members one is a subject matter grouping and the other is a group of "intangibles" related to group living. This may be of some assurance to school camp people that there is a balance in their programs. At the same time, it is interesting to note that in spite of the fact that this type of camping is called "school camping", the leaders in these camps did not rate the

¹Supra, p. 22.

the objectives dealing with correlating the camp experience with the classroom¹ any higher than they did. (Table 2).

4. The influence of the employment status upon a staff member's objectives. One of the purposes of this study was to see if there was any indication that staff members approach school camping with different goals in mind because of their employment status. As a result of this rating of objectives it would appear that there are several cases where the employment background of staff members has a bearing on their objectives.

Special teachers rated the physical-education-health-safety-recreation group significantly higher (.05 level) than the mean for all staff members. One possible reason for this is that they may have felt a greater confidence in this subject grouping.

The permanent staff members rated the objective dealing with camp-classroom correlation significantly higher (.05 level) than the mean rating for all staff members. One might advance two ideas as to why this is so. Perhaps it is because these leaders, although employed by the school board like the classroom teachers, are much more removed from the classroom situation than are the classroom teachers. Therefore, they have to make more of a conscious effort at correlating the camp work with the classroom work, whereas the classroom teacher, while not consciously making this correlation a very major goal, may be unconsciously carrying on this correlation because of being so familiar with what the class has studied and will be studying in school. The second possible explanation for this rating by permanent staff

¹Supra, pp. 20-21.

members is that by virtue of their being employed in school camping "full time" they have thought through their objectives more than have some of the other leaders and have come to the conclusion that if this is "school camping" then it must be tied in with the ongoing school program--that it must be an outdoor laboratory for the class. This process of thinking through objectives is pushed upon the permanent staff members more than the others because they naturally have to promote and defend school camping in the community more than do those staff members who work at camp only a week or two during a year.

The high school students rated three groups of objectives significantly lower than the means for all staff members. Conservation-natural science objectives and school subjects objectives were rated lower at the .05 significance level; objectives dealing with camp-classroom correlation were rated lower at the .01 significance level. This should raise serious questions about the degree of authority to be given high school students in a school camping program. Is it possible that the low ratings given these three groups of objectives indicate that high school students approach the school camp leadership experience somewhat as a vacation to be divorced from scholarly learning? Certainly it is apparent that such students, lacking the maturity and educational background of adults, require very careful orientation if they are to be given an important part of the leadership function at a camp.

Resource people rated personal values lower than the all-staff mean at the .01 significance level and rated social objectives low at the .05 significance level. This substantiates a belief which many educators hold, namely, that such people tend to lose sight of the

people whom they teach and put great stress upon the subject matter with which they deal. Since most of these resource people come to camp to work with children for a limited time in a particular subject area, it is natural for them to emphasize the subject area rather than the children, whom they never really come to know. School camps which use resource people must keep in mind that a resource person may be very valuable in an educational program, but he is apt to come with a narrow and limited approach and with little knowledge of the overall program in which he is temporarily a participant. More will be said later of the place of resource people in the camp program.

5. Differences in objectives in different camps. Although, as we have seen, staff members in some instances may place varying amounts of emphasis upon the same objectives depending upon their employment status, this is not of itself strong enough to account for the differing objectives of different school camps. Each school camp has its own characteristics, different from any others, which have been molded by the staff members (their employment status, their educational philosophy, their age and experience, etc.), by the administrative climate of the school, by the camp facilities (buildings and grounds), and by the community within which the school camp operates. These school camp differences were shown up vividly by the ratings of objectives by staff members.

Battle Creek School Camp rated Objective 12 on conservation significantly lower, while Dearborn School Camp rated it significantly higher than the mean for all staff members (both at .05 level.)

Ann Arbor rated the conservation-natural science group significantly higher at the .05 level than the all-staff mean.

Cleveland Heights rated classroom-camp correlation very high, significantly different, at the .05 level, from the mean for all staff members.

Orange School Camp rated the physical education-health-safety-recreation group significantly high at the .05 level.

Plymouth rated four groups (physical education-health-safety-recreation, school subjects, classroom-camp correlation, and personal values) significantly lower than the all-staff means. The physical education-recreation group was at the .05 level; the other three were at the .01 level.

Finally, Warren gave a very high rating to social objectives, significantly higher, at the .05 level, than the mean for all staff members.

6. The minor roles of objectives dealing with religious education, change from classroom routine, and appreciation of home. The following three objectives were not included among any of the categories which have been considered up to this time:

- (10) to foster religious growth, e.g., in vespers, grace before meals.
- (27) to provide pupils a change from classroom routine.
- (28) to develop a greater appreciation of one's home and family.

Although these objectives have been stated occasionally as worth-while objectives of school camping programs, there has been no great support of them. This was substantiated by the results of this study. (See Table 3.) However, it may be surprising that Objective 10 received as much support from the school camp staff members as it did. In view of the long history in our country of separation of church and state and the avoidance of religious teaching in our public schools

it seems unusual for this objective to receive greater support than the teaching of physical education. In spite of the viewpoints noted earlier¹ about the wording of Objective 3, it seems difficult to ascribe this situation entirely to a semantics problem.

Conclusions

It seems clear that school camping, insofar as it is represented by these eight school camp programs, has settled for its main objectives on a balance between subject matter learning in the fields of natural science and conservation and the development of those attitudes, skills, and appreciations essential to continuance of our democratic society. It is also apparent that in spite of the support given nationally to school camping by leaders in the field of physical education and recreation the rank and file of leaders actually working in these school camps at the time of this study did not consider objectives in this category of major importance.

Some possible correlation has been shown between the employment status of a camp leader (whether he is a resource person, permanent camp staff member, classroom teacher, etc.) and his choice of objectives. Also, there has been disclosed a considerable variation of emphasis in objectives among these eight school camps at the time of this study.

As a final conclusion it would seem pertinent to inject a subjective evaluation of school camping objectives. As a result of this study, the observer strongly feels that a great many school camp leaders have not engaged in any really deep thinking about the

¹Supra, pp. 15, 33.

objectives of their school camping programs. This seems true of many school employees as well as of the college students, resource people, etc. Many of the leaders grappled with the objective selection procedure as if they had never seriously asked themselves what their goals were; some expressed this to the observer verbally. Two of the staff members who were interviewed were unable to sort the twenty-eight objectives in order of priority. "All are very important," was one comment.

This lack of discrimination in choosing one's objectives was exhibited in the general upgrading of the ratings, the mean rating of the eighty-six leaders who participated in this selection being 60.5% of the total possible score. It was further exhibited in the high rating given to Objective 10. This lack of clearness as to one's goals, the observer thinks, is responsible for such things as the placement by leaders in public school education of religious education as more important than physical education. "To foster religious growth" sounds good, so we must choose it. Almost all of the objectives "sound good" so we must choose them. One is led to wonder whether we are being realistic or not when we choose a dozen or more objectives of greatest importance for a program that reaches a school child for so small a portion of his school career.

CHAPTER III

STAFF EVALUATION OF THE SCHOOL CAMP APPROACH

In addition to the device for selecting objectives discussed in the foregoing chapter, a questionnaire¹ was submitted to each school camp staff member who was interviewed. There were two purposes of this short questionnaire. The first was to learn the staff member's point of view regarding the general approach which school camping should take, aside from specific objectives dealt with in the previous chapter. The second purpose was to learn the staff member's attitude toward one of the key problems of school camping, that of staffing the camp.

Tabulation of the responses to these questions showed the following information.²

1. Should camping (A) be an integral part of the school curriculum in which every child should have an equal opportunity to participate, or (B) should it be an extra activity for those teachers and classes who particularly want it? Of the seventy-five people who answered this question only four stated that school camping should be an extra activity for those teachers and classes who particularly want it. (No two of these four belonged to the same staff group.) One re-

¹Appendix I, pp. 139-140.

²Of the 107 staff members observed in action, 88 (82%) were interviewed and completed at least part of the questionnaire. Of the 19 staff members not included five were classroom teachers, six were special teachers, and eight were resource persons.

source person stated that camping should be in the curriculum for city schools, but that rural schools should have a program taking pupils to the city instead. The response to this question clearly indicates that the great majority of school camping leaders, whatever their background, believe strongly in this program.

2. Do you feel that certain grade levels receive greater value from a school camping experience than other grade levels? If so, which? Fourteen of the eighty-one camp leaders who answered this question stated that they felt there was no preferential grade level. The remaining people sometimes listed one specific grade they thought received greatest value, and they sometimes listed a grade grouping, e.g., high school, which they thought received greater value than other grades. The tabulation of responses for all staff members is given in Table 6.

TABLE 6

NUMBER OF STAFF MEMBERS CHOOSING GIVEN GRADE LEVELS
AS THE ONES RECEIVING GREATEST VALUE FROM SCHOOL CAMPING*

No Grade	Middle Elem. (3rd & 4th)	Upper Elem. (5th & 6th)	Jr. High (7th-9th)	High School (10th-12th)
14	19	59	26	8

*81 staff members participated, but some chose more than one grade level.

It is apparent that fifth and sixth grades are considered the ideal grade levels for school camping by most of these staff members. However, it should be pointed out that all of the camps observed were involved with children in the age group of fifth and sixth grades at

the time the observations were made. One of the camps occasionally takes third and fourth grade classes, one or two of them has occasional groups in the seventh through ninth grade range, and none of them takes high school students. In other words, most of these staff members have said they believe the age level they work with receives greatest value, but most of them have had very little experience with any other age level. Results might be different, naturally, if high school camp leaders were quizzed on this.

It was interesting to note that two staff members in one camp stated that they chose fifth, sixth, and eighth grades as the ones receiving the greatest value, because in their system these grades involved self-contained classrooms. In other words, in this case the extra value of the camp experience to the children is a result of school organization, not of any particular quality inherent in children of these age groups.

There were no significant differences in the answers to this question by staff members grouped according to their employment status. Nor were there any major differences among the camps as such, except that staff members of camps which served a wide range tended to be less specific in choosing the grade level which receives the greatest value from school camping. For example, Cleveland Heights School Camp has accepted children from grades three through six. Of the seven staff members interviewed at this camp, four said that no grade levels profited more than others, two leaders chose grades four and five, and one leader chose grades four, five, and six.

3. Should certain subjects be stressed more than others in a school camping situation? If so, which subjects? Of the eighty-three

leaders who answered this question, twenty-eight said no school subject should be stressed more than others. Table 7 shows the subjects that the other fifty-five people believe should be stressed. It may be questioned whether "group living" could be considered a school subject. Perhaps it should be included with "social studies", but since it was listed distinctly by these five leaders it was kept separated on this tabulation. It is included with these data on school subjects since it tends to reinforce the conclusion reached in Chapter II that social objectives make up one of the major objective groupings of school camp leaders.

TABLE 7

SCHOOL SUBJECTS WHICH FIFTY-FIVE LEADERS
BELIEVE SHOULD BE STRESSED IN SCHOOL CAMPING

<u>School Subject</u>	<u>Number of Leaders</u>
Natural Science	49
Social Studies	14
Art and Crafts	12
Health & Safety	8
Conservation	5
Group Living	5
Language Arts	5
Physical Education	5
Mathematics	4
Music	2

One might question the few responses in favor of conservation when it was chosen so overwhelmingly on the objectives selection. The answer lies, no doubt, in the wording of the question where it refers to "school subjects." In elementary schools conservation seldom would be listed as a school subject, but would find its place either in natural science or in social studies, as one or more units, or integrated with other units.

It is interesting to note that the answers to this question corroborate the findings of the objectives selection in regard to the fields of conservation-natural science and physical education-health-safety recreation. Of the five people who listed "conservation" as a school subject which should be stressed, only one person did not also list natural science as a subject to be stressed. Therefore, a total of fifty staff members, or 60.2% of those answering this question, suggested that subjects in the natural science-conservation area should be stressed. None of the people who listed physical education on this question also listed health or safety. In addition, one other person listed "recreation" as a subject which should be stressed so that, in all, fourteen people, or 16.9% of those answering the question, supported the health-safety-physical-education-recreation area as "subject matter" to be stressed in school camping. These percentages of 60.2% for natural science-conservation and 16.9% for physical education-recreation are to be compared with the respective percentages of 72.9% and 48.1% obtained with the objectives selection device described in Chapter II.

Perhaps the most significant aspect of the results of this question is that twenty-eight people, slightly over one-third of those

responding, said that no school subject should be particularly stressed in school camping. This feeling that most, if not all, elementary school subjects can be applied with ease in a school camping program and that specific objectives should be based upon the needs and interests of the particular class that is participating and not upon the movement as a whole, is quite widespread among school camping leaders.

4. Are you satisfied with the staff arrangements for this school camp? If you are not satisfied, what changes would you like to see? Of the seventy-nine people who replied to this question, twenty-four (30.4%) were satisfied with the present staff arrangements, and fifty-five were dissatisfied with one or more aspects of it. Most of those dissatisfied with present arrangements expressed a need for more staff. Tabulation of the responses to this question is given in Table 8.

TABLE 8

IMPROVEMENTS IN STAFF ARRANGEMENTS
DESIRED BY SEVENTY-NINE STAFF MEMBERS

Improvement	No. of Staff	Per Cent
More permanent staff members	29	36.7
No improvement	24	30.4
More practice teachers (college students)	19	24.1
More training and preparation	9	11.4
Better organization of present staff	8	10.1
More resource people	5	6.3
Fewer resource people	5	6.3
More women staff members	5	6.3
More men staff members	4	5.1

The need for additional staff members was expressed primarily in terms of someone who could be at the camp permanently or for large blocks of time (e.g., college students or permanent camp counselors) and not so much for additional resource people. In fact, as many people asked for fewer resource people as asked for more.

Comments by staff members on staff arrangements brought forth several interesting points.

A. Use of student teachers. As already indicated there was a strong feeling that arrangements whereby student teachers spend a block of time in a school camp would be very profitable to the camp and to the student. The following three comments were typical (the first two by students):

"Teachers-in-training are a good help, and we learn more about children as we are doing it."

"It is a terrific experience for student teachers."

"Teachers-in-training could function as assistants--should be a requirement for certification."

Among school camping people there seems little doubt that greater participation of student teachers in school camping is one of the primary needs in this quickly developing program. Resistance is encountered among teacher-education institutions which either have not been convinced of the value of school camping, or which have an educational program too rigid to permit experiences in outdoor education for student teachers.

B. Classroom teachers and resource people. The observer feels that one of the major staff problems of school camps today revolves around the use of resource people, particularly in relation to

the classroom teacher. Is the resource person valuable? How is he to be used? What is the classroom teacher's role in relation to a resource person? How many resource people are desirable in a week of camping? These are questions which lay behind the comments made by staff members.

It has already been mentioned that five people felt that there were too many resource people at their camp. Several comments of these leaders are pertinent: "Too many outside resource people with no teaching ability; therefore, many pupils missed things they should have learned."

"More resource people needed, but these people need to be a part of the daily program. I feel that they need to be a part of the staff for twenty-four hours a day (or at least twelve hours). They need more general orientation (e.g., music pertaining to the woods.)"

"Resource people acting as assistants with teachers leading groups . . ."

Resource people, themselves, had some comments about the system:

"Classroom teachers didn't participate enough on field trips."

"The permanent counselors¹ had good control of the group discipline, and thus facilitated the work of the resource person."

"Teachers must also act as counselors and resource people--not be at camp on a week's vacation."

"More teacher participation. Teachers should carry outdoor information gained into classroom for further discussion."

¹This leader was referring to classroom teachers and special teachers as these terms have been defined in this study.

Proper use of a resource person requires good organization and skilled leadership on the part of those normally in charge of the camp program. In almost every case the most successful use of resource personnel occurred when the regular counselor (whether he be classroom teacher, college student, permanent camp staff, etc.) worked cooperatively with the resource person instead of completely relinquishing the leadership role to him. It is the observer's reaction that, in general, too much dependence is placed upon the short-term resource person. His approach is apt to be very narrow (as pointed out in Chapter II); it is extremely difficult for him to correlate his camp leadership with the ongoing work of the class; he cannot know the individual campers, their problems or interests; and he can seldom remain in camp long enough to observe or participate in an evaluation. It would seem that one of the most effective uses of resource people could be in the training of the other adult leaders who will be working in the camp for longer periods of time, rather than always spending their time teaching the children. At the very least, use of resource people should be carried on under firm controls and continuing evaluation.

C. Classroom teacher participation. Another side to this problem was presented by two classroom teachers who stated that only willing teachers should go to camp--that it should not be compulsory. One of them stated that she had not been told of school camping when she was hired and that she felt she should not be forced to attend. This problem is especially acute when a school system first develops a school camping program. School camping could hardly be called school camping if the classroom teacher does not accompany his class to camp. This continuity between the camp experience and the classroom

experience is almost completely broken in such cases. Furthermore, it is obvious that the class which attends camp with an interested teacher will gain much more from the experience than a group attending with an antagonistic teacher. On the other hand, once a school board includes school camping as part of its curriculum, it cannot justify denial of the experience to a youngster merely because his teacher does not like it, any more than it can justify denial of arithmetic to him because the teacher may not like to teach that. This situation presents a strong argument for giving student teachers an experience in school camping so that they will be able to participate in such programs of outdoor education as a classroom teacher later on.

Clearly, the responses to this question (No. 4) bring out some of the major problems of school camping. Having the children in one's charge for several days in a row, twenty-four hours a day, presents problems requiring extra staff help in comparison with the classroom situation. The fact that several adults must work cooperatively with the same group of children presents problems in working relations not encountered in classroom teaching where a teacher works by himself. Camp living arrangements present other problems for the staff. All of these difficulties seem very real in the comments of these camp leaders expressing the need for more "full-time" help, more college student-teachers, and better working relationships between resource people and other camp leaders.

CHAPTER IV

THE PROGRAM CONTENT OF THE SCHOOL CAMPS

Use of the Observation Chart

As described briefly in Chapter I, the observer spent a week in almost every one of the eight camps under study in order to make a time study of the program activities and of the methods of teaching which different groups of leaders used. To facilitate recording of these observations the grid chart form shown in Appendix I was developed. Each square on this grid chart represents one minute, and the chart is so composed that one sheet represents thirty minutes, with thirty squares in columns under the various categories to be recorded. The grid was further arranged so that a separate record could be made of the participation of the campers, the classroom teacher, and whatever other leader might be present. Records of time were made simply by drawing a line through the squares representing the appropriate minutes.

In addition to the grid for recording time, each sheet has spaces for recording identifying information, such as the date, time of day, size of group, type of activity and number of leaders present. Finally, half of the recording sheet was left blank for the purpose of making descriptive records of the programs observed.

Major Program Divisions

Definitions.

The activities observed at these school camps were classified under two large headings, staff-directed activities and self-directed activities.

Staff-directed activities include those where there is some definite structuring with the adult leader definitely responsible. In a staff-directed activity the conversation is pointed toward a particular goal, or the group is aimed toward accomplishing a particular learning or work objective. An example would be a field trip to an abandoned farm, a work session to construct check-dams, or a campfire program.

Self-directed activities are those in which the camper is allowed a great degree of freedom in what he may talk about or what he may do. All camps have periods of free time, usually before meals, when campers may do almost anything they wish. It may be whittling, playing ball, reading, writing letters, working on a research problem with a counselor, or washing for the meal. During a portion of the free-time periods before meals some campers in all but two of the camps, had assigned duties of setting the tables or helping in meal preparation. Since these were always a minority of the campers and the work did not last the entire free period, this activity was designated as "self-directed", along with the other free-time activities, for the sake of simplifying recording.

Several other activities are difficult to classify as "staff-directed" or "self-directed." Rest hours were labeled self-directed

activity, for even though they may have been structured to the extent that campers had to remain on their bunks under counselor supervision, there was still a great latitude permitted for individual pursuit in every case. Thus, a camper could read, write letters, draw, write in a diary, play quiet games, or simply rest and think.

Meals were likewise included among self-directed activities, for here again was great freedom for individual choice in table activities. There might be table games, songs, or conversation about any topic. In some cases the counselors ate with the children; in other cases, they did not.

Daily work jobs, usually called "kapers", were classified as staff-directed activities (with the exception noted above during free periods), because there was always some sort of definite organization arranged by a leader and a definite purpose in mind. They were compulsory, and little freedom of choice was permitted. (For the person unfamiliar with camp programs, "kapers" includes bedmaking, sweeping the floors, picking up paper, cleaning washrooms, and other daily clean-up jobs. All campers participate in this work for a certain period each day, usually right after breakfast. The meal duties mentioned in connection with free periods are usually in addition to the regular kapers.)

Because a given activity was classified as a "self-directed activity", it does not follow that it was not an educational session. Some of the best teaching which the observer noted took place during free time or during meals. It was at these times that teachers could reach individuals who needed help on a particular thing. It was at these times that special research projects could be carried on. These

self-directed activities offered some of the best chances for accomplishing such personal objectives as (13), "to encourage the camper's independence and self-reliance."

It was for practical reasons only that self-directed activities were so segregated. The variety of activities and the mobility of the situation during these self-directed activities presented difficulties too great for recording observations in the manner of the more structured periods. Notes were kept of the things observed during these self-directed periods, however, and summaries of such things as free-time activities will be found in Appendix II. They will be indicative of the educational nature of these periods.

Staff-directed activities were divided further into three categories: planning, evaluation, and content. Because much of the school camp literature stresses the importance of campers planning their own activities and evaluating what they have done, such sessions have been segregated in the tally.¹ All staff-directed activities other than those involved in planning for the future and in evaluating what is past are termed "content" activities in this study.

Statistical Procedure

Tabulations were made of the number of minutes spent in staff-directed and self-directed activities at each school camp. These were expressed in terms of the per cent of total observed time devoted to

¹In this study objective (8) "to help the camper become an effective participant in group planning" received a rating by staff members of 1.47, significantly higher, at the .01 level, than the mean rating for all objectives. Objective (21) "to give experience in processes of evaluation" received a rating of 1.07, not significantly different from the mean rating for all objectives.

them. Similarly tabulations were made of the staff-directed time spent on planning, evaluation, and content, and the per cent of staff-directed time spent in these categories was determined for each camp and for the camps combined. The statistical significance of the differences between the mean per cent for all camps combined and the percentages for each individual camp was computed for staff-directed, self-directed, planning, and evaluation activities.¹ These data are given in Tables 9 and 10.

Self-directed Activities

The percentage of time devoted to self-directed activities varied from 30.2% at Battle Creek to 43.9% at Ann Arbor with the combined camp percentage at 39.1%. Ann Arbor, Dearborn, and Plymouth had a percentage of self-directed activities significantly higher, at the .01 level, than the percentage for all camps combined. Battle Creek and Cleveland Heights had percentages significantly lower, at the .01 level, than that for all camps combined. In the interpretation of these figures, however, it must be kept in mind that it was impossible for the observer to observe every minute of a week. Time had to be allowed for personal needs and for occasional staff interviews. These periods of no observation were usually taken during campers' free time or during rest periods. Therefore, these percentages might have been somewhat different had complete observation been possible.

¹Significance was computed according to the procedure outlined by Henry E. Garrett, "The Significance of the Difference Between Means Derived from Independent or Uncorrelated Measures or Scores--When There Are More Than Two Means To Be Compared", Statistics in Psychology and Education (New York: Longmans, Green and Co., 1953), pp. 273-281. The classification of time within each ten-minute interval of time observed provided the individual scores used in these computations.

TABLE 9

OBSERVED TIME SPENT ON STAFF-DIRECTED AND SELF-DIRECTED ACTIVITIES

School Camp	Staff-directed Activities		Self-directed Activities		Total Time	
	Minutes	Per Cent	Minutes	Per Cent	Minutes	PerCent
Ann Arbor	1857	56.1**	1452	43.9**	3309	100.
Battle Creek	2045	69.8**	883	30.2**	2928	100.
Cleveland Heights	2609	63.0**	1534	37.0**	4143	100.
Dearborn	1679	58.2**	1205	41.8**	2884	100.
Orange	1738	59.8*	1167	40.2	2905	100.
Plymouth	1859	57.4**	1381	42.6**	3240	100.
South Euclid- Lyndhurst	836	61.9	514	38.1	1350	100.
Warren	748	63.1**	437	36.1	1185	100.
Total Combined Camps	13371	60.9	8573	39.1	21944	100.

*Denotes a per cent which differs significantly, at the .05 level, from the per cent for the Total Combined Camps in this activity classification.

**Denotes a per cent which differs significantly, at the .01 level, from the per cent for the Total Combined Camps in this activity classification.

TABLE 10
STAFF-DIRECTED TIME SPENT ON PLANNING, EVALUATION, AND CONTENT

School Camp	Total Minutes Staff-directed Activities	Planning		Evaluation		Content	
		Min.	Per Cent	Min.	Per Cent	Min.	Per Cent
Ann Arbor	1857	40	2.1	51	2.7	1766	95.0
Battle Creek	2045	123	6.0*	39	1.9	1883	92.1
Cleveland Heights	2609	112	4.3	172	6.6*	2325	89.1
Dearborn	1679	118	7.0**	141	8.4**	1420	84.6
Orange	1738	25	1.4	70	4.0	1643	94.5
Plymouth	1859	78	4.2	42	2.3	1739	93.5
South Euclid- Lyndhurst	836	00	0.0*	5	0.6	831	99.4
Warren	748	2	0.3	24	3.2	722	96.5
Total Combined Camps	13371	498	3.7	544	4.1	12329	92.2

*Denotes a per cent which differs significantly, at the .05 level, from the per cent for the Total Combined Camps in this activity classification.

**Denotes a per cent which differs significantly, at the .01 level, from the per cent for the Total Combined Camps in this activity classification.

In terms of a subjective evaluation the observer noticed a definite difference among camps in the amount of freedom permitted in "free time". For example, one camp had rather strict boundaries for campers to observe when they were on their free time, while another camp had practically no observable boundaries. Again, one camp arranged things so that counselors were always around in free time to help campers with activities or to teach them new activities, such as whittling or new games, while another camp left the campers almost entirely on their own resources during those free minutes. This extra amount of freedom appeared to be associated with those short-term camps which did not have permanent staff members and seemed to reflect a need for more twenty-four-hours-a-day staff members or greater experience in organization of free-time periods.

Planning Activities

The per cent of observed staff-directed time which was spent on planning activities (that is, when the children participated in the planning) varied from none at South Euclid-Lyndhurst to 7.0% at Dearborn. The percentage for Dearborn was significantly higher at the .01 level than the percentage (3.7%) for all camps combined; Battle Creek had a percentage significantly higher at the .05 level than that for all camps combined. South Euclid-Lyndhurst was significantly lower, at the .05 level, than all camps combined.

This does not represent the total amount of camp planning involving children since it was evident from the observations made of two Ann Arbor classes before they went to camp that sometimes much camp planning is carried on at school before the campers ever reach the camp site. The camps having permanent camp staff members probably

delay a greater percentage of their total planning until the campers are actually at camp than do those camps having no permanent staff. This is indicated by the fact that the camps having permanent camp staff members had a mean percentage of 4.9% in planning activities while those without any permanent camp staff had a mean of 2.3% (significantly different at the .01 level).

The observer was disappointed with the quality of the planning which he witnessed. Much of the planning involved relatively unimportant decisions dealing with mechanics of camp organization, such as assignment of clean-up jobs and naming of an activity group. Only at three camps was much camper participation observed in the planning of the program activities (with the exception of some camper-planned evening activities which practically every camp had.) In the case of the camps which lacked this type of planning it might be thought that the campers participated in planning the program in the classroom before coming to camp. This may be; however, in the one case where the observer was able to see nearly all of the pre-camp planning sessions, this was not so. Although campers were involved in much planning, practically none of it included planning activities for the regular morning and afternoon activity periods. At one camp the program director told his campers, "Your teachers and leaders have planned your activity program for you." In another case the planning consisted of little more than listing some possibilities and letting children vote on what they preferred.

Leaders were observed who encouraged no really thoughtful planning, who never involved campers in considering reasons for choosing one activity over another. Flexibility was noticeably absent in one

case where a camp council was told by the leader, "If you are not going to change it tonight you won't be able to change it the rest of the week."

It requires great skill to teach youngsters the ability to plan. The balance between being too autocratic and too laissez-faire is a difficult one to maintain. However, it is the conclusion of this observer that herein lies an area for great improvement in school camping.

The planning activities carried on by campers as observed in these camps is given in detailed lists in Appendix II.

Evaluation Activities

As in the case of planning, much evaluation of camp will take place in the classroom, in this case, after camp. The observer would have liked to distinguish between a "review" and an "evaluation" in making this study. However, an activity session involving a review of what has happened earlier has been recorded as "evaluation" even though little actual evaluating may have taken place. This was done since some school camp leaders seem to consider "reviews" and "evaluations" synonymous and because reviews do partake somewhat of an evaluative aspect in that they force a pupil to sort through a series of happenings and select what seems most important for him in relation to the discussion under way at the time.

The highest percentage of time devoted to evaluation was 8.4% at Dearborn; the lowest was 0.6% at South Euclid-Lyndhurst, and the percentage for all camps combined was 4.1%. The percentages for Dearborn (8.4%) and Cleveland Heights (6.6%) were significantly higher than the combined camp percentage (4.1%) -- the former at the .01 level,

and the latter at the .05 level.¹

The evaluation sessions observed at the various camps are listed in Appendix II. It may be seen from these lists how common is the review type of evaluation. Real evaluation, like real planning, is something to strive for.

Subject Area Divisions

Definitions

The school camp activities defined as "directed" were further classified according to subject matter. The subject areas chosen were as follows: arithmetic, art and crafts, campcraft, conservation, health and safety, language arts, music, natural science, physical activity,² and social studies. With the exception of campcraft, which belongs almost exclusively in an outdoor curriculum, all of these in one form or another might be part of a regular classroom curriculum. Although most of the subject areas which have been chosen may require no definition here, the following clarifications need to be made.

Campcraft includes those activities involved with the necessities of living out-of-doors . . . cooking and sleeping, making the equipment necessary for this, and learning the requisite skills. The boundary line between campcraft and handcraft is sometimes difficult to

¹In some of the school camps a large share of the planning is carried on during the first day and a large share of the evaluation is carried on during the last day at camp. The observer was unable to be at the South Euclid-Lyndhurst Camp during the last day nor at the Warren Camp either the first or the last day. The percentage of time given to planning and evaluation at Warren and to evaluation at South Euclid-Lyndhurst, thus, might be different if the observer had been at camp the entire week.

²For an explanation of the use of this term in place of "physical education," refer to p. 64.

establish. For example, learning to use a jackknife can be in connection with handcraft or campcraft. Generally speaking, if the jackknife is being used to make something utilitarian in an outdoor setting (e.g., cooking stick) the activity may be called "campcraft"; if it is being used to make something only esthetic or of utilitarian value in an indoor setting (e.g., letter opener) it may be called "handcraft" and would be classified under art and crafts.

Conservation has been strictly separated from natural science. Worthy as natural science and nature appreciation may be in establishing a milieu favorable to conservation, conservation itself does not begin until there is a concern over the management of natural resources. Only that education which had this quality was considered "conservation education" in this study.

An important part of the language arts is conversation. Lessons in this language art may be carried on in many ways, some quite casual with the student unaware of what is happening. However, because of the difficulty of recognizing and defining these instances, language arts has been limited here to those cases involving written work or very obvious oral situations involving such things as spelling, grammatical corrections, story telling, or talks prepared by campers.

Natural science has been interpreted to include physical geography, whereas social studies includes economic geography.

Although "physical activity" is not a school subject as such, this term has been used in place of "physical education" since it is mainly time spent in activity that was measured in the course of these observations. Nevertheless, the time spent in physical activity at these camps is a good indication of the learning opportunities for

physical education. There is a correspondence between the types of activities carried on at camp under "physical activities" and the types of activities carried on at elementary schools in physical education classes. Two things, then, are included in the term "physical activity" as used in this report: specific instructions in such things as square dancing, archery, and volleyball; and activities involving large body movements, such as hiking, even though there may not be specific instructions involved.

The reader should keep in mind that there was only one observer and usually several activity groups. While the observer's group was on a creek hike, other groups might be engaged in craft work, a field trip to a cemetery, or a conservation work project. The observer did not stay with the same activity group the entire week, but rotated among them so that he could observe a variety of leaders and campers as well as a variety of activities. Therefore, although these observations are not of the entire program of a camp, they may be considered representative of a week's program. The observations and experiences of the observer at any given camp may be said to be typical of what an individual camper experienced there during that week.

Those who are interested in the actual subject material covered in these various areas in school camping programs will find detailed notations in Appendix II.

Statistical Procedure

Recording of the subject area activities was accomplished by entering notes on the blank space of the observation form. These notes included the amount of time spent on a given subject and the specific activities and topics included within that subject area.

Tabulations were made of the number of minutes spent on each subject area at each school camp. These were expressed in terms of the per cent of staff-directed time devoted to them. These data are given in Table 11. The percentages for a given camp do not add up to one hundred per cent for two reasons. One is that some activities may apply equally well to more than one subject area (e.g., square dancing might be considered under music or under physical activity). The other reason is that some staff-directed activities (e.g., orientation to camp rules or camp clean-up) are difficult to classify under any of the subject areas we have chosen.

For each of the subject areas the statistical significance was computed of the differences between the mean percentage for all camps combined and the percentages for each individual camp. The statistical significance was also computed for the differences among the all-camp mean percentages of the ten subject fields.¹ Significant differences are noted in Tables 11 and 12.

Conclusions

An analysis of the data shown in Tables 11 and 12 brings out the following points regarding the amount of time devoted to these subjects in these school camps.

1. The lack of emphasis upon conservation education. In Chapter II it was pointed out that the objective dealing with

¹Significance was computed according to the procedure outlined by Henry E. Garrett, "The Significance of the Difference Between Means Derived from Independent or Uncorrelated Measures or Scores--When There Are More Than Two Means To Be Compared", Statistics in Psychology and Education (New York: Longmans, Green and Co., 1953), pp. 273-281. The classification of time within each ten-minute interval of staff-directed time observed provided the individual scores used in these computations.

TABLE 11
STAFF-DIRECTED TIME SPENT ON TEN SUBJECTS

School Camp	Total Minutes Staff-directed Activities	Arithmetic		Arts & Crafts		Campcraft		Conservation	
		Min.	Per Cent	Min.	Per Cent	Min.	Per Cent	Min.	Per Cent
Ann Arbor	1857	26	1.4	32	1.7*	116	6.2	78	4.2
Battle Creek	2045	36	1.8	64	3.1	255	12.5*	89	4.3
Cleveland Hts.	2609	32	1.2	194	7.4	262	10.0	38	1.5*
Dearborn	1679	37	2.2	9	0.5**	15	0.9**	124	7.4**
Orange	1738	4	0.2	176	10.1**	167	9.6	56	3.2
Plymouth	1859	2	0.1	125	6.7	142	7.6	72	3.9
South Euclid- Lyndhurst	836	1	0.1	42	5.0	61	7.3	40	4.8
Warren	748	56	7.5**	100	13.4**	104	13.9	7	0.9
Total Combined Camps	13371	194	1.4	742	5.5	1122	8.4	504	3.8

*Denotes a per cent which differs significantly, at the .05 level, from the per cent for the Total Combined Camps in this subject area.

**Denotes a per cent which differs significantly at the .01 level, from the per cent for the Total Combined Camps in this subject area.

TABLE 11--Continued

School Camp	Health and Safety			Lang. Arts			Music			Nat. Science			Phys. Act.			Soc. Studies		
	Min.	Per Cent		Min.	Per Cent		Min.	Per Cent		Min.	Per Cent		Min.	Per Cent		Min.	Per Cent	
Ann Arbor	6	0.3		39	2.1		74	4.0**		727	39.1**		477	25.7		132	7.1	
Battle Creek	26	1.3		29	1.4*		216	10.6		137	6.7**		504	24.6		128	6.3	
Cleveland Hts.	33	1.3		104	4.0		217	8.3		379	14.5		624	23.9		70	2.7*	
Dearborn	24	1.4		155	9.2**		96	5.7		155	9.2**		300	17.9**		149	8.9	
Orange	32	1.8		102	5.9		219	12.6		147	8.5**		514	29.6		111	6.4	
Plymouth	10	0.5		21	1.1*		160	8.6		221	11.9		459	24.7		39	2.1**	
South Euclid- Lyndhurst	20	2.4		14	1.7		114	13.6		246	29.4**		327	38.9**		92	11.0*	
Warren	6	0.8		61	8.2*		150	20.0**		86	11.5		277	37.0*		77	10.3	
Total Combined Camps	157	1.2		525	3.9		1246	9.3		2098	15.7		3482	26.0		798	6.0	

TABLE 12
SUBJECT AREAS IN ORDER OF FREQUENCY--ALL CAMPS COMBINED

Subject Area	Total Minutes Spent on Subject	Per Cent of Staff-directed Activities	Mean Number Of Minutes Per Week Per Camp #
Physical Activity*	3482	26.0	497
Natural Science**	2098	15.7	300
Music***	1246	9.3	178
Campcraft	1122	8.4	160
Social Studies	798	6.0	114
Art and Crafts	742	5.5	106
Language Arts	525	3.9	75
Conservation	504	3.8	72
Arithmetic	194	1.4	28
Health and Safety	157	1.2	22

#Approximated by dividing Total Minutes by seven. Two days each were spent at South Euclid-Lyndhurst and Warren School Camps; one week was spent at each of the other six camps, and slightly more than one day extra was divided between Ann Arbor and Cleveland Hts. School Camps.

*Significantly higher at .01 than all other subjects.

**Significantly higher at .01 than arithmetic, art and crafts, conservation, health and safety, and language arts; significantly higher at .05 than social studies, arithmetic, art and crafts, conservation, health-safety, and language arts.

***Significantly higher at .05 than arithmetic and health-safety.

conservation education was rated of exceptional importance by school camp staff members, receiving a rating tied as second highest among the twenty-eight objectives, significantly higher than most of the other objectives. In contrast with the high rating of conservation education as an objective is the actual amount of conservation education carried on at these camps. The per cent of staff-directed time devoted to conservation varied from 0.9% at Warren School Camp, to 7.4% at Dearborn School Camp, with the mean for all the eight camps being 3.8%. Of the ten subject areas conservation ranked seventh in per cent of time devoted to it, outranking only language arts, arithmetic, and health-safety. It ranked significantly lower (at the .01 level) than physical activity and natural science. The small amount of time spent on conservation education becomes more apparent, perhaps, when one speaks in terms of minutes rather than percentages. Considering that these observations consisted of about seven weeks, the mean number of staff-directed minutes per camp week devoted to conservation education was seventy-two (Table 12). One hour and twelve minutes of staff-directed activities dealing with conservation in a week would hardly make one think it was a major objective.

2. The emphasis upon natural science. Among these school camps there was a great emphasis upon natural science, completely in line, this time, with the importance placed upon objectives in this area by the school camp staff members. The per cent of directed time devoted to natural science varied from 6.7% at Battle Creek to 39.1% at Ann Arbor. The mean for all camps was 15.7%, significantly higher than the means for six other subjects (arithmetic, art-crafts, conservation, health-safety, and language arts at the .01 level and social

studies at the .05 level.) To the extent that knowledge and appreciation of natural science provides a background for conservation learning, conservationists may take pleasure in this ascendancy of natural science. More will be said about relationships among conservation, natural science, and school camping in Chapters V and VI.

3. The emphasis upon physical activity. Largely because of the great amount of exercise necessarily involved in outdoor living, physical activity had more time devoted to it than any other subject. This varied from 17.9% at Dearborn to 38.9% at South Euclid-Lyndhurst, with the mean for all camps being 26.0%. (The percentage for Dearborn was significantly lower at the .01 level than the combined camp mean. The percentages for South Euclid-Lyndhurst and Warren -- 37.0% -- were significantly above the all-camp mean at the .01 and .05 levels respectively.) To be sure, much of this emphasis is unconscious and unavoidable in view of the definition of physical activity adopted in this study.¹ Yet, when one considers the small amount of physical exercise upon which our urban children exist today and the difficulty that some schools have in getting their children to walk a few blocks to and from school, then even such casual, accidental physical activity as hiking on a natural science field trip assumes important implications. The results of this time study bear out what was stated in Chapter II regarding camp as a place providing many opportunities for physical education.² But they make more incomprehensible the low rating given by staff members to the objective dealing with physical education.

¹See p. 64.

²See p. 22.

4. The declining role of campcraft in camping. It may be of a little more than passing interest to note the new meanings being attached to the word "camping". Originally, camping meant actual living in the outdoors--cooking out, sleeping outside or in temporary shelters, and using no more equipment than could be carried by man, canoe, or beast of burden. With the advent of the organized children's camp the term "camping" came to mean something else, sometimes almost completely divorced from the original meaning. However, the term retained its original romance and "selling" qualities, and experiences that did not involve overnight sleeping in the country (whether in hotel-type lodges or more temporary shelters) became known as day camps. Now we even see city playground programs being called day camps or stay-at-home camps where blacktop sidewalks among buildings become the "woodland trails" and automobile horns become the "bird songs". This trend is seen in the results of this study where the mean per cent of staff-directed time spent on campcraft per camp is 8.4%. One might say that on the average there were two hours and forty minutes per week spent on camping at these camps. It is acknowledged that inexperienced children going to a camp for a week in late autumn, winter, or early spring will be limited in the amount of rugged camping in which they should participate. However, there are many beginning stages of campcraft for all seasons. At only one camp were children observed using the campcraft skill of lashing, and in this instance it was in connection with a handcraft project (picture frames). One camp did not permit campers to use jackknives at any time. This is not to say whether or not these camps should have more campcraft activities in their programs. Furthermore, the word "camping"

still sounds good to us, and the term "school camping" is probably here to stay. But if school camps are to include no more campcraft than was observed at some of these camps, then one is led to wonder if a more realistic approach has been taken by Dearborn in calling its school camp the Dearborn Outdoor School.

5. The differential stress upon subject areas. It may be recalled from Chapter III that in response to the question, "Should certain subjects be stressed more than others in a school camping situation?" slightly over one-third of the leaders replied "no". This time study makes it clear that despite the feeling of these people, certain subjects are stressed much more than others. Arithmetic receives significantly less emphasis than music. Language arts receive significantly less emphasis than natural science. Why should such a large portion of school camp leaders believe that no subject should be stressed more than others in the face of such obvious, actual differentials? Perhaps this attitude that all subjects fit equally well in school camping is a defensive one. If someone criticizes school camping and claims that children lose a week of reading, writing and arithmetic, it is easy to answer this by saying that the campers still get reading, writing and arithmetic while they are at camp. "They read in the reference books about the things they found on their hike; they write in the camp diary; their arithmetic is carried on in connection with map and compass work." These things may be true, but it still is a fact that the boys and girls at these school camps had much less work in arithmetic and written language arts during the week than they would have had in the classroom, and much less work in arithmetic and written language arts than in natural science, physical activity and

music during their week at camp. It would seem that these staff members should re-examine their philosophies in the light of these facts. An educational program need not "cover the waterfront" in order to be worthwhile.

6. Program differences among school camps. The figures in Table 12 show some interesting variations of emphasis on subject matter among the eight school camps. While it is understood that programs will vary somewhat in a given camp from week to week and according to the season, the observer feels on the basis of his observations and interviews that most of the statistically significant differences indicated on the time study are representative of the usual situation. There are a few exceptions. One exception occurs in the case of Dearborn where the percentages for art and crafts and for campcraft are undoubtedly abnormally low. Scheduling difficulties prevented the observer from witnessing a representative amount of the craft work, and rainy weather cancelled several of the cookouts planned for the week. Another exception is that the percentage of time given to arithmetic at the Warren School Camp is probably abnormally high due to a map and compass activity which fell within the **two** days of observations, but which would probably not have a counterpart during the other three days not observed. Finally, a third exception is at Battle Creek where three cookouts were seen by the observer although most of the activity groups had only two cookouts. However, these time study figures, in general, combined with the detailed notes of content covered (found in Appendix II) should be of considerable help to school camping leaders in evaluating their programs.

Other Program Observations

In a study of this sort, an observer has the opportunity to see many aspects of a program and to make evaluations of a secondary nature to his original purposes. The following comments may be of interest to those having a concern for the total school camp program.

1. Subject matter versus personal and social objectives; the quality of education. Some educators would have little interest in what has been said thus far in this chapter on the grounds that the major values of school camping lie with the personal and social objectives and not with subject matter. However, the two types of objectives are not in opposition to each other. The finest education will combine great subject matter learning with a continuing concern for the individual personality and its development. It should be remembered that the two most important groups of objectives chosen by these school camp leaders include a subject matter field and the social objectives. The camps which were observed in this study provided programs rich with opportunities for teaching subject matter and for contributing to the development of personal values and social objectives in the campers. However, a program including a rich variety of activities does not insure that the campers are learning a lot of subject matter or are developing emotional maturity or are improving in qualities of citizenship. While detailed observations have been made in this study about what was taught, how long it was taught, and even on some techniques by which it was taught (Chapter V) little attempt has been made to determine how well it was taught. For example, the observer participated in several trips to abandoned farms. One of these

was exceedingly disappointing with an unenthusiastic leader going through the routines of leading, but paying little real attention to either the campers or the abandoned farm. Others were quite the opposite. Even though these trips will seem much the same as recorded on paper, the observer's reaction was that the campers with the unenthusiastic leader gained much less than the others. This, however, is a problem primarily of staff training and selection, whereas our present study is concerned primarily with program development.

2. City activities in the country. School camping has been founded on the thesis that the camp program should make use of the activities suited to a camp setting, and that it should not be a classroom or a city program transported to the country.¹ The observer noted that the school camps in this study followed this philosophy closely. The reader will find in the lists of activities in Appendix II few things which could be done as well in the city. However, in the light of this philosophy, some camp leaders might want to re-evaluate their use of comic books, radios, motion pictures, slide pictures, baseball, volleyball, ping-pong, and playing cards.

3. Maintaining the educational climate. The observer sensed that the campers in all of the camps felt an obligation and had a desire to make the week's experience worthwhile. There seemed a general recognition of the fact that the class was at camp to learn some things through their fun. There really appears to be a different atmosphere

¹William G. Vinal, Nature Recreation (New York: McGraw-Hill Book Co., 1940; reprinted, Boston: American Humane Education Society, 1954), pp. 68-71.

L. B. Sharp, "Basic Considerations in Outdoor and Camping Education", The Bulletin of the National Association of the Secondary School Principals, XXXI (May, 1947), pp. 43-47.

from that which a person encounters in many summer camps. One interesting way in which this educational climate is perceived is in the setting up of learning goals by campers before they go out on some field trips. This occurs in a variety of ways; at one camp these goals were established in discussion with campers, written on a wall chart, and evaluated upon return. For example, goals for a hike to a gravel pit consisted of, "(a) look for fossils; (b) find out how sand and gravel got there; (c) road safety; (d) gather firewood; (e) erosion; (f) animal tracks". Another interesting manifestation of the learning atmosphere was a test covering some of the learnings of the week, given at one school camp each Friday. (This was only described to the observer, not actually observed.) These two examples of rather formal educational procedures were more the exception than the rule (indeed, many school camping leaders would not want such highly structured procedures in their camp programs), but the learning atmosphere which they represent was present in all the camps.

4. Variety of work experiences. A sizeable amount of directed activity time not accounted for in the earlier part of this chapter involved work experiences. Detailed lists are available in Appendix II for those interested in this aspect of camping. In every case the campers made their own bunks, kept their cabins clean, and waited on dining tables. In all but two camps the children set the dining tables. In four camps the children helped prepare food or washed dishes (or both). Beyond this there were many types of special work projects: building check dams, replacing log benches, cutting firewood, etc.

5. Infrequency of competitive awards. Although once strongly

entrenched in summer camping, the use of extensive awards involving strong competition now has lost favor among educators (of public schools and summer camps alike) as a means of motivation. The absence of competitive awards was marked in the school camps under study; probably they had less importance there than in most summer camps. Three camps had some sort of flag or award for the cleanest cabin. One camp presented a small Indian headdress to the cleanest table after meals and gave candy bars to campers who did the best map and compass work. Another camp had a daily nature contest, the winner of which received an extra dessert at the end of the week.

6. Lack of regimentation. Regimentation patterned after military camps was also once a common trait of summer camping, but is now decreasing in extent and intensity. One might suspect that school camping, being connected with classroom education (and its greater formality in comparison with summer camping) would be more formal, more regimented than summer camping. There is very little evidence of this. In one camp, the observer did see campers marched from their cabin area to the dining hall before meals, but in other aspects of the program of this camp, and in the other school camps, great informality and freedom was observed. The daily program had very few bell-ringing or bugle-blowing shifts from one part of the program to another. The common pattern was to have one large block of activity time each morning and one each afternoon during which campers participated in whatever had been planned (which varied from one activity period to another and which the campers had helped plan in varying degrees as noted earlier).¹ Three of the camps had no bells, no bugles, or noise-

¹Supra, pp. 60-62.

makers of any kind to indicate meal time or other periods of the day. In general, the camps were characterized by a relaxed feeling.

7. Correlation with the classroom. The point was made earlier that the most unique thing about school camping was the continuity of experience and leadership afforded by a classroom group attending camp with its teacher.¹ Evidence of this continuity was frequently observed. Often classes would bring to camp projects which they had prepared or started in school: nature trail signs, labels for a collection of bird and mammal skins, collecting equipment for nature hikes, diaries or camp logs with decorative covers, and equipment for cookouts. In addition, there were signs of things they were going to do upon return to school such as writing of letters to staff members or arranging a terrarium. Without even seeing the before-camp or after-camp activities one could be impressed by the opportunities involved in an on-going group having a common experience such as this. More will be said in the next chapter about the correlation of camp work with classroom work.

8. Meals as educational activity. Meals were classified as self-directed activities so that little mention has been made of them thus far. It would be unfair to school camping to fail to point out the educational quality of the meals. In almost every case staff members dined with the children. The meals almost always proceeded leisurely, permitting campers and counselors opportunity for many things. Table games (either educational or purely amusing), stories, and singing often took place during or after the meal while campers were still

¹Supra, p. 1.

seated at the tables. Instructions in table manners were provided. At one camp the staff had a novel way of correcting table manners by referring to each poor manner by a "code name". For example, if a camper did not use his napkin he was told that he had "white sails". This new term provided a laugh when the children guessed what it meant, and took any drudgery out of learning etiquette. However, the most valuable part of a leisurely meal with campers and counselors probably is in the opportunity to converse seriously about a variety of subjects. In our daily world, children and adults (other than their parents) seldom have a chance to discuss together anything other than what is absolutely necessary. This is true at camp. During activity periods and kaper (work) periods conversation is limited considerably to the activity at hand. Those periods of "self-directed activity" such as meals, provide the main opportunity for developing the art of conversation and for developing closer relationships between campers and counselors, through knowing one another better.

9. Parent visits at school camps. None of the camps permitted parents to visit during the main body of the week because of potential disruption of program and effect upon homesickness during this short stay away from home. However, three camps did arrange for parents to come to camp on Friday evening to visit camp and to take their campers home. This program was observed at one of the camps and included a campfire and a program by the children depicting activities of the week. Campers did not remain at all the school camps as late as Friday evening, but the observer was greatly impressed by the possibilities of this sort of end-of-week parent visit to increase public understanding of school camping and to allow for more carry-over of the camp experience in the home situation.

CHAPTER V

SCHOOL CAMP LEADERS AND INSTRUCTIONAL METHODS

Lecture, Discussion, Demonstration, and Non-verbal Activity

Definitions

We have seen that one of the important and interesting factors in school camp programs and the conservation education which they include is the type of staff member. Staff members have been classified in seven different groups according to their employment status, and they have been compared with respect to the objectives which they hold for school camping. In addition, the programs of the school camps in this study have been compared in a few instances in terms of their staff members, e.g., whether they have permanent camp staff members or not.

A further comparison of staff members was made with respect to the type of teaching method which they used. Teaching methods were classified in four groups: lecture, discussion, demonstration, and non-verbal. During the observation of a given activity, the observer recorded the number of minutes used by leaders in these different teaching techniques on the grid chart¹ as described in the previous chapter.²

¹Appendix I, p. 138.

²Supra, p. 53.

It should be realized that two people can use the same technique of instruction with varying results. The qualities which make one teacher succeed and another fail are often very subtle. In this study no attempt was made, in general, to place a value judgment on the work of a teacher. Thus, there may be good lectures and poor lectures represented in the total time spent in lectures. The intention of the study was to determine only the relative amount of use made of a particular teaching approach by staff members of different groups and as one whole group.

There is no sharp dividing line between a lecture and a discussion. Some discussions are almost lectures, and some lectures are almost discussions. The observer discovered that "discussions" may actually have many minutes of lecture included, and vice versa. In the final analysis, the observer's judgment must sort one teaching method from another. However, certain types of combinations may occur. A lecture method may be combined with a demonstration, or the demonstration may be combined with a discussion. Non-verbal activity may be associated with a discussion, and so on.

The four types of teaching methods may be defined as follows:

Lecture consists of a period of talk by one person of one minute duration or longer involving no interplay among two or more people. Also included here are isolated announcements in which the person was definitely talking to, not with, the other people present, even though such announcements may have had a duration of less than a minute.

Discussion includes periods of time of one minute or longer marked by a definite conversation among two or more people, characterized by a "talking with", not a "talking to" atmosphere.

Demonstration is the imparting of knowledge by showing a specific skill, procedure, or an experiment to an audience.

Non-verbal activity includes teaching situations characterized by physical movement. This would include periods of walking, running, chopping, manipulation of a surveyor's measuring tape, etc. The well-worn phrase, "doing activity" applies here.

A fifth category, called incidental leadership, was established to record those minutes when a leader was present, but not actively engaged in a teaching role. This pattern would occur, for example, when two or more leaders accompany a group on a field trip, but only one leader assumes an active role in teaching the campers or conducting the trip. It also occurs during campfire programs when many leaders may be present, but only one of them actually is conducting the program. Still another case is when group singing is carried on with many leaders present and singing, but only one of them directing the singing.

Statistical Procedures

Tabulations were made and percentages computed of the number of minutes spent in each of these categories of teaching methods by each group of staff members. In computing the percentage of time which a leader spent in a particular teaching method, it was felt that this should be expressed in terms of the per cent of his active leadership or teaching time. Therefore, incidental leadership was subtracted from the total time a leader was observed, in making these computations. The statistical significance of the difference between the percentage for each class of staff members and the mean per cent

for all staff members was computed.¹ These data are given in Table 13.

Tabulation was also made of the time spent by campers in listening to lectures (both adult and camper lectures), participating in discussions, and engaging in non-verbal activities. In addition, because of the difficulty of placing music and the watching of motion pictures in any of these categories, separate tabulation was made of these two items. These data are given in Table 14.

Conclusions

The results of this time study give rise to the following conclusions:

1. The great amount of non-verbal activity in school camp programs. There can be no doubt that much time is given over to "doing activities" in these school camp programs as a whole. As indicated here, school camping has not been a matter of merely changing the location of classroom work and carrying on long periods of sedentary activities. In Table 13, it is seen that the average school camp leader spent 59.6% of his active leadership time in non-verbal activity. In Table 14, it may be noted that the average camper was involved in non-verbal activity 54.8% of the total amount of his staff-directed time. Even the minimum percentage for any staff group or individual camp seems rather high. Resource people constituted the group of staff members devoting the least amount of their active teaching time

¹Significance was computed according to the procedure outlined by Henry E. Garrett, "The Significance of the Difference Between Means Derived from Independent or Uncorrelated Measures or Scores--When There Are More Than Two Means To Be Compared", Statistics in Psychology and Education (New York: Longmans, Green and Co., 1953), pp. 273-281. The classification of teaching technique within ten-minute time intervals of observed activity provided the individual scores used in these computations.

TABLE 13
TEACHING METHODS EMPLOYED BY STAFF MEMBERS

Staff Member Group	Total Minutes Observed	Incidental Leadership		Minutes Active Leadership	Lecture	
		Min.	Per Cent ^a		Min.	Per Cent ^b
ALL STAFF MEMBERS	46,139	19,723	42.7	26,416	994	3.8
Classroom Teachers	13,698	6,374	46.5*	7,324	134	1.8**
Special Teachers	7,469	3,145	42.1	4,324	265	6.1**
Permanent Staff	9,866	3,399	34.4**	6,467	340	5.3**
College Students	7,549	4,089	54.1**	3,460	34	1.0**
High School Students	2,712	1,004	37.0	1,708	4	0.2**
Parents	1,659	1,136	68.5**	523	0	0.0*
Resource People	3,186	576	18.1**	2,610	217	8.3**
Ann Arbor	6,997	2,936	41.9	4,061	148	3.6
Battle Creek	7,879	3,385	43.0	4,494	82	1.8**
Cleveland Heights	9,722	3,981	41.0	5,741	150	2.6*
Dearborn	5,266	2,893	54.9**	2,373	147	6.2**
Orange	4,724	1,850	39.2	2,874	209	7.3**
Plymouth	5,128	1,538	30.0**	3,590	66	1.8*
South Euclid-Lyndhurst	3,710	2,203	59.4**	1,507	163	10.8**
Warren	2,713	937	34.6*	1,776	29	1.6*

^aPer Cent of Total Minutes Observed. ^bPer Cent of Minutes of Active Leadership

*Denotes a per cent which differs significantly, at the .05 level, from the per cent for ALL STAFF MEMBERS in this teaching method.

**Denotes a per cent which differs significantly, at the .01 level, from the per cent for ALL STAFF MEMBERS in this teaching method.

TABLE 13--Continued
TEACHING METHODS EMPLOYED BY STAFF MEMBERS

Staff Member Groups	Discussion		Demonstration		Non-verbal Activity	
	Min.	Per Cent ^b	Min.	Per Cent ^b	Min.	Per Cent ^b
ALL STAFF MEMBERS	10,135	38.4	257	1.0	15,731	59.6
Classroom Teachers	2,790	38.1	30	0.4*	4,459	60.9
Special Teachers	1,111	25.7**	45	1.0	2,974	68.8*
Permanent Staff	3,077	47.6**	106	1.6*	3,318	51.2**
College Students	1,308	37.8	7	0.2*	2,158	62.4
High School Students	487	28.5*	1	0.1	1,218	71.3*
Parents	4	0.8**	0	0.0	519	99.2**
Resource People	1,358	52.0**	68	2.6**	1,085	41.6**
Ann Arbor	1,238	30.5**	20	0.5	2,716	66.9*
Battle Creek	2,013	27.5**	17	0.4	2,572	57.2
Cleveland Heights	2,568	44.7*	90	1.6	3,199	55.7
Dearborn	1,262	53.2**	10	0.4	1,098	46.3**
Orange	1,122	39.1	62	2.2**	1,361	47.4**
Plymouth	1,277	35.6	32	0.9	2,247	65.4
South Euclid-Lyndhurst	186	12.3**	3	0.2	1,207	80.1**
Warren	469	26.4**	23	1.3	1,331	74.9**

TABLE 14
STAFF-DIRECTED ACTIVITY TIME SPENT BY CAMPERS IN LEARNING BY DIFFERENT METHODS

School Camp	Min. of St.-Dir. Act.	Lecture			Discussion		Non-verbal Activity		Music		Motion Pictures	
		Min. Adult Lect.	Min. Camper Lect.	Per Cent.	Per Cent.	Min.	Per Cent.	Min.	Per Cent.	Min.	Per Cent.	
Ann Arbor	1857	148	14	8.7	807	43.4	869	46.8	74	4.0	12	0.6
Battle Creek	2045	82	1	4.1	579	28.3	1231	60.2	216	10.6	00	0.0
Cleveland Heights	2609	150	1	5.8	971	37.2	1305	50.0	217	8.3	00	0.0
Dearborn	1679	147	84	13.7	782	46.6	717	42.7	96	5.7	00	0.0
Orange	1738	209	0	12.0	345	19.8	1014	58.3	219	12.6	32	1.8
Plymouth	1859	66	21	4.7	460	24.7	1245	67.0	160	8.6	00	0.0
South Euclid-Lyndhurst	836	163	2	19.7	136	16.3	438	52.4	114	13.6	33	3.9
Warren	748	29	17	6.1	143	19.1	508	67.9	150	20.1	00	0.0
Total	13371	994	140	8.4	4223	31.6	7327	54.8	1246	9.3	77	0.6

aPer cent of staff-directed activity represented by adult and camper lectures combined.
bPer cent of staff-directed activity.

to non-verbal activity--41.6% (significantly lower at the .01 level than the mean for all staff members.) And the campers at Dearborn School Camp were involved in non-verbal activity 42.7% of their staff-directed time (significantly lower, at the .01 level, than the mean for all staff members) for the lowest percentage of any specific camp. It should be remembered also that staff-directed time does not include those free-time periods when campers may do almost anything they wish, including many non-verbal activities.

However, one must not be misled into thinking that these high percentages for minutes of non-verbal activity necessarily indicate a large variety of non-verbal activities. Most of the activity in this category consists of hiking. The time study showed such a high percentage of staff time given to non-verbal activity in comparison with the other teaching methods for two reasons. First, many of the field trips (and other outdoor activities) were frequently conducted by two or more leaders. During periods of hiking the leaders would walk with the campers, often talking with a few of the children near them, sometimes talking only between themselves, and sometimes without talking. The observer felt that the essential characteristic of these periods was non-verbal activity, and they were so coded. Although the leaders could be said to be teaching, it was not felt that these informal periods could be called discussion or lecture. After such a period of walking one of the leaders would call the group together and lead a discussion or present a lecture about something of interest observed along the way. This period of time would be coded as "lecture" or "discussion" for the leader assuming active leadership and would be recorded as "incidental" for the leader or leaders who stood and listened.

The second way in which non-verbal activity time was built up was in hikes (hardly to be called field trips) in which physical exercise and the covering of distance seemed the main objectives--where very little time was spent talking about things along the way.

The observer feels that school camp leaders need to use a greater variety of non-verbal teaching techniques in their work. For instance, there are many non-verbal activities, in addition to observation hikes, valuable in teaching natural science -- making rock collections, making plaster casts of tracks, digging soil samples, and measuring tree growth, to name a few.

2. The active teaching roles of the resource person, the permanent staff member, and the special teacher. In Table 13 it is seen that three of the four staff member groups having the lowest percentages of incidental leadership (conversely, the highest percentages of active leadership) are the resource people, the permanent staff members, and the special teachers.¹ (The resource people and the permanent staff have percentages of incidental leadership significantly lower, at the .01 level, than the mean per cent for all staff members.) This brings out the interesting roles which these people play in camp.

First, the resource people are those who are brought to camp for a short period of time for a specific teaching job. Although another leader may go along with them on an activity, the typical situation is for this other leader to relinquish the entire leadership role to the resource person. These other leaders were most frequently college students or classroom teachers, and this tended to build up a

¹The fourth group, high school students, will be discussed later, pp. 94-96.

higher percentage of incidental leadership for those two groups. On the other hand, the fact that the resource person had almost the entire responsibility meant that he spent very little time as an "incidental leader".

Secondly, in those camps having permanent staff members there is a tendency for the classroom teachers (and any other leaders who are present) to depend upon the permanent staff members for the teaching of the children. This is based upon a feeling that the permanent staff members are most familiar with the camp facilities, routines, and natural science of the area. It is also based, probably, on a lack of confidence, or ability, in working cooperatively with other leaders with the same group of campers.

Finally, in those camps where there is no permanent staff member a major share of active leadership falls upon the special teachers. This is partly because they are subject matter "specialists", and they are at camp to teach their specialty, e.g., physical education or art or music. It is also because the administration of these short-term school camps frequently falls upon a special teacher who, by virtue of not being tied down to full-time classroom responsibilities, has been able to make pre-camp arrangements of facilities and camp organization more easily than the classroom teacher could.

Another indication of the active leadership assumed by these three groups of staff members is the per cent of time spent by them in lecturing--5.3% for permanent staff, 6.1% for special teachers, and 8.3% for resource people. Each of these percentages is significantly higher, at the .01 level, than the all-staff mean.

This situation is true, also, of the percentages for discussion,

except for the exception of the special teachers. The special teachers spent only 25.7% of their teaching time on discussion; this was significantly lower, at the .01 level, than the mean percentage for all staff members. There may be two explanations for this low percentage. A sizeable share of the teaching of the special teachers was in connection with supervising games and sports. In these activities, once a game has been started, there is a maximum of non-verbal activity and a minimum of discussion or lecture. The other possible reason for this low per cent of discussion lies in the type of field trip the special teacher conducted. The observer noted several times that special teachers led field trips, even though they were poorly prepared (and admittedly so) in knowledge of nature or field trip techniques. In such cases the leader is forced to make the trip just a hike, with a lot of non-verbal activity, but very little discussion of things along the way. Hence, special teachers built up a high percentage of non-verbal activity and a low percentage of discussion. (The percentage of non-verbal activity for special teachers was significantly higher, at the .05 level, than the mean per cent for all staff members.)

3. The inactive leadership of the classroom teacher. One might expect the teacher of a class of children to retain a very strong teaching role with his pupils at school camp. The opposite was found to be true in the camps studied. The percentage (46.5%) of incidental leadership for classroom teachers was significantly higher, at the .05 level, than the mean for all staff members. Of the other groups of leaders, only the college student and parents spent a greater per cent of time as incidental leaders. Two reasons for this have already been given: the feeling that other staff members are more qualified

to teach in this setting, and the lack of experience in working cooperatively with other staff members with their class. This cooperative working relationship is greatly in contrast with the working conditions to which classroom teachers have been accustomed and represents one of the major difficulties which classroom teachers have to face.

However, this lesser teaching role of the classroom teacher is not necessarily unfortunate. What is more important than whether a classroom teacher is actively teaching or not, is what he is doing when he is "inactive" and what his role is in the camp organization, other than teaching. There is great value in a teacher being free to observe his pupils at times, rather than having to be engrossed continuously in teaching them. The observer was greatly impressed by this in the course of his study. As an observer, he was able to notice many reactions, attitudes, and even overt actions of campers which, almost of necessity, escaped the leader who was busy teaching about erosion, or demonstrating use of a tool, etc. A classroom teacher who makes good use of the opportunity to observe his children will find it very rewarding.

But there is another job of the classroom teacher besides those of teaching and observing his pupils. This is the job of program advisor or even that of program director. The unique aspect of school camping is the continuity of the experience--before-camp, during-camp, and after-camp activities all tied together under the continuous leadership of the classroom teacher. To capitalize upon this opportunity the classroom teacher must not relinquish direction of the educational program to others who know little, if anything, about the children, the classroom curriculum, and the plans and needs of the class and

teacher. It is to be expected that other people should know more about the camp area, the natural features found there, camping activities, and the techniques of working in the camp environment. The classroom teacher cannot be an expert in everything, and these other people have the responsibility of making their talents, abilities, and knowledge of the program possibilities of a camp site available to the classroom teacher. Then the classroom teacher should play an important part in determining which of the possibilities are to be used, and in determining how the program is to be organized. The classroom teacher should be alert, constantly, to advise other staff members on the needs of certain campers or on ways of handling children with problems. This advisory role is a continuing one. It is not one that is completed on the first day at camp by telling of a few things which the teacher would like to have the campers do, or telling of a couple of children with discipline problems. This advisory role is as important on the final day as on the first. Throughout the week decisions need to be made regarding program. Weather will necessitate changes. Some activities may prove worth doing twice. Other activities may need to be deleted. Throughout the week there needs to be continuing evaluation of what the camper is gaining and how he is being handled. In this aspect of the program the classroom teacher is invaluable. To the extent that the classroom teacher fails to accept this role, school camping becomes that much less valuable.

The observer feels that these responsibilities belong to the classroom teachers. Yet, seldom did he feel that the classroom teachers in this study measured up to this role. In one of the short-term camps the classroom teachers were definitely directors of the

program, but because of being understaffed, they had to spend most of their time handling problems of maintenance, procurement of supplies, cooking of food, and mechanics of program, instead of spending most of it with the campers, teaching or observing. This, the observer felt, was definitely a weakness of organization in not providing enough staff members and was manifested in another way, to be mentioned later under the role of high school students.

In most of the other camps the classroom teachers were definitely not directors of the program and much too seldom functioned as "camp advisors". To some extent this seemed the fault of the classroom teachers themselves and seemed to reflect a lack of ability to handle resource people or to work with others. To some extent this seemed the fault of the permanent staff members or the special teachers who were in charge of the camp. These people often seemed to lack the ability (or the desire) to involve other staff members, particularly classroom teachers, in planning and making decisions. The director of one camp referred to permanent staff members as "one-week wonders", who must continually fight the tendency to develop a "workable" program of one week's duration to be foisted upon all class groups which attend camp. Indeed, this is one of the biggest difficulties facing those who are in charge of programs extending more than one week.

4. The extra responsibility placed upon high school students.

It would be reasonable to assume that the non-professional school camp staff members--college students, high school students, and parents--would be the ones to have the highest percentages of time spent as incidental leaders. This is true of the college students and parents (both having percentages of incidental leadership significantly higher,

at the .01 level than the mean for all staff members), but we find that the high school students in this study spent a greater percentage of time in active leadership than did either the classroom teachers or the special teachers (although not significantly different from the all-staff mean). The observer believes this was definitely a case of a camp understaffed in terms of twenty-four-hour-a-day staff members (which was responsible for the classroom teachers spending so much time on maintenance and facility problems, as noted earlier.)¹ This was evident on such occasions as the woodcutting session, where one high school girl was supervising thirteen children in the use of two crosscut saws, two axes, and a hatchet. The lack of readiness of high school students to assume the responsibilities thrust upon them in this situation is shown by the figures in Table 13. Only 0.2% of their active leadership time was spent in lecture and only 28.5% of it in discussion. Both of these percentages are significantly lower (at the .01 and .05 levels respectively) than the all-staff means. The high school students lacked the knowledge and experience required for teaching adequately. It was more a matter of doing things with campers than telling them or teaching them things.

While the observer felt that the high school students in this case were given too much responsibility, he was impressed with the enthusiasm which these students added to the program and with the possibilities for more restrained use of them in school camp programs for elementary children. Some school camping has been conducted for secondary school children, but in very few cases have secondary students

¹Supra, pp. 93-94.

been combined with elementary children such as has been done at this camp in this study. The lack of self-contained classrooms, and scheduling problems related thereto, create many difficulties in high school camping. However, in camps which are adequately staffed there would be value in experimenting with the participation of one or a few high school students in an elementary school camp program as "senior campers". This might offer a good opportunity for curriculum enrichment for gifted high school pupils or for high school pupils belonging to the Future Teachers of America. It would have to be approached from the viewpoint of what the camp program could give the high school student and not what the high school student could give to the camp program. It would be a means of making school camping available to some high school students rather than a way of solving staff problems in the school camp program.

5. The trainee role of the college student. The participation of college students in the school camp programs was, for the most part, that of student teachers rather than that of full-fledged staff members. This is indicated by the figures in Table 13. More than half of the time (54.1%) the college students spent in staff-directed activities was in incidental leadership, essentially observing. (This percentage is significantly higher, at the .01 level, than the all-staff mean for incidental leadership.) Usually, the college students worked with another leader, and when responsibility was given them it was more often in a rather controlled situation, such as leading singing in the dining hall or supervising campers at rest hour or in going to bed. Mention has been made in Chapter III of the need expressed by professional school camp staff members for more college student teachers

and of the value which college students felt their camp experience was to them.¹ Provision of this experience for college students is one of the most effective avenues for improving school camping and outdoor education.

6. The incidental role of the parent. One of the school camps used parents of campers as aides in the camp, and the incidental teaching role which they played is strikingly shown in Table 13. It was a case of a person going along on the daytime activities, but practically never saying anything except in those informal and rather "free" periods while walking on a field trip, etc. The major uses made of the parents were as leaders to sleep with the children at night, to rest with them during rest period, and to eat with them in the dining hall. At these periods of self-directed activity, there is no doubt that some of the parents functioned admirably as leaders. Perhaps one of the greatest values in having parents participate in the program is that over a period of years a sizeable group of community members learns a great deal about school camping through first-hand acquaintance. This must have a great influence on the degree of public understanding which a community has of its school camping program. Mention has already been made of parent visits arranged on the final night by three camps.² There is need for more experimentation with and evaluation of these and other school camp-parent relationships.

¹Supra, pp. 48-49.

²Supra, p. 80.

Correlation of An Activity with Other Camp
or Classroom Activities

In the previous chapter mention was made of a few of the projects carried on in the classroom in preparation for camp.¹ To gain another indication of the amount of correlation among various activities of classroom and camp, the observer noted those times when a leader or a camper referred to the fact that something had happened previously at camp or in the classroom. Tabulation of this count is given in Table 15. Statistical significance was computed as before.² These data indicate the following points:

1. More frequent reference to previous camp activities than to school activities. Nearly four times as many references were made to things which had happened earlier at camp as were made to happenings in the classroom. This was evident in all groups of staff members except the parents, in which case the lack of references to any previous camp or class activities is related directly to their lack of participation as active leaders, noted earlier.³ Many of the references to previous camp events occurred during periods of evaluation of a week's program and not during the course of regular activity periods.

2. The lack of camp-classroom references by non-school employees. If a person has little contact with the classroom and its curriculum he hardly can be expected to tie camp activities very closely to those of the classroom. This was born out by the count of

¹Supra, p. 79.

²Supra, pp. 83-84.

³Supra, p. 97.

TABLE 15
REFERENCES BY STAFF MEMBERS TO PREVIOUS CAMP
OR CLASSROOM ACTIVITIES

Staff Member Groups	Total Minutes Lecture and Discussion	References to Previous Camp Activities	References to Previous Classroom Activities
Classroom Teachers	2,924	26	23 ^a
Special Teachers	1,376	28	10
Permanent Staff	3,417	59	7 ^b
College Students	1,342	42 ^c	0 ^b
High School Students	491	0 ^d	0
Parents	4	0	0
Resource People	1,575	3	1
All Staff Members	11,129	158	41

^aSignificantly higher at the .01 level than the mean for all staff.

^bSignificantly lower at the .05 level than the mean for all staff.

^cSignificantly higher at the .05 level than the mean for all staff.

^dSeveral references were made during the course of a review discussion but were not recorded; thus, data for high school students were excluded from computations regarding references to previous camp activities.

references. Only one reference to something which had happened in the classroom was made by a leader other than those employed by the schools. Of the school employees, those having least contact with the classroom, the permanent camp staff, made the fewest references to classroom happenings, significantly fewer, at the .05 level, than the mean for all staff members.

3. The small amount of intra-camp correlation by resource people. One of the weaknesses of using resource people is that the resource person has little knowledge of what other camp leaders have taught the campers, where the campers have gone on the camp property for their activities, and what will be happening the next day with other leaders. This is seen in the very few references made by resource people to other activities at camp (significantly fewer, at the .01 level, than the references made by the classroom teachers and the special teachers.) Furthermore, the actual number of correlations with classroom work by the classroom teachers and special teachers is, no doubt, greater than indicated here. A teacher who knows what has been studied or what will be studied in the classroom might frequently make a correlation without mentioning the classroom work as such.

4. The many references to other camp or classroom activities by campers. One would fail to appreciate the real amount of correlation of camp activities with one another and with classroom activities were it not noted here that in addition to the references by staff members, campers themselves referred to other camp activities 257 times and to classroom activities 6 times. These figures were not included in Table 15 because in this form they are of no value in comparing roles of staff members. Some of these references by campers

were stimulated by questions and discussion directed by staff members, and some were spontaneous on the part of the campers themselves. A classification of the origin of these references would have been valuable since some staff members might have accomplished a major share of their correlation in this manner, i.e., stimulating the campers to verbalize the correlation.

The Extent of An Ecological Approach in Nature Education

The belief is widely held among conservationists that an understanding of ecology is essential to an understanding of conservation. Intelligent management of natural resources must take into account the many, varied relationships which exist among the forces of nature, including man. Nature education which is ecological in character can have a direct connection with conservation. Nature education which deals only with identification or other isolated facts, can have only a remote connection, if any at all, with conservation. For instance, while it may be interesting and enjoyable for a person to be able to identify an elm tree or a fox squirrel there can be little connection with conservation understandings unless the person goes a step further and learns something about such relationships as exist among the elm tree, the elm bark beetle, and the Dutch elm disease, or until one learns something about the food and shelter requirements of a fox squirrel.

As the observer made notes about the natural science material covered by leaders in these school camp programs he also noted the number of times that the material was presented as an isolated fact, such as mere identification of a plant or animal, and the number of times that the material was presented in a manner that expressed a

relationship among two or more facets of nature. This information is presented in Table 16. These data were tabulated and handled statistically as outlined before.¹

School camp staff members emphasized relationships 9% more than isolated facts.² None of the staff groups differed significantly from the mean for all staff members.

There is one interesting exception which is not given in Table 16. It may be recalled that a group of graduate students from the School of Natural Resources of the University of Michigan served as resource people at the Ann Arbor School Camp and have been recorded as resource people throughout this study.³ Eight of these students were observed in action and the tally for this group is: total presentations, 184; relationships, 127 (69.0%); isolated facts, 57 (31.0%). Over twice as much emphasis was put upon relationships as upon isolated facts by this group of staff members having somewhat of a common background of training in natural science. (This emphasis upon relationships is significantly higher, at the .01 level, than the mean for all staff.)

The performance of this group is contrasted with that of the resource people at the Orange School Camp, who had the following tabulation of nature presentations: total presentations, 76; relationships, 16 (21.1%); isolated facts, 60 (78.9%). Such comparison points

¹Supra, pp. 83-84.

²This is in terms of number of instances. In terms of minutes of time the relationships would have a still higher percentage since it takes more time to develop a relationship than it does merely to state an isolated fact.

³Supra, p. 10.

TABLE 16
THE RELATIVE STRESS PLACED UPON ISOLATED FACTS AND
RELATIONSHIPS IN NATURE EDUCATION

Staff Member Groups	Total Presentations	Relationships		Isolated Facts	
		Number	Per Cent	Number	Per Cent
Classroom Teachers	33	44	53.0	39	47.0
Special Teachers	51	27	52.9	24	47.1
Permanent Staff	427	222	52.0	205	48.0
College Students	14	9	64.3	5	35.7
High School Students	6	1	16.7	5	83.3
Parents	1	0	00.0	1	100.0
Resource People	463	266	57.3	197	42.5
All Staff Members	1045	569	54.5	476	45.5

up the importance of staff training and background to the camp program. A camp must select staff members carefully and orient them as thoroughly as possible, if it is going to accomplish its objectives. Of course, this presupposes careful definition of objectives. A school cannot take a class of children to a camp, with poorly trained staff members and vague objectives, and automatically achieve wonderful educational results.

CHAPTER VI

IMPLICATIONS FOR CONSERVATION EDUCATION

Review of Related Studies

There is agreement that conservation education is one of the major objectives of school camping programs. There is also agreement that the school camp presents many opportunities for teaching conservation. It seems that many people have believed so thoroughly in these two relationships between school camping and conservation education that they have unthinkingly added a third belief---that much conservation education is taking place in the school camps across the country. There is little evidence to support this belief. Very few careful evaluations of school camping programs have been carried on, and very few of these have dealt specifically with conservation education.

One of the early studies was that conducted in 1947, by Life Camps, Inc. (forerunner of the present Outdoor Education Association) and the New York City Board of Education. It involved a comparison of a group which spent three weeks in a school camp with a matched control group which did not have this experience. The children were compared with respect to their interests, sociometric ratings, artistic representation of camping scenes, physical measurements, and subject matter learnings related to camping. Conservation, as such, was not one of the subject areas tested. However, tests were made in nature study and in science and health education. In these two tests, there

were no significant gains over one another by either the experimental or control group during the period of study.¹ In addition to concern with natural science and health, this study dealt considerably with personal and social values. There was practically no mention made of conservation in the report of the study.

James Clarke, in his report of the San Diego School Camp (1951), gave an evaluation of the conservation education in that school camping program.

Conservation of natural resources was another area in which there was an increase of understanding and appreciation. [in classroom after camp]

.....
More than two-thirds [of answers received from parent questionnaire] stated that their children showed more interest in and understanding of nature.²

First-hand observation of reforestation, erosion control, and the maintenance of game preserves, water supply, and fire trails illustrates to sixth-graders the means of conserving our natural resources. Reports of the children's increased understanding of conservation and interest in it after their return from camp show that important educational gains were made in this area.³

Such evaluation is vague and highly subjective, but it is typical of the evaluation commonly found in school camping literature.

Lenore Smith conducted a questionnaire study of about fifty school camps. She summarized her study of school camping objectives as follows:

The first portion of this inquiry of appraisal was devoted to the study of objectives for the camp program. The most frequently mentioned group of objectives was that related to the area of

¹Extending Education Through Camping (New York: Life Camps, Inc.--now Outdoor Education Association, 1948), pp. 60-61.

²James M. Clarke, Public School Camping, (Stanford, Calif.: Stanford University Press, 1951), p. 110.

³Ibid., p. 118.

outdoor education and conservation. Socializing aspects of the group living phases of school camping were the next most frequently mentioned group of objectives. Third in order of emphasis were the statements related to the concept of learning by doing or implementing teaching through first-hand experiences in the out-of-doors. Statements related to the development of child health were grouped into the fourth category.¹

This compares with the results of the selection of objectives in this study, where conservation-natural science and social objectives were the top-ranking groups.²

Smith went on to state that her jury of school camping experts also rated conservation high as an objective (although not unanimously) and that conservation education was reported by 91% of the camps responding to her questionnaire.³ One of the questions was: "In what ways is special emphasis placed on conservation education?" Smith stated, "Special emphasis on conservation education was reported by thirty-four of the respondents. Methods used were: visitations; use of conservationists; and specific camper activities."⁴

Here again, results are subjective valuations about one's own program and have little meaning for somebody interested in the amount and quality of conservation education existing in school camps.

Herman Kranzer studied the program activities of the Battle Creek School Camp (Clear Lake Camp) in relation to the objectives of the Battle Creek Public Schools. His thesis included a listing of all

¹Lenore C. Smith, "An Investigation of Personnel Practices and Program Organization in Public School Camping and Outdoor Education" (unpublished Ph.D. dissertation, University of Southern California, 1950), pp. 141-142.

²Supra, pp. 25, 36.

³Smith, op. cit., p. 169.

⁴Ibid., p. 125.

of the pupil-planned program activities for a five-year period. Out of these ninety program activities only six seemed, by their titles, to be directly connected with conservation. (These were "lumbering, sawmill, maple sugaring, plant trees, tree trimming, bird feeders and shelters.")¹ Kranzer presented detailed descriptions of four regular camp activities (e.g., housekeeping) and the eleven most common pupil-planned activities. These detailed descriptions indicated that six of the fifteen activities had some application to conservation. (These six were "cook-out and meal planning, hike, lumbering, campfire, work projects, and sawmill.")²

Nadine Cragg evaluated the program of the Long Beach, California, School Camp, utilizing: testing of a group of campers and a non-camper control group; questionnaires submitted to campers, teachers, and parents; and a check list rating by three professors (of sociology, psychology, and education) from the University of Redlands. The three professors used the check list on a one-day visit to the camp. Cragg reports that the "highest ratings were given to the leaders' use of opportunities to teach, to the campers' interest in their activities, and to those items related to learnings and practice in conservation."³

Thirteen teachers participated in this study; in response to the question about what they believed children gained from their camp

¹Herman C. Kranzer, "A Study of Clear Lake Camp's Contributions to the Elementary Curriculum" (unpublished Master's thesis, Education Department, University of Michigan, 1952), pp. 16-19.

²Id., pp. 29-38.

³Nadine Cragg, "An Evaluation of the Year-Round School Camp of Long Beach, California" (unpublished Ph.D. dissertation, University of Michigan, 1952), p. 85.

experience, only three (23.1%) stated conservation. "Knowledge of nature" and "appreciation of nature" were each stated by six teachers (46.2%).¹

Out of the participating parents, six (5.9%) listed "forest conservation" as one of the things which their child learned at camp; one each (0.8%) listed "how to live with nature" and "fire protection". Nature study, as such, was listed by thirty-five (29.8%), but conservation, as such, was not listed.²

In a test of nature study given to campers and non-campers, Cragg found no significant differences in the two groups before camp; after camp there was a significant difference in favor of the camping group.³

From the standpoint of the conservation education it is unfortunate that Cragg did not design her study so as to have a better evaluation of the place of conservation in the camp program, especially since conservation education was one of the four motivating factors in establishment of the Long Beach School Camp.⁴ There was no conservationist among the visiting experts. Conservation was not listed among the ten groups of things which Cragg checked for learning before and at camp. The "Nature Study and Science" group seemed to come closer to conservation than did other groupings, but only three items of the twenty-

¹Ibid., p. 84.

²Ibid., pp. 81-82.

³Ibid., p. 70.

⁴Ibid., p. 5.

three on this list related directly to conservation.¹

Lola Eriksen made one of the first studies specifically on conservation education in school camping, utilizing, primarily, a questionnaire submitted to camp directors of eighteen school camping programs in California. The questionnaire listed conservation activities (e.g., seed collecting and planting, reforestation, gully control) and provided for a three-way rating of them (viz., "frequently; sometimes; seldom, never"). Some of Eriksen's conclusions are as follows:

The items listed as examples of developing these conservation concepts (viz., conservation is everyone's responsibility; resources are not unlimited; all living things are interdependent) were quite varied. Many of the items were of such general nature that they offered little real information; they did not indicate how the activity suggested was used or related to the concept. Problem solving or acceptance of responsibility by campers was not general.²

Over twice as many camps (fifteen) stressed broad principles relating to conservation in contrast to detailed facts.³

Camper participation in planning and evaluating all aspects of conservation-related projects seemed to indicate some real need for improvement. Here, in an area where real learning could result from participation in the total picture of planning and evaluating, there were instances in which such participation was a seldom or never occurrence. If real problem solving is to be utilized as a method of conservation education, campers must be included frequently in all aspects of projects.⁴

Opportunities for relating camp program activities to major conservation problems of the campsite were utilized to a rather limited extent, being completely neglected by some camps.⁵

¹Ibid., p. 74.

²Lola J. Eriksen, "A Study of Conservation Activities in Outdoor Education Programs in California" (unpublished Master's thesis, Dept. of Science Education, San Jose State College, 1955), p. 35.

³Ibid., p. 37. Summary of answers to question: "Does your program stress: Broad principles? Detailed facts?"

⁴Ibid., pp. 43-44.

⁵Ibid., p. 55.

All of the studies reported so far have one common weakness in depending largely upon the evaluations of a camping program by people other than the research student, instead of upon direct observations by the investigator himself. In many cases it means relying upon the rather subjective evaluations by staff members of their own camp programs. It means trying to group and compare evaluations of many people, all having different standards and understandings about conservation and school camping.

This weakness has been eliminated in William Hunter's study of conservation education at the Mill Lake Camp (Dearborn School Camp) and the Cedar Lake Camp in Michigan. Hunter observed portions of these camp programs himself, concentrating his visits during the morning and afternoon activity periods. He arranged his visitation so as to observe a given activity only once per camp, thus obtaining a great variety of observed activities. Two of his conclusions which are of interest to this study are as follows:

The various activities . . . indicate that conservation and nature study are of prime importance at the Dearborn School Camp. Twenty-two of the thirty activities suggest topics referring to conservation and/or nature study. A closer look at the activities reveals that there was actually little of this type of teaching.¹

In this study of four school camps 91 activity periods were actually observed out of a possible 122. Eighty-five of the 91 activity topics appeared to be oriented toward conservation, nature study or science, but a closer examination revealed that only 34 activity periods had sixty per cent or more of their material concentrated on nature study and science and about twenty periods had sixty per cent or more oriented toward the study of conservation practices. It was estimated that only 11 periods were organized

¹William F. Hunter, "A Study of Conservation Education in the Cedar Lake and Mill Lake Group Camps" (unpublished Master's thesis, Dept. of Conservation, University of Michigan, 1957), p. 22.

well enough to require little or no change conservation-wise within the activity.¹

Hunter does not explain how he arrived at the per cent of material concentrated on conservation in a given activity. The inference is that these are subjective estimates.

It is interesting to note that, in their different ways, both Eriksen and Hunter have arrived at conclusions with which this study is substantially in agreement.

The Problem: Conservation Education of Small
Quantity and Low Quality

The problem resolves to the fact that, in spite of the very high placement of conservation education among the objectives of school camping by the majority of people connected with the field, and in spite of the widespread belief that the school camp offers one of the most valuable opportunities that we have for conservation education, there is a small amount and a low quality of conservation education in many of our school camps.

In this study we have seen that conservation ranks low among the subjects of the school camps in terms of the amount of time devoted to it.² The need for such a time study is pointed up by a comparison with Kranzer's study at the Battle Creek Camp. Kranzer listed conservation as one of the components of the activity he termed "hike". His analysis is true, but it does not indicate how frequent an element conservation is in hikes. This observer went along on many hikes at the Battle Creek School Camp; some hikes centered very much on

¹Ibid., p. 51.

²Supra, p. 66, 70.

conservation while four had practically no conservation included in them.

Reference to the lists of material studied in conservation at each of the observed camps¹ will show lack of coverage in certain areas, even in some of the camps devoting the greatest amount of time to conservation education. At Dearborn School Camp there was practically no attention given to forest conservation; there was practically no attention given to either forest or wildlife conservation at Orange and South Euclid-Lyndhurst School Camps; at Warren School Camp, where the camp site abounds with opportunities for teaching soil conservation, there was no mention made of it.

But just as disconcerting as the relative lack of conservation education was the low quality of much of what did exist. This poor quality was evident in three respects.

1. The tolerance of negative "conservation activities". Educators say we learn by doing. If camp staff members permit campers to do things of a harmful nature to our natural resources what kind of resource stewardship is then being learned?

Two campers chopped down a live tree in the presence of a staff member; there was no reason to do so other than to have some chopping practice, and there was plenty of dead wood to practice upon.

Campers swept the leaves away from a large area adjacent to their cabins in one camp, completely exposing the soil to the force of rain and water run-off.

In connection with an art and crafts project, campers picked

¹Appendix II, pp. 152-160.

wildflowers in profusion and then left them to wilt in the craft cabin.

A camp director leading a hike told the forty-nine campers with him, "Everyone get a Jack-in-the-pulpit."

2. Inconsistency between what staff members tell the campers and what the staff members do. The first weakness, mentioned above, might be excused on the basis that such staff members simply did not understand relationships in nature and their connection with conservation. This second weakness is more difficult to explain or accept. How can a child be expected to believe what he has been told about conservation if he sees his counselor doing almost the very opposite thing?

On one trip two staff members led a group of campers past a "No Trespassing" sign into a field which was being severely eroded, but which juniper trees were invading. One of the leaders led a discussion about the erosion and told the campers that the farmer had received an offer to sell his juniper trees to a nurseryman, but that he did not want to sell them. Then, in spite of all these indications that one should treat this farmer's property with great care, these leaders permitted the campers to pull up young juniper trees to take to their homes to plant.

On a wildflower field trip in a metropolitan park, some campers and their leader walked past signs saying, "Do Not Pick the Wildflowers". One camper saw another pick some flowers and said twice, "Hey, you aren't supposed to pick them!" The leader said nothing and led the group on down the trail, picking some flowers, himself, as he went.

On a trip to a pond a leader reprimanded some boys for picking

cattails, but on the same hike this same leader picked wild geranium and phlox. No explanation for the double standard was given.

At an outdoor supper and campfire program campers were cautioned about picking wildflowers needlessly and told that other people want to enjoy them too. Appreciation of living plants was also shown by saving their cooking sticks for use a second time later on. But at this same campfire, another staff member told the group, "Be sure to take your tin cans home. Why take them empty? Why not take a plant?" This was at a heavily used camp site, where thousands of people come to enjoy the outdoors every year.

A sense of stewardship for our natural resources begins with little things. All of a leader's talk about care of resources means nothing if the camper sees this leader do the very opposite.

3. The choice of less appropriate methods of teaching conservation. School camp leaders have accepted the following two principles as part of the very basis of their camping philosophy. First, those things should be done at camp which are suitable thereto, but which are difficult or impossible to accomplish in the classroom. Second, effective learning requires a certain amount of direct learning experience. Thus, in addition to using reading material in our studies, sometimes we view pictures or motion pictures; sometimes we bring actual objects into the classroom; sometimes we go outside of the classroom to observe objects or processes; and sometimes we feel it is important to go beyond the point of observing, to manipulate or do something about that which is studied.

Acceptance of these beliefs would indicate that in conservation education at school camps a premium should be placed upon projects

which include "doing activities" (e.g., building check dams, planting trees) along with discussion. A second choice would be the observation of many things related to conservation which one would not easily find in the ordinary urban school setting. The last choice would be those things such as reading books, watching motion pictures, and hearing lectures, which can be done just as well, if not better, in the classroom.

Yet, in seven weeks of observations, only one work project in conservation was observed, viz. construction of check dams in a gully.

Of the fifty-six minutes spent on conservation education at Orange School Camp, only two minutes (3.6%) were spent teaching outdoors. Of the forty minutes spent on conservation at South Euclid-Lyndhurst, only four minutes (10.0%) were spent teaching outdoors. Most of the indoor time at both these camps was devoted to the showing of a motion picture dealing primarily with soil and water conservation. Both camps had streams passing through their camp sites---streams having problems of streambank erosion, spring flooding, pollution. Both camps had bare soil and gullies available for observation or conservation projects. Yet in the two camps combined, the observer noted only one minute of time devoted to teaching about soil or water conservation outdoors.

Another example of this was the visit of two resource people from a museum to one of the school camps. On a beautiful, sunny, October afternoon these men spent forty-four minutes inside showing slides and bird and mammal skins to the campers, who were crowded together on the floor of the cabin. During this time sixty-three natural science presentations were made, fifty-one of them being

isolated facts and twelve expressing relationships. For twenty-two minutes the group went outdoors, where nine more isolated facts and four relationships were presented. The children were excited about finding a dead shrew on this walk, but it elicited only passing interest from the resource people. In this session, devoted entirely to wildlife, only one statement was made about wildlife management.

Perhaps the most striking example is that of Dearborn. In Table 11 it is seen that Dearborn spent more time on conservation than any other school camp did, significantly greater, at the .01 level, than the mean for all camps. Yet, of the total 124 minutes tallied for conservation education, only twenty-two minutes (17.7%) were spent in the field.

All of this does not mean that motion pictures, books, and indoor lectures or discussions should have no place in a school camp program. Such teaching aids are valuable supplements to the field work. But there is no justification for teaching conservation indoors at school camp, just as one would do in the classroom at school, while disregarding fine teaching opportunities on the camp site.

The reader must not assume that there were no outstanding examples of conservation education observed in these camps. The following samples show some very fine teaching activities in conservation or ecology.

A forestry session conducted by a resource person (college professor) included: growth ring studies on parking lot posts; a game involving study of a large white oak as a wolf tree, a den tree, and a shade tree; digging of soil samples; and a contest in deciding whether certain tagged trees should be cut for lumber or not.

A forestry field trip conducted by a resource person (district forester) involved a carefully arranged variety of walking, seated discussions, and observations, approached from a sound, ecological basis.

A mammal study field trip, conducted by a university student involved observations, trapping of meadow mice, and making of plaster casts of animal tracks.

A self-guided nature trail, using an ecological approach, was devised by another university student.

Several fine field trips were conducted at abandoned farms--including one conducted by a classroom teacher, another conducted by a graduate student using maps and compasses.

In a number of cases permanent staff members were noted seizing opportunities to involve conservation in other activities, not so directly concerned with conservation (e.g., cook-outs).

No one could ask for better conservation teaching than what is represented by these examples. But the fact remains that in these school camps, generally, neither the quantity nor the quality of conservation education was what the observer would have expected to find on the basis of the selection of objectives by the staff members.

The Basis of the Problem

The crux of the problem lies, of course, in the poor training of staff members in this subject field. These camp leaders certainly did not plan to slight conservation; they simply were not prepared to do what they would like to do. Many leaders are confused as to what conservation is and have a vague feeling that when they are teaching identification of trees or when they observe pond life, they are teaching conservation. This lack of understanding makes it extremely

difficult to obtain any reliable information about conservation education from camp directors by means of questionnaires.

Of those who know what conservation is about, there are not many who are competent enough in the subject to be able to do an adequate job of teaching. Unfortunately, the reverse side of the coin is true, also. Many of the resource people who know natural science or conservation facts have little knowledge of how to teach; this results in such things as indoor lectures at camp.¹

The importance of the situation becomes greater when one considers classroom education in our public schools. If in school camp, where conservation is one of the major objectives, the status of conservation education is so low, what, then, is its position in the classroom where, as an objective, it probably becomes comparatively less important? Many of the same leaders are teaching there as at camp, but there is not the stimulus of the environment which is present at camp.

Solutions to the Problem

It is easy to say that the answer to the problem is to achieve better staff training. This is, in fact, not an answer, but a restatement of the problem. It would seem that hope for the future would lie in the following areas.

1. Realistic leadership on the part of school camp directors.

There is a growing group of highly dedicated, professional school camp leaders, centering around those who are directing the programs. It is

¹For an example of this, refer to the case of the two resource people on pp. 115-116.

this group which holds the key to the future of school camping. So far, in the development of school camping, these people have had to spend a great portion of their time in public relations and in organizing new programs. These people realize they have a valuable educational program in school camping. Furthermore, they are essentially in agreement on the importance of conservation education in the school camping plan. However, they have been so involved in the spread of this program that many of them have not appraised it carefully enough. When one is so close to a program it is difficult to see it in perspective, and there have been few objective studies of school camping to help these people in their appraisals.

Now, however, there are signs which school camp leaders must not ignore. If professional school camp staff members can carefully reexamine their objectives, take a realistic look at their programs, and accept justifiable criticism, school camping will have the leadership it needs. If an attitude prevails that there is no poor school camping, that a child only needs to go to camp to reap its benefits, then not only will conservation education be weak, but also a valuable educational program will gradually wither.

2. Reorganization of the use of resource people. It has been apparent, no doubt, that much of the conservation taught at school camps has been dependent upon the use of resource people brought in for this purpose. Table 17 shows that more minutes were spent by resource people than any other group in the teaching of conservation--their percentage of active leadership time spent on conservation being significantly higher, at the .01 level, than the mean for all staff members. This observer believes that it is time for school camping

leaders to reorganize the manner in which these resource people are used.

When school camping was in its infancy the dependency upon resource people in teaching natural science and conservation to campers was not such an unworkable plan as it is getting to be now. As camps become more numerous there is a point being reached when it is no longer practical to depend upon such people for teaching conservation to children. There will not be enough of such people to go around. Furthermore, as has been pointed out, many of the available resource people simply are not fitted for teaching children, although they know their subject matter thoroughly.

More important than such practical considerations, however, is the basic question: Who should teach conservation in the public schools? Resource people are not used extensively in reading, arithmetic, language arts, and social studies. There is no mystery about conservation, no reason why elementary school teachers cannot know it as well as their other subjects. In fact, conservation represents a blending of natural science and social studies in such a way that achievement of a working knowledge in the field should be relatively easy for a teacher.

But in the school camps where resource persons taught the children, the usual pattern was for the classroom teacher (or any other leader present) to completely relinquish responsibility for teaching the session, and in some cases to refrain from participation in the activity with the resource person. What effect does this sort of organization have upon the attitudes of the camper toward conservation and his regular leader? Does he feel that because his regular leader

TABLE 17
MINUTES OF CONSERVATION TAUGHT BY STAFF MEMBERS

Staff Member Groups	Minutes Active Leadership	Conservation Taught	
		Minutes	Per Cent of Active Leadership
Classroom Teachers	7,324	54	0.7 [*]
Special Teachers	4,324	21	0.5 ^{**}
Permanent Staff	6,467	151	2.3
College Students	3,460	10	0.3 ^{**}
High School Students	1,708	1	0.1 [*]
Parents	523	0	0.0
Resource People	2,610	264	10.1 ^{**}
All Staff Members	26,416	501	1.9

^{*}Denotes a per cent which differs significantly, at the .05 level, from the per cent for All Staff Members. (Significance computed as outlined, p. 79.)

^{**}Denotes a percent which differs significantly, at the .01 level, from the per cent for All Staff Members. (Significance computed as outlined, p. 79.)

shows no interest in conservation (either by not attending the session or by apparently not learning the conservation material) that conservation surely must be an uninteresting subject, deserving of little attention on his own part? Does he feel that since his regular leader cannot handle conservation it must be an extremely difficult subject which he would have little hope of mastering? Does he feel that his regular leader is incompetent because of having to rely so much on resource people to teach conservation?

There is a need for resource people in the conservation education field, but that need is primarily on the level of the adult leaders and not on the child level. If there is any value to the professional education of school teachers, then they should be the ones to teach the children, and the resource people should be used to teach the teachers.

The use of resource people in direct teaching of children probably has persisted because of attitudes on the part of both school people and non-school conservationists. The school leaders have used the resource people partly because this represents a way to teach conservation when one knows little about it himself, but also partly because it represents a way to increase the staff of the school camp. Conservationists have accepted the resource person role because, recognizing that very little conservation is taught in the schools anyway, they see here an opportunity to reach a few more children.

The observer feels that both groups are defeating their own ends in the long run. It has been pointed out in this study how such a staff organization results in weaknesses in the program--leaders not knowing how to teach, leaders not knowing the nature of the children

they are teaching, and activities unrelated to one another. The net effect produces little conservation education, at best, and a camp program which may not stand the test of time. It is the school-employed teacher who must teach conservation (either in the classroom or at camp), and if that person does not know conservation, then he must learn it. It is recognized that there is educational value in occasional use of resource people for specific objectives; however, this is different from the wholesale use of resource people to cover a complete subject area.

The observer feels that the following specific steps must be pursued: First, the regular camp leader must retain control of the learning situation when a resource person is used. The regular leader must always be present, must not only introduce and close a session with a resource person, but also continually contribute during the session, if necessary, asking questions where needed, restating in understandable language any material which children cannot understand, and seizing control of the situation in cases where obviously the resource person is going in the wrong direction. The regular teacher must remember that he is basically responsible for all the learning during a session with a resource person. The resource person should be what the title says, a "resource", not the director of the learning situation.

Second, a resource person should be careful in accepting a resource role in a school camp. He should be sure that he and the regular leaders all understand the objectives of the particular activity session. He should expect the regular teacher to accompany him on the session for two reasons - because the regular teacher is responsible for the learning process, and because it is an opportunity for the

regular teacher to learn the subject matter of conservation.

Third, in cases where a resource person is used, an attempt should be made to have the person spend as long a time as possible at camp, staying through meals, evening programs, free-time periods, etc. The resource person then would have a better chance to know the children and the whole program, and the other staff members would have more opportunity to gain knowledge from the resource person. It would seem valuable for an agency like the Michigan Department of Conservation, which regularly assigns personnel to school camps, to assign one person to one camp for two or three consecutive days, instead of assigning two or three individuals to the same camp for short visits each within one week.

Finally, in order to accomplish more quickly the needed staff training in this field, school camp leaders and conservationists, alike, must work toward a shift of emphasis from resource people working largely with children to resource people working largely with adult leaders--at adult conferences and training programs.

3. Greater use of college students in school camps. A final, practical step which school camping leaders can pursue to improve the status of conservation education in school camps is to achieve greater participation of college students in a training role at camp. Prospective teachers of today are the teachers who will be going to school camp with their own classes in five years. If properly handled, their college experiences at school camps can be invaluable to the school camping movement in the future. College students can be helpful in the camp program, but the experience should be looked upon primarily as an educational experience for them. If this experience can give

them a sound approach to conservation education, then school camping in the future will be different from what has been portrayed in this report.

Conclusion

There is no question that school camping offers some excellent opportunities for conservation education. However, school camping leaders and conservationists, alike, must realize that we are a long way from making full use of this opportunity. School camp leaders must appraise their programs carefully and work to bring their programs more closely in line with their objectives--or else change their objectives. Conservationists must work hard to train the school camping leaders in the field of conservation. If fuller use is made of the opportunity to teach conservation in school camps it is very likely that school camping will prove to be a lever having an effect upon the whole elementary school program.

CHAPTER VII

IMPLICATIONS FOR SCHOOL CAMPING IN GENERAL

In the previous chapter attention was centered upon the school camp as an agency for conservation education. This has been the primary concern of this study. However, when one spends seven weeks in careful observation of school camp programs and many more weeks talking with leaders and pondering over the observations and interviews, he arrives at some judgments about school camping in general, which, although subjective, are based upon considerable objective evidence. The following judgments stand out among the many reactions of the observer to this study.

1. School camping has great value as an educational program.

While the observer has been highly critical of existing practices at times, he has gained a confidence regarding the potentialities inherent in school camping. There are many factors which make the learning possibilities outstanding. The opportunities for learnings in certain school subject areas, particularly conservation, natural science, and physical education; the unique opportunity to work toward social and personal objectives, which is afforded by round-the-clock community living; the continuity of before-camp, during-camp, and after-camp experiences under unified leadership--these have already been pointed out. In certain ways school camping represents a break through the walls of tradition, in the direction of improved methodology. There is considerable freedom and flexibility of organization which makes

experimentation easy. Generally, the staff-pupil ratio has become such that small-group activities are relatively easy to arrange. These qualities, combined with the high degree of motivation which the campers have, present a rare chance for a teacher to achieve something like an ideal teaching situation.

It may well be that work carried on in this camping situation will prove to have influence on the field of education as a whole. One of its effects, for example, may be in the area of in-service training. The ordinary classroom teacher usually works completely by himself, so much so, that many school systems provide a certain number of visiting days each year for the teacher to observe other teachers in action. In this light, a week spent at school camp--working with other teachers, observing techniques which others employ, and having the stimulus and opportunity (e.g., in evenings at camp) to discuss professional concerns with other people in the field--becomes a chance for in-service training.

2. School camping is a supplement, not an alternative, to the classroom. Some school camp leaders, in explaining and justifying school camping, pit the camp against the classroom as though education could accommodate only one of them. This is unfortunate and may account for reluctance among some classroom teachers to accept school camping. Naturally, a classroom teacher would be defensive and antagonistic if, by comparison, it were indicated that the classroom could not be operated democratically, that work experiences could not be provided in the school building, or that healthful living did not apply indoors. Yet, some of the school camping literature gives this impression. The classroom is useful, and education could not easily get

along without it. Certainly, books provide one of the most efficient paths to learning that civilization knows. In spite of the value of direct experience, if we were forced to learn everything solely by this means, we would not progress very far.

The school camp is one aid in the educational process--just as are the library, the school grounds, the gymnasium, the auditorium, and the classroom. The school camp loses its justification if it is divorced from the ongoing school curriculum. If the classroom teacher does not accompany the class to camp, if the children do not attend as a classroom group, if there is no preparation for, or follow-up of, the camp experience in the classroom--then there can be little reason for a school system to be involved in camping.

One of the things which might have helped to create the idea of a conflict between the classroom and the camp, is the principle which has been at the very basis of the school camping movement, viz., that those things which can be taught best in the classroom should be taught there, and those things which can be taught best out-of-doors should be taught there. This tends to create a comparison and an attitude of competition regarding which location can do a better job with what subjects. Actually school camp leaders have accepted this statement for years without ever carrying it much farther. Seldom has anyone really tried to specify exactly what it is that can be taught best, where, and when. There is probably no agreement on what is "best teaching". Is it teaching in the shortest amount of time, is it teaching for the lowest financial cost, is it teaching which results in retention for the greatest length of time, or is it teaching which instills a desire for further learning in the pupil? The answer

requires a judgment which is not determinable in a precise, objective manner. Therefore, this principle about teaching somewhere what is best taught there is a very agreeable one in theory, but becomes a most difficult one to apply.

3. School camp staff members need to evaluate their programs much more carefully. This point has been made repeatedly throughout this study because the observer has been so deeply impressed by this shortcoming in the school camp field. More careful evaluation needs to be made of objectives, methods, organization, and content. This is the only basis for improvement. Too many school camp staff members have never looked closely at what they have been doing. School camping literature is full of proposals, plans, and recommendations, but of very few critical appraisals. For example, the recent Bibliography of Studies and Research in Camping, published by the American Camping Association, lists forty-six titles dealing with "School Camping and Outdoor Education."¹ Less than one-fourth of these titles indicate that they would include an evaluation of existing programs, and most of the existing evaluation is highly subjective.

The criticism of school camping programs put forth in this report may appear to imply exceptional weaknesses on the part of the staff members. The observer does not feel this is so. He has been concerned about the nature of school camp programs and especially about the status of conservation education. As such, he has reported the situation as observed, with the hope that this information might lead to improved practice. It is very likely that if such close scrutiny,

¹Lenore C. Smith, Bibliography of Studies and Research in Camping, Martinsville, Indiana: American Camping Association), pp. 10-13.

as has been given to these school camps, were given to similar programs such as those of the classroom or the summer camp, that the same disparity between practice and ideal would exist. The permission of these school camp leaders for such a detailed evaluation is a tribute to their professional spirit. In fact, one of the most encouraging factors in the school camping picture is the presence of such dedicated and enthusiastic leaders. Such leaders can accomplish many improvements and make real progress if they examine their programs critically.

One need in this process of evaluation is for more inter-visitiation among school camp staffs. School camp leaders know, better than anyone else, that a person must visit a camp program for relatively long periods of time to appreciate and understand it fully. With such a variety of activities in progress during a day at camp, it is easy to obtain a wrong impression from a brief visit at any particular time. School camp leaders, themselves, would profit greatly from more and longer visits to other camps than is the custom. Administratively this may be difficult to arrange, but it is a goal for which to strive.

4. School camping must include much content learning. It is a hopeful sign that this study shows school camp staff members placing strong emphasis upon two areas--social (group living) objectives and the natural science-conservation content field. However, there seems to be a group of school camping people who feel the only importance in camping lies in the group living values. One sometimes has the feeling that these people believe that campers should do nothing but live together. But living together without some content to live for is rather shallow living. One cannot learn to accept responsibility unless

there is something to be responsible for. One cannot learn to plan together with others unless there is something for which to plan. The content learning of the camp makes the meat of the program for which people live together. There can be more purposeful living together if there is much content learning taking place. There should be no fear of learning subject material at camp along with cooperation, independence, and responsibility. The realistic teacher will realize that most children will have their social skills and personality patterns quite fully developed by life within the family even before starting to school and that changes in these areas do not come easily thereafter. This is not to say that a week at school camp does not have effect upon an individual's social adjustment, upon his personality structure. But this effect can be exaggerated. And when content learning is so facilitated by such things as the high degree of pupil motivation, the community life, the natural environment, and the correlation possible with the classroom, it is fitting that such content learning be a major objective of the school camp program.

5. There will, of necessity, be a trend toward more permanent staff members. Probably the most ideal arrangement for school camping is for an inspired and qualified classroom teacher to plan and execute a complete week of camping by himself, obtaining the camp, arranging for supplementary staff help, handling the provision of food, and planning the entire educational program. In this way, the classroom teacher is surely the program director, and the pupils are probably more easily involved in the whole learning process than if there is some type of permanent staff or on-going organization already established. This is the way that pioneer school camping groups usually

get their start. However, if school camping depends only upon such teachers it will not, in the foreseeable future, become a large movement in American education. Any great spread of school camping will come about only with the formation of a continuing school camp staff group--either permanent staff members hired specifically for this work, or, in the small schools, special teachers who have the yearly camping program as part of their assignment. The frequent lack of adequate background for school camping, even on the part of dedicated and enthusiastic leaders, has been stressed in this study. It takes training and experience, and every classroom teacher cannot be expected to have this or to obtain this quickly.

The need for such stability in school camp leadership is indicated by the history of the camps in this study during the three years since the observations were made. Of the four camps not having any kind of permanent staff, one camp has suspended operations (reportedly for financial reasons), one camp has curtailed operations (few teachers are going to camp, supposedly because the special teacher who directed the program left the school system shortly before the observation period of this study), one camp has hired a permanent director, and one camp has assigned a special teacher to work with the camp each year.

6. There is a need for more trained staff members than is represented by the usual classroom pupil-teacher ratio. It might be considered adequate for one teacher to teach thirty pupils in a classroom for five or six hours a day, but this ratio is completely unworkable in the school camp where pupils and staff are living the entire day together. Extra staff must be provided. The American Camping Association

standards for summer camping state there should be one staff member (not counting maintenance, medical, or administrative staffs) for every eight campers eight years old or older,¹ and there is no reason to believe that school camping should require a different ratio. The school camps in this study have recognized this, of course, and have tried to fill this need in several ways, using other school employees (in addition to the classroom teacher), college students, high school students, parents and other resource people. School employees are most desirable (it is interesting to note that since the period of observation two of the camps having permanent staff members have enlarged their permanent camp staff). High school students are not mature enough to be considered staff members, although they, themselves, might profit from a camping experience with elementary school children. Of the other possibilities it would seem that college students offer the greatest hope for staff help. Parents are a rather uncertain help, usable only in limited situations. Resource people are limited in numbers and can participate in the camp programs for only short periods. College students, on the other hand, can frequently be obtained for a whole week or more. They are in a period of their life devoted to study so that they have special motivation for learning the many things that have to be learned in a short time, and their experience in the camp program will be of direct benefit to them later, either as teachers or parents.

¹American Camping Association Standards (Martinsville, Ind.: American Camping Association), p. 1.

Conclusion

School camping is a program holding great promise as a supplement to regular classroom education. While it can have application in many subject fields, it has particular relevance to conservation, natural science, physical education, and democratic citizenship. Special concern has been expressed for the status of conservation education in school camping. There appears to be general recognition of the great importance of conservation education as an objective of school camping, but in the actual school camp programs observed in this study, conservation was given little emphasis. This is due, in large part, to inadequate preparation of teachers in the field of conservation. With our problems of resource management becoming increasingly important, it is urgent that fuller use be made of the educational opportunities presented by school camping in the field of conservation. School camp leaders must realize that herein lies one of the greatest challenges in school camping and that staff preparation represents the level where the most effective improvement can be made.

APPENDIX I

OBSERVATION AND QUESTIONNAIRE FORMS

Trial Observation Form

The following page consists of the trial observation form discussed in Chapter I.¹ There are four main parts to this form.

First, the heading has blanks to identify the class attending camp for the week, the camp site being used, the date and hour of the day, the nature of the activity being observed, the location of the activity on the camp site, the size of the activity group, and the names or number of adults present ("Supervision").

Second, is a place to indicate the objectives of the staff members for the activity being observed.

Third, there is a place to enter any pertinent comments or description of the activity.

The last portion of the blank provides space for recording: the number of minutes spent in planning, evaluation, lectures, demonstrations, discussions, activities where child leadership was being utilized, and doing activities; the number of questions asked by leaders and by campers; the degree of interest exhibited by campers; and the number of references correlating the activity with other phases of the school curriculum.

¹Supra, p. 7.

School	Camp site	Date
Teacher	Class	No. Pupils
Activity	Location	
Group Size	Supervision	Time
Objectives:		

Comments:

[illegible]

The Final Observation Form

On page 138 is the final observation form developed for use in observing the school camp programs described in this study.¹ Following is a key to the meaning of the abbreviations on this form.

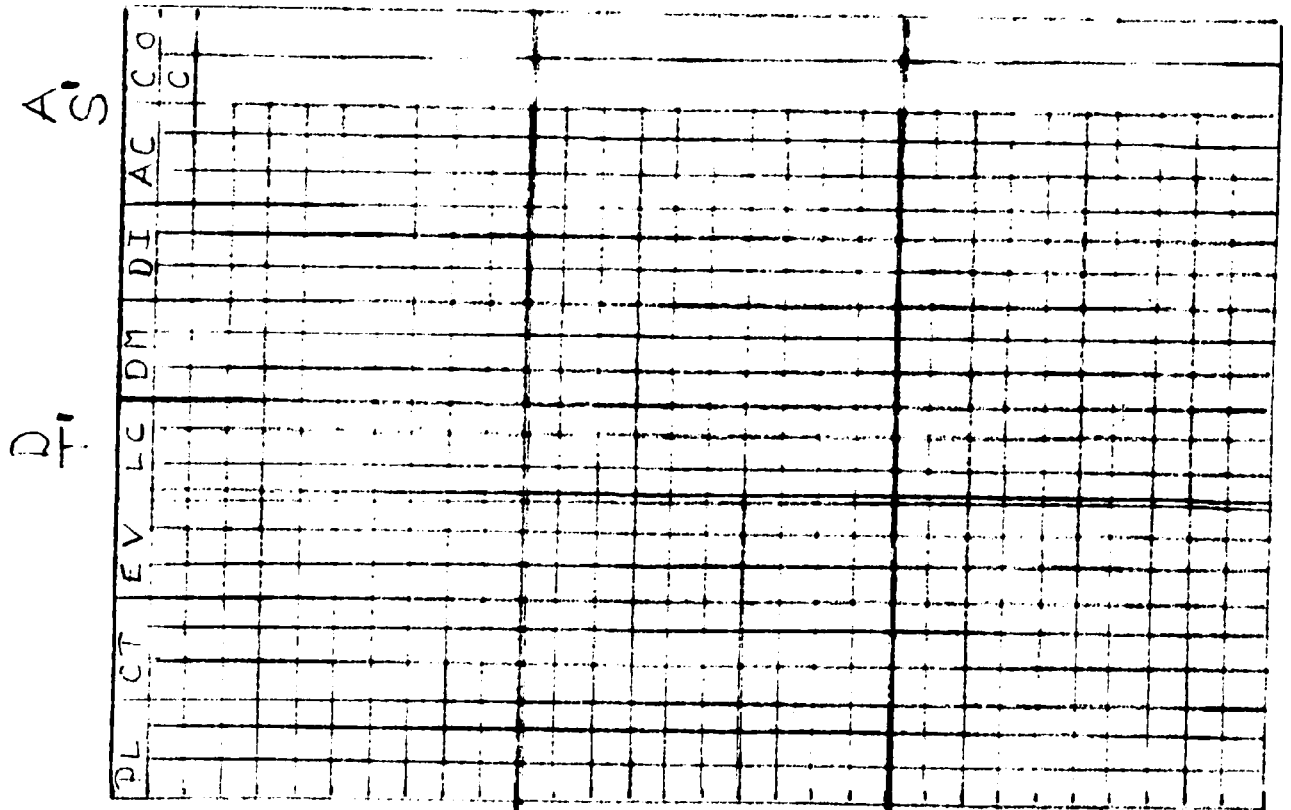
The Heading of the Observation Form

- A--The activity being observed
- C--The class grade and number of pupils attending camp for the week
- D--The date of the observation
- L--The location of the activity on the camp site
- S--The school attending camp for the week
- S'--The supervision of the activity (name of leaders--number of campers)
- T--The teacher(s) of the classes attending camp for the week
- T'--Time of day of the observation

The Top Edge of the Grid

- AC--Activity that is primarily non-verbal
- CT--Content activity (not involving planning or evaluation)
- CO--Observed correlations with previous activities
 - c--References made to things which occurred previously at camp
 - s--References made to happenings in the classroom
- DI--Discussion
- DM--Demonstration
- EV--Evaluation

¹Supra, pp. 11-12, 53.



STC

C

L

T

L

LC--Lecture

PL--Planning

The Left Side of the Grid

C--Participation of campers

L--Participation of leaders other than classroom teachers

T--Participation of classroom teachers

The Staff Questionnaire

On page 140 is a copy of the questionnaire used in connection with staff interviews. The portion of the questionnaire entitled "Objectives", is for recording the numbers of objectives selected by staff members in the card selection procedure. This selection procedure and the results obtained from it are given in Chapter II.

Most of the other questions included on this questionnaire are discussed in Chapter III.

Date _____

Name _____

School Camp _____

Employing Agency _____

Position _____

ObjectivesMost ImportantApplicableNot ApplicableQuestions:

1. Should camping (A) be an integral part of the school curriculum in which every child should have an equal opportunity to participate, or (B) should it be an extra activity for those teachers and classes who particularly want it? (A) _____ (B) _____

2. Do you feel that certain grade levels receive greater value from a school camping experience than other grade levels? _____
If so, which? _____

3. Should certain school subjects be stressed more than others in a school camping situation? _____ If so, which subjects? _____

4. Are you satisfied with the staff arrangements for this school camp? (For example: Do you need more resource people? Are there too many resource people? Is the counselor-camper ratio satisfactory? Are more women counselors needed? Are more men counselors needed? Would teachers-in-training be of help?) If you are not satisfied, what changes would you like to see?

5. What previous experience have you had in camping and outdoor education?

6. What academic training have you had?

CollegeMajor SubjectsDegree

7. What teaching experience have you had?

APPENDIX II

NOTES ON OBSERVED PROGRAMS

A. Arithmetic

Ann Arbor (Total staff-directed time observed in arithmetic: 26 min.)

In connection with forestry study:

Counting age of living pine tree by layers of branches

Determining age of felled oak by counting annual rings

Counting growth rings on posts along driveway

Using concepts of diameter, fraction, board foot, and cubic foot

In connection with orienteering (map and compass activities):

Learning there are 360° in a circle

Carrying on directional work in terms of degree readings of compass

Determining how long ago was 1937 (while discussing an old farm)

Battle Creek (Total staff-directed time observed in arithmetic:
36 min.)

In connection with banking, e.g., adding up money banked

In connection with cook-out:

Adding the number of people going on the cook-out

Figuring quantities of food needed (the number of pounds of meat needed to provide two "sloppy Joes" per person--the amount of cocoa and apricots--the number of onions, celery sticks, bottles of milk, graham crackers, buns, chocolate bars, marshmallows, and cans of tomato soup)

In connection with orienteering:

Learning there are 360° in a circle and using degree readings of compass

Learning there are two and one-half feet in a "normal" walking step and counting steps while on a compass course

In connection with settling in camp:

Determining the number of doubledeck beds needed in bunkrooms (division)

Counting the number of campers in the activity group

Computing the number of campers to be with each counselor (division)

Estimating the number of gallons in the water tower

In connection with studying a sawmill:

Using the concept of diameter

Measuring the actual dimensions of a 2" x 4" and 4" x 4" boards

Cleveland Heights (Total staff-directed time observed in arithmetic: 32 min.)

Learning that twenty per cent equals one-fifth (in course of campfire discussion on how much we use our brain power)

In connection with cook-out, determining the number of bottles of catsup for each packbasket (involving fractions)

Game and puzzle using arithmetic: "buzz" and problem of two people marooned on desert with three cans of water

Pancake computations following one breakfast: (12 min.)

Adding the total number of pancakes eaten per table and for all tables

Determining the average number of pancakes eaten per table (using fractions)

Determining which is greater, three-fourths or seven-eighths

In connection with tree study:

Learning that "round" figures mean "approximate" figures

Determining the cost of four board feet of lumber at 20¢ a foot

Use of concept of diameter of tree

Learning that the ratio of maple sap to maple syrup is as great as 60 gallons to one

Measuring the circumference of the largest tulip tree in camp and an ensuing discussion about circumference, diameter, and conversion of inches to feet (Discussion lasted 8 minutes)

In connection with weather study:

The use of denominate numbers and the concept of temperature degree

Determination of how far below freezing given temperatures were

Dearborn (Total staff-directed time observed in arithmetic: 37 min.)

Developing a meaning of the size of an acre by having campers run around a field approximately an acre in size

In connection with the Trading Post (free-time activity in afternoons):

Writing checks

Addition and subtraction on the check stubs

In connection with a mapmaking project:

Learning meaning of a "transit"

Learning to use a compass, learning meaning of "degree", and learning there are 360° in a circle

Measuring by means of a ruler, pacing, and a rope measure

Orange (Total staff-directed time observed in arithmetic: 4 min.)

Reference to four quarts equaling one gallon (in conservation lecture)

Use of concepts of diameter, angle, and log length in woodchopping

Use of numbers in rhythm-number game

Plymouth (Total staff-directed time observed in arithmetic: 2 min.)

In archery, determination of distance and shooting of arrows fifteen yards and twenty yards from target

South Euclid-Lyndhurst (Total staff-directed time observed in arithmetic: 1 min.)

Discussion of diameter of bird nest being three inches

Warren (Total staff-directed time observed in arithmetic: 56 min.)

In connection with orienteering:

Determining the length of one's pace

Computing the distances walked (mapmaking project)

Computing how many sit at a dining table when there are six people on each side and one at each end

Counting in connection with the rhythm game, "Who Stole the Cookies"
(Free time)

B. Art and Crafts

Ann Arbor (Total staff-directed time observed in art and crafts:
32 min.)

Beauty to which campers' attention was called in developing esthetic appreciation:

Beauty in flight of buzzards

The perfume of apple blossoms

Activities:

Making nature trail signs, including sawing the wood, lettering, and woodburning the names

Making plaster casts of animal tracks

Making terraria

Battle Creek (Total staff-directed time observed in art and crafts:
1 hour, 4 minutes)

Beauty to which campers' attention was called in developing esthetic appreciation:

Night sounds

Beauty of the starlit, night sky

Reflections of stars in the lake water

Activities:

Making arrows out of cattail stems

Building miniature houses out of moss, leaves, twigs, etc.

Helping to obtain materials for basket weaving of splints and observing an Indian making baskets of such materials

Making rope by twisting fibers by hand

Making shadow boxes, plaques, acorn animals, and acorn pipes

Cleveland Heights (Total staff-directed time observed in art and crafts: 3 hours, 14 min.)

Beauty to which campers' attention was called in developing esthetic appreciation:

Pretty mushrooms, looking like snow

Beauty to be seen in a campfire

Perspective as seen in distant, overlapping hills

Beauty of sunlight on top of distant hill

Trees etched against the sky with snow on the ground

Clouds looking like mountains

Shadows on the snow and snow appearing like white blossoms on plants

The beauty of bracket fungus, birch trees, clubmoss, maple trees, red maple buds, and hepatica

Beauty of rock ledges, waterfall, and plants growing there

Tall evergreen trees at an old cemetery

Activities:

Making lapel pins from black cherry wood, sumac wood, and old wooden boxes—sawing, filing, using a vise, applying pin backs, and waxing

Whittling letter openers, magic twirling sticks, neckerchief slides, and making buttons and "buckeye" twirlers

Making seed displays by taping seeds on large manila paper

Stenciling camp emblem on scarf material

Drawing sketches to illustrate wall-chart diary

Dearborn (Total staff-directed time observed in art and crafts:
9 min.)

Beauty to which campers' attention was called in developing esthetic appreciation:

A beautiful red oak tree

A hillside dotted with junipers

Activities:

Making winter bouquets of milkweed pods

Making writing boards for use in cabins

Orange (Total staff-directed time observed in art and crafts:
2 hours, 56 min.)

Beauty to which campers' attention was called in developing esthetic appreciation:

A woodland log, rotting and covered with small plants, making a natural terrarium

Old-style printing and pictures illustrating a story told by a resource person

Activities:

Gathering natural craft materials (sticks, clay, etc.) on a hike

Drawing a pictorial map of camp

Spatterprinting leaf prints on invitations to parents' night

Making leaf prints with printer's ink

Whittling totem sticks and miniature totem poles

Sketching the camp fort with crayons, first on manila paper, then on paper plates

Modeling with native clay

Plymouth (Total staff-directed time observed in art and crafts:
2 hours, 5 min.)

Beauty to which campers' attention was called in developing esthetic appreciation:

The pretty flowers of witch hazel trees

Activities:

Spatter-printing leaf prints

Making frames for the leaf prints out of aspen twigs--splitting the twigs and then lashing them together

Sketching

Leatherwork

South Euclid-Lyndhurst (Total staff-directed time observed in art and crafts: 42 min.)

Beauty to which campers' attention was called in developing esthetic appreciation:

Spring wildflowers

Activities:

Drawing wildflowers and the parts of wildflowers

Warren (Total staff-directed time observed in art and crafts: 1 hour, 40 min.)

Activities:

Drawing semi-pictorial maps of camp

Constructing models of the camp fort with sticks, glue, clay, and bark

Bark craft--carving initials in pieces of dead bark, glueing names in alphabet noodles to bark in making lapel pins, using bark for plaques and to hold moss gardens

Making beads from native clay and stringing them on wire

Making paper weight with a rock with name glued on it in alphabet noodles

C. Campcraft

Ann Arbor (Total staff-directed time observed in campcraft: 1 hour, 56 min.)

Cook-out:

Fire built and later extinguished with water

Menu: hamburger, carrots, potatoes, and onions in aluminum foil; potato chips; oranges; marshmallows; and orange pop

Knives used in preparing food

Supplies carried by campers to and from cook-out in boxes and a milk crate

Battle Creek (Total staff-directed time observed in campcraft: 4 hours, 15 min.)

Making arrows out of cattail stems

Building campfires, one outdoors and one in an outdoor fireplace

Chopping and sawing black ash trees to be used in basket-weaving

Discussion of Indian trail signs and woodchuck-hide jugs with Indian resource person

Building a lean-to shelter with slabs, hammer, and nails

Planning menu quantities for cook-out, including "sloppy Joes", dried apricots, potato salad, celery sticks, cocoa, and s'mores

Cook-out "A":

Supplies, including most of firewood, driven to the spot (one and one-half miles from camp) by truck

Two cooking fires built--one for campers and one for leaders--and fires extinguished with water

Menu: "sloppy Joes", carrot and celery sticks, apple, milk

"Sloppy Joes" cooked in one large pot

Cook-out "B":

Supplies carried by campers to and from cook-out spot

The group sub-divided into three groups for cooking

Three fires built and later extinguished with dirt

Menu: "Pigs in blankets" (weiners, bacon, and cheese cooked on a stick by each camper), buns, milk, and candied apples ("candy" cooked in one #10 tin can and apples dipped into it)

Cook-out "C": (same cook-out spot as "B")

Supplies carried by campers to and from cook-out spot

One cooking fire built and extinguished with water from lake by leaders

Menu: hamburgers, potatoes, vegetables cooked together in aluminum foil; milk, candied apples (as in "B")

Cleveland Heights (Total staff-directed time observed in campcraft:
4 hours, 22 min.)

Discussion of use of compasses as an aid in finding direction

Observation of lashing and primitive campsite made by former campers

Trailing game using Indian and pioneer trail signs

Instruction in the use of a jackknife, including discussion, demonstration of proper handling, demonstration of how to sharpen, and practice in sharpening and using one's own knife

Fire-building demonstration by leader with accompanying discussion on safety practices and how to extinguish a fire (conducted at indoor fireplace)

Fireplace cooking (one group at indoor fireplace and one group at outdoor fireplace, because of wet snow)

Fires built in the two fireplaces

Menu: chili con carne (cooked in #10 tin cans), carrot and celery sticks, apple, and milk

The total group of campers divided into five cooking groups, each with a pot of chili

Cook-out:

Supplies carried by campers to and from cook-out spot in pack baskets

Campers organized into four cooking groups, each supervised by one camper "captain" and one counselor

Four fires built and extinguished with water

Jackknives used in preparation of food

Dearborn (Total staff-directed time observed in campcraft: 15 min.)

Reports on one or two cook-outs made by campers at the evening "news-cast"

(No cook-outs observed since bad weather canceled most of them)

Orange (Total staff-directed time observed in campcraft: 2 hours, 47 min.)

Instruction in use of axes and hatchet followed by chopping of firewood

Instruction in use of jackknife followed by using knife to cut cooking sticks

Cooking bread-on-a-stick and toasting marshmallows on sticks over a fire

Cook-out:

Supplies driven to and from cook-out spot in jeep

Two fires made in large outdoor fireplace

Menu: Hunter's stew (ground meat, carrots, potatoes, onions) cooked in coffee cans (two portions in one can)

Plymouth (Total staff-directed time observed in campcraft: 2 hours, 22 min.)

Chopping, sawing, and splitting firewood

Storing firewood under a cabin to keep dry

Putting log bench in amphitheater (involving chopping and sawing)

Instruction in making square lashing

Cook-out:

Supplies, including firewood, carried by campers to cook-out spot

One cooking fire built and later extinguished with dirt

Menu: weiners (cooked on sticks), potato chips, carrot and celery sticks, apples, marshmallows, milk

South Euclid-Lyndhurst (Total staff-directed time observed in campcraft: 1 hour, 1 min.)

Discussion regarding the use of jackknives, sheath knives, and hatchets

Discussion of what to do if lost

Helping in the making of campfire

Roasting marshmallows on sticks

Warren (Total staff-directed time observed in campcraft: 1 hour, 44 min.)

Tracking game, involving use of Indian and pioneer trail signs

Cook-out "A":

Supplies carried to cook-out spot by campers with pack baskets

Two cooking fires built in a large, outdoor fireplace (by leaders)

Menu: Hunter's stew (cooked in individual coffee cans on the grills), sweet rolls, apple, milk

Cook-out "B":

One large cooking fire built

Menu: weiners (cooked on sticks), buns, baked beans, (pre-cooked), cabbage salad, doughnuts, oranges, marshmallows (toasted on sticks)

Jackknives used for cutting cooking sticks

D. Conservation

Ann Arbor (Total staff-directed time observed in conservation:
1 hour, 18 min.)

Material studied:

The conservation pledge

General care of property:

Responsibilities in regard to using fire, breaking branches,
and carving on trees and buildings

Maintenance of clean grounds by picking up paper and other
trash following activities such as cook-outs or making of
plaster casts of animal tracks

Fire prevention by carefully extinguishing cook-out fire
with water

Protection of wild plants:

Restraint in picking plants (e.g., crowfoot violet, trillium,
and Jack-in-the-pulpit) without permission

Exercise of care when walking off trails so as not to tramp
on beds of wildflowers, e.g., violets, wild strawberry

The need for protection of ground pine from over-picking for
winter greens

Forestry:

The importance of accessibility in logging--old trees on a
swamp ridge never having been cut because of difficulty in
removing logs

The undesirability of allowing trees to die and rot in most
forestry practice

The planting of elm trees because of their shade value

Forestry terms: den tree, wolf tree, shade tree, selective
cutting

Wildlife conservation:

The value of hawks

The planting of grains (for food) and multiflora rose (for food and shelter) as practices of wildlife management

The million dollar value of muskrat fur in southern Michigan

The value of hollow trees as den trees for wildlife, providing animals for hunters and providing squirrels to be of value in "planting" nuts for foresters

Soil Conservation:

The effect of improper farming on hillsides--bare, denuded soil

Erosion in old farm fields

The value of crop rotation in maintaining soil fertility

Problems of proper land use:

The relationship of poor soil and poor farming to present condition and use of the land (former farm land, now state-owned recreation area)

The ownership pattern of land as an indicator of poor soil, where ownership changes frequently within a short period of time

The value of marshland

The importance of using certain land for pasture rather than cultivation

Activities which included most of the above conservation material:

Talk by state park ranger about his work and about state recreation areas

Field trip on mammal study, led by resource person

Field trip on forest ecology, led by resource person

Nature trail walk, led by resource person

Field trip on forestry, including several conservation games, led by resource person

Breakfast table discussion centering around the conservation pledge, led by special teacher

Battle Creek (Total staff-directed time observed in conservation:
1 hour, 29 min.)

Material studied:

General care of property:

The importance of leaving a camp site cleaner than one finds it, e.g., not leaving apple cores lying around

Proper method of putting out campfires

Plant protection:

Restraint in cutting live wood

Restraint in picking plants unless there is a need for it

Forestry:

Factors in the selection of trees for saw logs

Forest tree diseases

Use for slabs, e.g., firewood

Uses for sawdust, e.g., bedding chickens, composition boards, ice houses

Wildlife conservation:

The value of farm ponds for wildlife

The importance of farms retaining hedgerows for wildlife

Soil conservation:

The relationships among poor land, poor crops, and erosion

Causes and cures of erosion

The value of contour plowing and check dams in halting erosion near the start

Activities which included most of the above conservation material:

Field trip and cook-out at abandoned farm

Field trip to a sawmill

Cook-out in a wooded area

Building check dams to control gully erosion

Cleveland Heights (Total staff-directed time observed in conservation:
38 min.)

Material studied:

Definition of conservation

Forest conservation:

The destruction caused by forest fires

Proper method for putting out campfires

The value of a pine tree plantation in erosion control

The destruction caused by the chestnut blight

The value of pine trees for lumber

Restraint in picking flowers or tearing off leaves of trees

The destruction of partridge berry and clubmoss by being used for Christmas greens

The damage caused to trees by grapevines

Wildlife conservation:

The value of grapevines in giving animals food and shelter

Soil conservation:

Check dams as a means of controlling gully erosion

The value of pine tree plantations in erosion control

The use of poverty grass and British soldier lichen as plant indicators of poor soil

The use of manure as a fertilizer

Control of erosion on roadside cuts by planting grass and ways of climbing such hills without wearing vertical paths leading to gully formation

Activities which included most of the above conservation material:

Field trip to a hillside pine plantation and an old cemetery

Field trip to some gullies and along a creek

"All-day hike" and cook-out in large, natural area of woods, field, ravines, and creeks

Dearborn (Total staff-directed time observed in conservation: 2 hours,
4 min.)

Material studied:

Explanation of the meaning of conservation and natural resources

The need of caring for state park property

Preservation of natural beauty:

The need for care in making nature collections

The desirability of covering or camouflaging a dump adjoining
a public area

Wildlife conservation:

The policy of permitting hunting on some state-owned land
and prohibiting it on other state-owned land

The establishment and enforcement of game laws

The use of pistols by game law enforcement officers

The history of and reasons for hunting and fishing licenses

Restraint in killing wildlife which one finds, e.g., snakes

The operation of the short-wave radio system for conservation
enforcement

The establishment of public fishing sites

The planting of corn for wildlife food

Forest conservation:

The danger of forest fires

Soil conservation:

The purposes and operation of the Soil Conservation Service
and Soil Conservation Districts

Types of erosion

The use of aerial photographs for soil surveys

The effect of poor farming upon crop production

A gully caused by cultivation of a hillside field and attempts
to cure it with brush piles

Run-down farms as a sign of poor land practice

Activities which included most of the above conservation material:

Discussion and field trip led by a state conservation law enforcement officer--primarily about wildlife and wildlife conservation

Discussion and field trip led by an agent of the U. S. Soil Conservation Service

Field trip to an old cemetery and poor pasture land adjoining, led by classroom teacher

Orange (Total staff-directed time observed in conservation: 56 min.)

Material studied:

Definition of conservation

Wildlife conservation:

Need of controlling the fox population

Effect upon fish of stream pollution

Forest conservation

Restraint on cutting live trees during camping activities

The utilization of trees from camp property in building log cabins

Soil and water conservation:

Causes and effects of stream pollution

The amount of water utilized per capita per day

The relationship of soil erosion to floods and pollution

Camp gullies and the muddy creek

Activities which included most of the above conservation material:

Showing of the motion picture, The River (U. S. Dept. of Agriculture), with accompanying discussion led by a resource person

Plymouth (Total staff-directed time observed in conservation: 1 hour 12 min.)

Material studied:

Definition of conservation

The operation of the former Civilian Conservation Corps

The operation of the state parks department:

The purchase of the parks

The number of personnel

Protection of physical facilities from abuse

Provisions for exchange of land between the state and private parties in specific cases, e.g., exchange of "used" gravel pit land

History of Island Lake State Park

Wildlife conservation:

Brush piles for animal shelters

Effect of fire upon wildlife

Small game hunting seasons

Effect of dam construction upon muskrat population

Decreasing popularity of fish stocking; the planting of trout

The importance of habitat "edges" in game production

Undesirability of goldfish in rivers

Legal size limits for catching fish

The value of predatory fish

Damage caused by sea lampreys

Forest conservation:

Restraint in breaking live trees during camping activities

Value in taking an increment boring low on a tree so as not to damage a potential saw log

Value of pine plantations on poor soil

Desirability of protection for the flowering dogwood

Desirability of using quick-growing aspen for camp activities requiring green wood

The value of mixed plantings of shade trees to avoid disasters due to a disease such as the Dutch elm disease

The effect of grazing stock in an area undergoing reforestation

Soil conservation:

Effect of cultivation upon the humus content of the soil

Opportunities in using poor farming land for parks

Possibilities of reforesting poor soil

Effects of gully erosion

The slow healing of gullies through natural processes

Water conservation:

Kent Lake Dam, reasons for its construction (recreation and flood control), land acquisition problems, relationships among different public authorities connected with the dam, problems of managing the lake and shore areas

Activities which included most of the above conservation material:

Field trip conducted by agent from the U. S. Soil Conservation Service

Field trip conducted by district fisheries supervisor of state conservation department

Truck trip through Island Lake Recreation Area led by a state park ranger

South Euclid-Lyndhurst (Total staff-directed time observed in conservation: 40 min.)

Material studied:

Plant protection

Restraint in picking wildflowers

Restraint in breaking live branches while gathering firewood and while obtaining sticks for marshmallow roast

Soil and water conservation:

Stream pollution

Consequences of destruction of forests

Man's role in the creation of floods

Activity which included most of the above conservation material:

Showing of the motion picture, The River (U. S. Dept. of Agriculture), with accompanying discussion led by permanent staff member

Warren (Total staff-directed time observed in conservation: 7 min.)

Material studied:

Forest conservation:

Restraint in carving upon live trees

Value in saving cooking sticks for use in more than one cook-out

Wildlife and conservation:

The undesirability of English sparrows and starlings

The damage of cabbage butterflies to gardens

E. Evaluating Activities

Ann Arbor (Total staff-directed time observed in evaluation: 51 min.)

Discussing at campfire what had been done during the afternoon program (8 min.)

Reviewing activities of a mammal hike, immediately following the hike (6 min.)

Discussing evaluation of cabin cleanliness following announcement of inspection results (2 min.)

Discussing at evening program and at final campfire the questions:

"What interested you most in the last two days?"

"Of what value have the study groups been to you?"

"What have you learned?" (23 min.)

Battle Creek (Total staff-directed time observed in evaluation: 39 min.)

Evaluating conditions and problems in girls' bunkroom

Evaluating cook-out (4 min.)

Evaluating the week's activities by an activity group (7 min.)

Evaluating a project of building a lean-to--determining reasons for its collapse (9 min.)

Cleveland Heights (Total staff-directed time observed in evaluation: 2 hours, 52 min.)

Evaluating the role of the cooks in camp and expressing appreciation to them

Evaluating the program of the week during final night campfires, involving such questions as:

"What was most important of the week?"

"What have been some special things that have affected your whole life?"

"How did our campfires fit into our day's work?"

"What were some of the most beautiful things of the week?"

(Two separate final nights were observed, involving 23 minutes and 21 minutes of evaluation respectively)

Reviewing daily activities in connection with writing a wall-chart diary

Evaluating craft projects (15 min.)

Evaluating a cook-out (1 min.)

Dearborn (Total staff-directed time observed in evaluation: 2 hours, 21 min.)

Evaluating activities (e.g., hike to gravel pit) at the end of activity periods to see if the goals which were established at the beginning of the periods were accomplished (Thirty-nine minutes of this type of evaluation were observed.)

Reviewing daily activities of the activity groups as included in the "newscasts" each evening

Evaluating activities as involved in keeping individual camper logs or diaries (Campers were provided mimeographed diary sheets including places for writing such things as: "things that seemed most worthwhile to me at camp", "things I think could be improved upon at camp", "how I think these things could be improved".)

Reviewing a bus trip through Waterloo State Recreation Area

Using a Camper's Self-Evaluation form at the end of a week, including these questions:

"Was I interested in group activities?"

"Did I offer to do more than my share in group activities?"

"Did my group benefit because of my participation?"

"Did I gain in appreciation of the out-of-doors?"

(plus nine other questions)

Orange (Total staff-directed time observed in evaluation: 1 hour, 10 min.)

Participating (in a somewhat limited fashion) in the daily evaluation-inspection of the sleeping cabins

Discussing a folk dance, as to whether it was an enjoyable activity (1 min.)

Plymouth (Total staff-directed time observed in evaluation: 10 min.)

Reviewing activities of a day, first in small activity groups, then by each group reporting to the total group of campers (39 min.)

Inspecting sleeping cabins daily by camper inspectors

Discussing (in one activity group) the two questions:

"What did you learn this week?"

"Have you kids had fun this week?" (2 min.)

South Euclid-Lyndhurst (Total staff-directed time observed in evaluation: 5 min.)

Evaluating wildflower study with such questions as:

"How many think you learned something about flowers?"

"What flowers did you know before you came?"

"What flowers did you learn at camp?"

Warren (Total staff-directed time observed in evaluation: 24 min.)

Discussing at a campfire what was done that day that was interesting

F. Free Time Activities

(in addition to showers, washing-up, and meal duties)

Ann Arbor

Baseball	Keep-away game with playground ball
Boating in lake	Nature trail--making signs and putting them along trail
Campfire-laying with counselors	Packing on last day
Card playing	Piano playing
Electric mammal buzz board	Table tennis
Exploring lake shore	Terrarium construction
Fishing at lake	Volleyball

Battle Creek

Banking	Chess
Buying things at camp store	Climbing hills and trees
Campfire building	Hiking

Ice cream making

Looking at caged ducks and ducklings

Musical chairs

Photography

Playing on beached rafts

Reading books and comic books

Rhythm game

Rock study

Singing

Swinging on rope

Tag

Throwing stones in lake

Whittling

Wrestling

Cleveland Heights

Dances, (Bunny Hop, Mexican Hat Dance, Hokey-Pokey)

Lummi stick game

Mail call

Making lapel pins

Nature quiz game

Nature table study

Photography

Sharpening jackknives

Singing

Stenciling camp emblem on scarves

Weather reporting

Whittling

Dearborn

Buying things at "Trading Post"

Capture the flag

Checkers

Cleaning cabins

Letter writing

Reading comic books, books, and magazines

Singing

Writing in camp log

Orange

Chopping and gathering firewood

Clay modeling

Cleaning cabins

Dancing (jitterbug, camelwalk, Charleston, Hokey-Pokey)

Handstands

Packing supplies on last day

Reading

Rhythm number game

Singing

Whittling (sticks for cook-out)

Wrestling

Plymouth

Archery	"King of the Mountain"
Chinese puzzle	Logrolling (on land)
Cleaning cabins	Playing in fallen leaves
Crafts	Practicing football cheers
Digging sassafras roots	Radio listening
Fishing	Reading
Flashlight games	Telling ghost stories
Fossil and rock hunting	Work project (completion of log benches started during activity period)
Jacks	

South Euclid-Lyndhurst

Playing catch	Weather reporting
Radio listening	

Warren

Baseball	Piano playing
Crafts	Playing in log stockade
Exploring creek	Rhythm game

G. Health and Safety

(Given below are the aspects of health and safety which were observed--during staff-directed activities--being pointed out to campers and the time given over to this direct teaching)

Ann Arbor (Total staff-directed time observed in health and safety:
6 min.)

The need for table setters to wash hands well before meals

The danger of drinking too much water at certain times

The danger of too many people drinking from one canteen

The need for adequate clothing outdoors in the evening

Danger of poison sumac

Restraint in snapping brush and branches while hiking in woods with a group

Battle Creek (Total staff-directed time observed in health and safety:
26 min.)

Bunkroom health:

Alternation of the heads of bunks in bunkroom

Restraint in the amount of candy to be eaten

The need for opening windows for fresh air

Importance of airing bunks following sleep

Boating safety:

Rowing only within safety boundaries

Danger of standing in boats

Danger of changing positions in a boat

Archery safety:

Value in wearing a long sleeve

Danger in snapping string of bow without arrows

Danger in retrieving arrows at targets without permission

Jackknife safety:

The need for extra care while whittling in a crowd

Prohibition of knife-throwing

Safety and health in other outdoor activities:

Prohibition of stone-throwing

The importance of staying with the group while on a hike

The danger of rolling objects down the sides of a gravel pit

The left side of the road as the proper side to hike along

The danger of walking on an old cistern

The need of warm clothing at an outdoor campfire

Danger of leaning over the saw in a sawmill

The importance of clearing away nearby brush before chopping

Cleveland Heights (Total staff-directed time observed in health and safety: 33 min.)

Health rules:

Importance of washing hands after petting dog before meals

The desirability of room temperatures from 68° to 70°

The importance of brushing teeth after meals

The importance of changing into dry clothes quickly after getting wet with snow

Safety rules in using a jackknife (demonstrated and discussed)

Safety in firebuilding:

The danger of certain types of rocks popping in the fire

The importance of clearing a large area for the fire

Safety on field trips and other outdoor activities:

The danger of snapping branches

The importance of walking on the left side of the road facing traffic

The exercise of care in the stable and while petting the horses

Safety rules for snowballing

The need for caution while walking near cliffs

Dearborn (Total staff-directed time observed in health and safety: 24 min.)

Health and safety on field trips:

The need for care to keep from getting wet

The importance of walking on the left side of the road

The danger of digging tunnels in the gravel pit banks

Prohibition against throwing snowballs

The danger of snapping branches while hiking in woods

Health and safety indoors:

Dangers involved in improper use of cabin heating stoves, e.g.,
drying clothes on top of stoves

Prohibition against campers using kitchen door because of letting
in flies

The need for proper clothing, proper food, plenty of water, and
an extra amount of rest at camp

The need for proper temperatures inside cabins

Orange (Total staff-directed time observed in health and safety:
32 min.)

Indoor health:

The importance of bunks properly made with sheets for cleanliness

The need for removing coats when inside

Safety rules in using a jackknife**Safety in boating:**

Danger of standing in boat

Danger of boating alone

The proper method of changing positions in a boat

Danger of running sidewise to waves

Importance of wearing light clothing while boating

Importance of staying with the boat if it should capsize

The proper method for two people to hold on to a capsized boat

Safety in horsemanship:

The importance of walking, not running, up to horses

The danger of shouting near horses

Care to be taken in leading horses

The proper way to dismount

The need for beginners to walk, not trot their horse

The need for riders to stay a safe distance apart

The importance of observers remaining outside the corral fence

Safety in other outdoor activities:

The value of having a "buddy" when hiking in woods

The danger of hiking near the lake

The danger of playing near tent floors propped up for the winter

The danger of operating the heavy stockade doors

The danger of throwing stones

The importance of walking, instead of running, down hills

The importance of wearing proper wraps when outdoors

The need for care around the parking area during parents' visitation night

Plymouth (Total staff-directed time observed in health and safety:
10 min.)

Dining hall health rule:

The need for washing clean silverware which falls on the floor

Safety in riding in a stake-body truck:

The need to watch for low limbs

The danger of sitting on the railing

The importance of keeping hands inside the railing

Health and safety in other outdoor activities:

Danger of handling mushrooms

Prohibition against going to the river along

The need for a leader to be present when knives or axes are used

The importance of dressing properly outdoors

The danger of dead branches which might fall from tree tops

The need for boiling river water before it can be used safely

The importance of waiting until all arrows are shot before retrieving any arrows from the target in archery

South Euclid-Lyndhurst (Total staff-directed time observed in health and safety: 20 min.)

Health rules:

The value in changing canteen water frequently

The importance of eating well and keeping clean

Cabin safety:

The need for two people to operate cabin shutters

Precautions in the use of the cabin oil stoves

Tool safety:

The need for careful use of jackknives

The requirement of special permission for the use of sheath knives and hatchets

Safety in outdoor activities:

Prohibition of stone throwing

The danger of poison ivy

The importance of going slowly on cold, wet days, when most accidents happen

The danger of eating plants one knows little about

Warren (Total staff-directed time observed in health and safety: 6 min.)

The nature of the poison ivy plant, its rash, and treatment of the rash

H. Language Arts

(Included here are words spelled, words defined, and activities--exclusive of ordinary conversation--which especially involved language arts.)

Ann Arbor (Total staff-directed time observed in language arts: 39 min.)

Words spelled (and defined, if new):

apple	boulder	cedar	choke
aspen	camp	cherry	deciduous

evergreen	habitat	tamarack	species
flicker	lake	tree	white
granite	pine	trembling	

Words defined only:

aerial	girdle(trees)	milli-	sal
degree(in measuring circles)	igneous	pledge	site

Activities:

Writing involved in making a nature trail

Recording observed birds on Audubon bird cards

Recording observed birds on large chart in dining hall

Reading labels on exhibit of bird and mammal skins

Dramatizations and puppet show in evening talent show

Stories told by leaders:

Tall story about a duck hunter and his dog

A humorous ghost story

Battle Creek (Total staff-directed time observed in language arts:
29 min.)

Words defined:

Adirondack	diameter	igneous
shelter	fossil	
check dam		

Activities:

Thinking of descriptive words for the wind at night

Dramatizations at evening stunt night

Writing cook-out menu

Reading books about trees and forestry before going to a sawmill

Writing menu for each meal on a dining hall blackboard

Telling of an Indian legend by leader

Cleveland Heights (Total staff-directed time observed in language arts:
1 hour, 44 min.)

Words spelled (and defined if new):

acorn	eucalyptus	quarts	scavenger
barros	fungi	quartz	shelf
compass	lichen	Queen Anne's lace	squirrel
crafts	partridge	Roxboros	teasel
erosion	quarry		

Words defined only:

aquarium	glacier	proxy	sumac bob	vain
archaeologist	mirth	pupate	terrarium	weather
condemnation	parasites	scavenger hunt	tinder	whether
conglomerate	phenomenon	sea chantey	unicorn	widow- maker
geology	poverty	solar system	universe	

Activities:

Discussion of "fungi" as plural of "fungus"

Discussion of synonyms: cemetery and graveyard; vain and conceited

Writing entry blanks for daily nature quiz

Writing individual diaries

Writing all-camp, wall-chart diary with accompanying discussions
of punctuation, capitalization, and compound sentence structure

Use of dictionary to determine spelling of "quarry" and "teasel"

Research in camp library to determine differences between "hornets"
and "wasps"

Writing poetry and reading it to class

Recitation of poems by leaders:

"These Are the Things I Prize", by Henry Van Dyke

"The Things I Prize and Hold", Anonymous

"Campfire", Anonymous

Stories told by leaders:

Myth about "Quicksilver"

Star legends

Dearborn (Total staff-directed time observed in language arts:
2 hours, 35 min.)

Words spelled: Chelsea

Words defined:

base line	fossil	parasite	terracing
conservation	goals	slope	tourniquet
contour	misdemeanor	strip cropping	transit
felony	natural resources	summons	

Activities:

Writing individual logs (diaries)

Use of wall charts in planning and evaluating activity sessions

Orange (Total staff-directed time observed in language arts: 1 hour,
42 min.)

Words spelled:

cab-in	chipmunk	Harvard
chickadee	during	Henderson

Words defined:

bow (boat)	conservation	etymology	oar
capsize	corner (square dance)	gallinaceous	oarlock
catwalk	entomology	gunnels	personifica- tion

"pitch woo" (words from song)	predator	net ball	subterranean tunnel
	promenade	shut out (volleyball)	swing (square dance)
polluted		stern (boat)	

Activities:

Labeling pictorial maps drawn of camp

Dramatizations in evening campfire stunts

Reading of poetry by leader:

"Trees" by Joyce Kilmer

"Wind"

"Where We Walked to School Today"

"The Night"

--and others

Story-telling by leader:

A Russian folk story

"Squash You All Flat"

Writing invitations to parents to visit camp on parents' night

Making sign for parents' night

Reading "oral letter" to parents on parents' night

Plymouth (Total staff-directed time observed in language arts:
21 min.)

Words spelled:

after	camp ranger	eagles	rowdies
beaver	counselor	frontiersmen	

Words defined:

conservation	humus	natural resources
fertile (water)	light soil	spawn
heavy soil	native stone	widow-maker

Activities:

Writing camp schedule on blackboard during camp council meeting

Taking notes at group planning sessions

Reading grace before meals

South Euclid-Lyndhurst (Total staff-directed time observed in language arts: 1 1/4 min.)

Words spelled (and defined, if new):

anthers	filaments	pedicel	stigma
calyx	foam	petal	style
corolla	ginger	Sioux	

Words defined only:

pollen grains	sepal	stamen
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Warren (Total staff-directed time observed in language arts: 1 1/4 min.)

Word spelled: Hiram

Activities:

Labeling maps

Research about poison ivy in scout manual

Writing suggestions for program activities

Story-telling by campers:

"The Dogwood and the Pussy Willow"

"How the Dogwood Came To Be"

Story-telling by leader:

Indian legend of the origin of fire

I. Music

Ann Arbor (Total staff-directed time observed in music: 1 hour,
14 min.)

Songs sung at camp (number of times in parentheses):

America (2)	Levee Song (2)
Battle Hymn of the Republic (1)	Marine Hymn (1)
Clementine (2)	My Bonnie (1)
Davy Crockett (3)	Round of Thanks (1)
Doxology (2)	Sing Your Way Home (1)
Good Night Ladies (1)	Star Spangled Banner (2)
Happy Birthday (1)	Swing Low, Sweet Chariot (1)
Home on the Range (2)	Taps (2)
I Went to the Animal (1)	Three Blind Mice (1)
John Brown's Baby (Parody: Battle Hymn of the Republic (1)	White Coral Bells (1)
John Jacob Jingle (1)	

Other music activities:

Dancing: Ball and Jack; Hokey-Pokey; square dances

Taps blown on bugle

Battle Creek (Total staff-directed time observed in music: 3 hours,
36 min.)

Songs sung at camp (number of times in parentheses):

All Night, All Day (3)	Caisson Song (1)
America the Beautiful (1)	Caliope Song (1)
Battle of Jericho (3)	Carmen Carmela (1)
Boondyada (1)	Comin' Round the Mountain (1)
Brother James' Air (1)	Daisy, Daisy (2)

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|--|--|
| Did You Ever See a _____? (4) | Music Grinder Song (1) |
| Do Your Ears Hang Low? (Parody: Turkey in the Straw) (1) | Oh, What Did (name of state) (5) |
| Doughnut Song (1) | Old Folks at Home (1) |
| Each Campfire Lights Anew (5) | Old Texas (2) |
| English Hiking Song (5) | One Hundred Bottles of Beer (1) |
| Five Green Bottles (1) | One Finger, One Thumb (3) |
| Good Night, Sweetheart (1) | Parodies: Battle Hymn of of the Republic (1) |
| Hark to the Chimes (2) | Parody: Hi-Ho, It's Off to Work (1) |
| Here We Sit Like Birds (7) | Parody: We Three Kings (2) |
| Home on the the Range (2) | Praise for Bread (3) |
| Hush Little Baby (1) | Put Your Foot on the Loud Pedal (5) |
| Mushaby Baby (2) | Round of Thanks (2) |
| I Had a Little Chickie (4) | Rudolf, the Red Nosed Reindeer (1) |
| I Went to the Animal Fair (1) | Sing, Everyone Sing (2) |
| I've Got a Home in Glory Land (4) | Smile and the World Smiles (1) |
| Jingle Bells (1) | So Long, It's Been Good to Know You (1) |
| John Jacob Jingle (4) | This is Table Number One (1) |
| Let Me Call You Sweetheart (1) | Walking at Night (9) |
| Levee Song (1) | We Want a Cook's Parade (1) (Parody: Farmer in the Dell) |
| Little Red Caboose (2) | Yankee Doodle (1) |
| Little Tommy Tinker (1) | Your Land and My Land (1) |
| Marching Along Together (1) | Zulu Warriour (2) |
| More We Get Together, The (1) | |
| Rock-o-my-Soul (3) | |

Other music activities:

Dancing: Bingo; Bunny Hop; Hokey-Pokey; square dances

Musical chairs game

Cleveland Heights (Total staff-directed time observed in music:
3 hours, 37 min.)

Songs sung at camp (number of times in parentheses):

Brother John (1)	Old Tantanoba (2)
Cape Cod Chantey (5)	Old Texas (6)
Crawdad Song (8)	Peace of the River (1)
Donkey Riding (9)	Pick a Bale of Cotton (3)
Each Campfire Lights Anew (6)	Praise for Bread (5)
God Has Created a New Day (2)	Row, Row, Row Your Boat (1)
Hark to the Chimes (2)	Taps (5)
If I Had a Hammer (1)	Three Blind Mice (1)
If You Want to Know Where the Violets Grow (1)	Weather Song (15)
I've Got That Joy, Joy (9)	We're All Together Again (11)
Kookaburra (6)	White Coral Bells (4)
Marching to Pretoria (2)	White Wings (5)
	Zulu Warrior (3)

Other music activities:

Playing lummi sticks (Titi-Toria, Maori song and stick game)

Staff singing performances (staff members and visitors sang
the following):

Oh, No, John	Turn the Radio On
If I Had a Hammer	Bless This House
There's Snow on Everything I See	

Dancing: Bunny Hop; Hokey-Pokey; square dances

Dearborn Total staff-directed time observed in music: 1 hour, 36 min.)

Songs sung at camp (number of times in parentheses):

Comin' Round the Mountain (4)	Levee Song (2)
Crocodile Song (2)	Little Skunk's Hole (1)
Found a Peanut (Parody: Clementine) (2)	My Hand on Myself (1)
Happy Wanderer (1)	My High Silk Hat (Parody: Finiculi, Finicula) (3)
Hello, Hello, Hello (1)	Parody: So Long, It's Been Good to Know You (2)
Home on the Range (1)	Reuben and Rachel (1)
If I Had the Wings of a Pioneer (1)	Throw It Out the Window (2)
In a Cottage in a Wood (1)	Weeny Song (1)
John Jacob Jingle (1)	Zum Gali Gali (2)

Orange (Total staff-directed time observed in music: 3 hours, 39 min.)

Songs sung at camp (number of times in parentheses):

Air Force Song (1)	French Cathedral (3)
At the Gates of Heaven (2)	Home on the Range (2)
Bed is Too Small for My Tiredness (1)	Horses Run Around (6)
Black Socks (Parody: White Wings) (1)	Jacob's Ladder (6)
Caisson Song (2)	Kookaburra (4)
Cannibal King (10)	Levee Song (1)
Cheboom (1)	Marine Hymn (3)
Comin' Round the Mountain (1)	Praise for Bread (9)
Creation (9)	Old Smokey (1)
Daisy, Daisy (3)	One Little Elephant Went Out to Play (1)
Down By the Old Mill Stream (10)	Onward Christian Soldiers (1)
Each Campfire Lights Anew (1)	Semper Peratus (4)

Soldier, Soldier, Won't
You Marry Me? (3)

Taps (5)

Tell Me Why (1)

This is My Country (8)

White Coral Bells (2)

Wise Man Built His House (7)

Other music activities:

Taps blown on bugle at parents' night

Dancing: Bunny Hop; Hokey-Pokey; square dance

Plymouth (Total staff-directed time observed in music: 2 hours,
40 min.)

Songs sung at camp (number of times in parentheses):

Ain't She Sweet (5)

All You Eta (Parody:
Allouette) (5)

Blue Tail Fly (2)

Brother John (1)

Caisson Song (1)

Cannibal King (1)

Clementine (5)

Comin' Round the Mountain (1)

Daisy, Daisy (3)

Darktown Strutters Ball (1)

Down in the Valley (3)

For He's a Jolly Good Fellow (1)

Good Night Ladies (1)

Hail, Hail, the Meats All
Gone (Parody: Hail, Hail,
the Gang's All Here) (1)

Happy Birthday (1)

Hawaiian War Chant (1)

Let Me Call You Sweetheart (1)

Heart of My Heart (1)

H-H-H-Hot Dog (Parody:
K-K-K-Katy) (1)

Home on the Range (1)

John Jacob Jingle (4)

Kookaburra (3)

Levee Song (5)

Lisping Song (Parody: Auld
Lang Syne) (2)

Long, Long Nail (Parody:
Long, Long Trail) (3)

Marine Hymn (1)

More We Get Together (1)

Oh, You Beautiful Doll (1)

Old Folks at Home (1)

Old Smokey (3)

On a Chinese Honeymoon (1)

Pack Up Your Weiners (Par-
ody: Pack Up Your Troubles)
(1)

London Bridge (1)

Parodies: My Bonnie (5)	Today is Monday (2)
Plymouth High School Song (2)	We Want a Cook's Parade (Parody: Farmer in the Dell) (2)
Row, Row, Row Your Boat (1)	
Taps (1)	Where, Oh Where Has My Little Dog Gone (1)
Tell Me Why (1)	

Other music activities:

Dancing: Bunny Hop; Hokey-Pokey; square dancing

South Euclid-Lyndhurst (Total staff-directed time observed in music:
1 hour, 54 min.)

Songs sung at camp (number of times in parentheses):

Cannibal King (2)	Levee Song (2)
Clementine (1)	Little Red Caboose (1)
Comin' Round the Mountain (2)	Little Tommy Tinker (1)
Davy Crockett (1)	My Hand on Myself (1)
Do Your Ears Hang Low (Parody: Turkey in the Straw) (3)	Oh, You Can't Get to Heaven (2)
Father, For this Noonday Meal (1)	Parody: Patsy-Ery-Ory-Ay (1)
Found a Peanut (Parody: Clementine)(1)	Patsy-Ery-Ory-Ay (2)
Gracious Giver of All Good (1)	Six Little Ducks (1)
Happy Wanderer (2)	Tell Me Why (1)
Hark to the Chimes (1)	Them Bones Going to Rise Again (1)
Hey Ho, Nobody Home (5)	Tireless Guardian of Our Way (2)
It's A Lie (1)	Vive L'Amour (1)
Kockaburra (1)	

Other music activity: bagpipe playing by camper's father

Warren (Total staff-directed time observed in music: 2 hours, 30 min.)

Songs sung at camp (number of times in parentheses):

Advertise (Parody: Auld Lang Syne) (1)	More We Get Together (1)
Brother John (1)	Night Herding Song (1)
Cheer Up (Parody: Brother John) (1)	Pull Off Your Coat and Collar (Parody: Old Gray Bonnet) (2)
Comin' Round the Mountain (5)	Reuben and Rachel (1)
Down By the Old Mill Stream (1)	Roundup Lullaby (1)
God Bless America (1)	Stand Up, Stand Up (4)
Happy Birthday (2)	Taps (1)
Hark to the Chimes (5)	Tell Me Why (3)
Hiram House School Camp (Parody: Brother John) (2)	This is Table Number One (3)
It Isn't Any Trouble Just to SMILE (4)	Weather Song (2)
Levee Song (2)	We're Here for Fun (Parody: Auld Lang Syne) (1)
May Again (1)	What's the Matter with Hiram House (Parody: Bear Went Over the Mountain) (2)
My Money (Parody: My Bonnie) (1)	White Dove (1)

Other music activities:

Listening to records of bird songs

Dancing: Virginia Reel and square dance

J. Natural Science

Ann Arbor (Total staff-directed time observed in natural science: 12 hours, 7 min.)

Things of nature which were observed and used as stimuli for teaching situations:

Animal life - birds:

cardinal	red-eyed vireo
chipping sparrow	red-wing blackbirds
crow	robin
flicker nest hole	tufted titmouse
great blue heron	turkey vulture
ovenbird	white-throated sparrow
palm warbler	yellow warbler
pheasant egg shell fragment	

Animal life - mammals:

chipmunk	muskrat runways
claw scratches on a tree	opossum (dead)
deer tracks	rabbit gnawings on sumac
den hole in apple tree	rabbit killed by an animal during the night
dog tracks	rabbit scat
fox tracks in sand	raccoon tracks
ground squirrel hole	skull bone (deer)
mole tunnel	thirteen-lined ground squirrel
mouse runways	white-footed mouse
mouse tracks	woodchuck burrow
muskrat house of cattail leaves	

Animal life - reptiles and amphibians:

common water snake	toad
frog	tree frog
snapping turtle	

Animal life - fish:

black crappie	bluegill
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common sucker	pumpkin seed
fish egg jelly	red horse sucker
golden shiner	yellow bullhead
largemouth black bass	yellow perch
minnow	

Animal life - invertebrate:

animal life on dead log	leech
ant hill	mayfly (adult just emerged)
bees in flowers	millipede
caddis-fly	slug
chimney crayfish burrows	spider with egg sac
dragon fly adults and nymphs	tent caterpillars
insect galls	whirligig beetles
insect life of stump	

Plant life - trees and shrubs:

annual growth rings	red oak (wolf tree)
apple tree in bloom	red osier
beech and beech nuts	rotting wood
black oak	shaded tree dying for lack of sunlight
coniferous tree annual branch growth	shallow-rootedness of swamp trees
deciduous and evergreen trees	spring wood growth versus summer wood growth
gray dogwood	
juniper and juniper berries	tamarack
limb socket (hole)	trembling aspen
maple (red, young leaves)	tuliptree
poison sumac	white pine
red maple	wild black cherry
	yellow birch

Plant life - ground vegetation:

blue grass	poison ivy
cattails	puffballs
club moss	pussy toes
crowfoot violets	raspberry
fungus on tree	scouring rush
grapevine	sensitive fern spore frond
grass and vines on nearly bare soil	sheep sorrel
hepatica	skunk cabbage
Jack-in-the pulpit	Solomon's seal
lichen	trillium
marsh marigold	violet
Mayapple	Virginia creeper
moss on sand	wild strawberry
	wintergreen

Rocks, features of the landscape, and other things:

brush shelter for animals	moraine
denuded hillsides with much lichen	mucky soil
fossil coral	sandstone
glacial boulder (granite)	sandy soil
grassy field in succession	shade of trees versus sunlight of open sand
lake and succession on lake margin	slate
limestone with fossils	swamp
marsh	

Activities including most of the natural science instruction:

Making nature trail

Use of Audubon bird record cards and bird pictures

Mammal study field trip, including such things as:

- Trapping mice with box traps
- Looking for tracks in sand
- Making plaster casts of deer tracks
- Following meadow vole runways with fingers

Orienteering field trip (map and compass) to an old farm area

Forestry field trips, including such things as:

- Splitting oak twig with knife to see grain and knots
- Counting age of pine tree by the layers of branches
- Counting age of posts by annual rings
- Checking samples of soil from forest and open field
- Playing "selective cutting" game (whether to cut or not to cut)

Nature scavenger hunt

Motion picture, Along the Waterways

Waterlife exploration, including the use of seines, gill nets, and strainers

Geology field trip, including cracking of rocks with rock hammer and collecting of rocks at old rock piles

Following a "self-guided nature trail" made by resource person

Battle Creek (Total staff-directed time observed in natural science:
2 hours, 17 min.)

Things of nature which were observed and used as stimuli for teaching situations:

Animal life:

bird egg	mouse tunnels
bird nest	oak gall
Blanding turtle	rabbit
fish spawning beds	red-headed woodpecker
frog	short-tailed shrew
minnows	squirrel nest

Plant life:

apple trees	beech saw log
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black ash	hickory, hickory nuts, and hickory saw log
cattails	milkweed
cinquefoil	oak tree and acorns
crab grass	pear trees
elm trees	red maple
fungus	sheep sorrel
grapevines	sumac
hawthorne trees with nests	water plants on bottom of lake
hedgerows	

Rocks, stars, and other things:

Big Dipper constellation	igneous rocks
fossils	Little Dipper constellation
glacial boulders	North Star
gravity in relation to boat safety	sedimentary rocks - limestone
gravity in relation to water tower	

Activities including most of the natural science instruction:

Exploration hike around main part of camp

Compass hike to Hidden Valley (gravel pit) including rock and fossil hunting

Night hike, including listening to night noises and looking at stars

Discussion of erosion and related topics in connection with a project of constructing check dams

Hike around the shore of the lake to "Paul Bunyan's Woods"

Expedition with an Indian resource person to obtain black ash and other basket materials

Cleveland Heights (Total staff-directed time observed in natural science, 6 hours, 19 min.)

Things of nature which were observed and used as stimuli for teaching situations

Animal life:

bird nests (in barn and fields)	salamander
bird tracks in snow	short-tailed shrew
fox tracks	slate-colored junco
galls (goldenrod and willow)	spring peepers
hornet nests	squirrel nest and "dining table"
meadowlark	squirrel gnawings on apple
mouse tracks	tent caterpillar webs
pileated woodpecker holes	turtle shell
rabbit and rabbit tracks in snow	woodcock
raccoon (pet) and raccoon tracks	

Plant life - trees and shrubs:

apple tree	red maple
basswood	spice bush
beech tree and beech roots	staghorn sumac tree, wood and fruit
bitternut hickory	sugar maple leaf
black walnut and walnut wood	sycamore
buckeyes	tree growing around a chain
chestnut (dead)	tuliptree
elm and elm wood	white pines
hemlock and hemlock cones	wild black cherry tree and wood
Norway spruce and spruce cones	witch hazel (in bloom)
	yellow birch
oak tree, leaves, and acorns	

Plant life - other vegetation:

adder's tongue	Indian hemp
bracket fungus	lichen
British soldier	mushrooms
burdock seeds	onion and its roots
cattail	partridge berry
ferns	poverty grass
goldenrod	Queen Anne's lace
grapevine	turkey-tail fungus
horse nettle	wild teasel

Rocks, features of the landscape, and other things:

cumulus clouds	nimbus clouds
divide between watersheds	pond
forest	quartz
freezing water	rock ledges and succession thereon
glacial boulder	Sharon conglomerate
granite boulder with dike	stream source and mouth
meadow	

Activities including most of the natural science instruction:

Exploration hike--exploring woods, ravines, and pond margin

Daily weather observations and reports

Field trip to pioneer cemetery, including:

Observation of pine tree plantation on eroded hill

Determining age of pines by counting the whorls of branches

Demonstration of firebuilding and fire safety

Hike to a dam and "dry lake"

Snow hike (hiking in first big snow of winter), including a nature hunt game

Field trip to Hemlock Falls and adjoining ledges, including:

Nature hunt game

Measuring circumference of large tuliptree

Compass hike

"All-day hike" through Southeast Wilderness to Ansel's Ledges
(large conglomerate rock ledges)

Dearborn (Total staff-directed time observed in natural science:
2 hours, 35 min.)

Things of nature which were observed and used as stimuli for teaching situations:

Animal life:

badger diggings	muskrat holes and houses
bluejay	rabbit tracks
den hole in tree	squirrel leaf nest and tracks
downy woodpecker	trout
great blue heron	white-footed mouse
meadow vole	woodcock
mole tunnels	

Plant life:

acorns (one sprouting)	poplar sapling
elm tree	puffballs
honey locust	red oak
juniper (two varieties)	silver poplar
leaves retained long time by oaks	staghorn sumac
milkweed	vetch
moss on trees	white oak
mullein	

Features of the landscape and other things:

fossils	soil samples taken with auger
gravel pit	stream
lake and lake succession	swamp

Activities including most of the natural science instruction:

Orientation walk around the camp grounds

Field trip to a gravel pit, including fossil hunting

Discussion and short field trip, primarily about wildlife

Discussion and field trip on soils, including:

Examining aerial photographs

Taking soil samples with an auger

Field trip to old cemetery and adjoining poor farm land

Bus trip through Waterloo Recreation Area, including a visit to a trout pond

Orange (Total staff-directed time observed in natural science:
2 hours, 27 min.)

Things of nature which were observed and used as stimuli for teaching situations:

Animal life:

blue jay

short-tailed shrew (dead)

cardinal

Plant life:

baneberry

pokeberry

basswood

rotting log

fungus

straightness of trees in
shady forest

maple leaf

sycamore leaf

oak tree and acorns

tuliptree fruit

partridge berry

Rocks and other things:

clay

rocks (in general)

dam controlling water level

shale

fire as affected by a draft

Activities including most of the natural science instruction:

A talk about the history of the camp area (both natural history and cultural history)

Discussion and short field trip on wildlife (primarily birds) including:

Showing of slides and study skins of wildlife

Showing of live, tame skunk and discussion about it

Showing motion picture, The River (U.S. Dept. of Agriculture) and accompanying discussion

Making leaf prints

Reading nature poems

Scavenger hunt

Rain hike

Plymouth (Total staff-directed time observed in natural science:
3 hours, 41 min.)

Things of nature which were observed and used as stimuli for teaching situations:

Animal life--vertebrate:

bluejay

garpike (dead)

bones (unidentified mammal)

milk snake (immature)

chipmunk

pheasant (calling)

deer tracks

squirrel nest

Animal life--invertebrate

ants

damsel-fly nymph

backswimmer

dragonfly

bald-faced hornet nest

oak gall

beetle

pine shoot moth

caddisfly

plankton

clam shell

red spider

cricket

snail

spider

water beetle

tent caterpillar web

water boatman

walking stick

water bug

Plant life--trees and shrubs:

aspen

pine tree plantation

black oak

poison sumac

dead trees

red oak

flowering dogwood

rotten stump

jack pine

shadbush

juniper (invading open field)

swamp oak

maple-leaved viburnum

tamarack

nine-bark shrub

wild black cherry

pin oak

witch hazel (in flower)

Plant life--other vegetation:

hepatica

moss

grapevine

mushrooms

Jersey tea

poison ivy

lespedeza

sedge

lichen

Features of the landscape and other things:

clay

lake

edges (between woods and field)

muck

fossil

river

gravel

rocks

gully

sandy soil

humus

Activities including most of the natural science instruction:

Hike to look for deer tracks

Field trip to study soils and effect of soils on vegetation, including:

Digging in soil to see soil profile

Taking increment boring of trees to determine age

Testing soil for acidity and alkalinity

Truck trip through Island Lake Recreation Area including stops at camp grounds, concrete dam and artificial lake, gravel pit, and old farm

Field trip along river and discussion of water life, including:

Looking at plankton through a microscope

Studying preserved fish and preserved insects

South Euclid-Lyndhurst (Total staff-directed time observed in natural science: 4 hours, 6 min.)

Things of nature which were observed and used as stimuli for teaching situations:

Animal life:

ant hills

common water snake

crayfish

dog track

frog

meadow vole

raccoon track

red-wing blackbird, female and nest

salamander

sucker (fish)

wading bird tracks

wood eft

woodchuck hole

Plant life:

anemone

apple tree

bedstraw

black mustard

bloodroot

bluets

buttercup

cinquefoil

clover

dandelion

dock

dogwood

Dutchman's breeches	phlox (blue and white)
elderberry	poison ivy
false spikenard	pussy toes
fern (fiddlehead)	Solomon's seal (true and false)
foamflower	spring beauty
golden ragwort	strawberry
grapevine	trillium
ground pine	tuliptree
Jack-in-the-pulpit	violets (purple and white)
Japanese barberry	wild geranium
maidenhair fern	wild ginger
Mayapple	wild leek
myrtle	wild raspberry
	wild water hyacinth

Features of the landscape:

pond	river and stream flow
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Activities including most of the natural science instruction:

Wildflower study session including discussion, field trip, drawing of flowers and flower parts, dissection of flower, and looking at exhibits in nature cabin

Field trip to explore meadow and river edge, including walking abreast across meadow in a long line to flush animals

Field trip to pond to look for nesting Canada geese

Showing motion picture, The River (U. S. Dept. of Agriculture)

Daily weather observations and reports

Warren (Total staff-directed time observed in natural science: 1 hour, 26 min.)

Things of nature which were observed and used as stimuli for teaching situations:

Animal life:

tent caterpillars	wood frog
wood eft	woodchuck hole

Plant life:

blue spruce	honeysuckle
Jack-in-the-pulpit	poison ivy
Lily-of-the-valley	wild black cherry
maple	

Activities including most of the natural science instruction:

Short session of nature hunt game and nature stories

Talk about butterflies and birds, including showing butterfly specimens and bird nests and listening to bird song records

Exploring a creek

Hike to explore the woods

K. Physical Activity

(Activities Involving Large Body Movements)

Ann Arbor (Total staff-directed time observed in physical activity: 7 hours, 57 min.)

Active games:

Capture the Flag
Counselor Hunt
Lame Wolf

Dances:

Ball and Jack
Hokey-Pokey

Square dances:

Chop Suey
Head Two Ladies Cross Over
Oh, Johnny, Oh
Red River Valley

Hiking and hill climbing

Hauling luggage and cook-out supplies

Wading in lake with hip boots and seining

Walking length of fallen flagpole and crossing unstable log bridge
("balance beams")

Battle Creek (Total staff-directed time observed in physical activity:
8 hours, 24 min.)

Active games:

Musical chairs
Stalk the deer
Tag

Archery

Chopping logs

Dances:

Bingo
Bunny Hop
Hokey-Pokey
Square dances:
Duck for the Oyster
Take a Little Peek

Hauling luggage, logs, and cook-out supplies

Hiking, running, hill-climbing, and night rope hike

Lifting heavy slab lean-to in place with levers

Rolling auto tires in gravel pit

Rowing boats

Sawing logs

Throwing rocks at a target and stones into the lake

Swinging on a rope and on grapevines

Cleveland Heights (Total staff-directed time observed in physical activity: 10 hours, 24 min.)

Active games:

Fox and geese
Lummi sticks
Snowball fight
Snowball throwing contests

Climbing fallen tree

Dances:

Bunny Hop
Hokey-Pokey
Square dances:
 Buffalo Bill
 Duck for the Oyster
 Grapevine Twist
 Take a Little Peak
 Two Head Ladies Cross Over

Hauling luggage and cook-out supplies

Hiking, running, and climbing hills

See-sawing on a log

Swinging on a grapevine

Dearborn (Total staff-directed time observed in physical activity: 5 hours)

Active games:

Capture the Flag

Hauling luggage

Hiking and climbing hills

Running around an acre of land

Throwing snowballs

Orange (Total staff-directed time observed in physical activity: 8 hours, 34 min.)

Active games:

Hare and fox
Pioneer and Indian game
Volleyball

Chopping wood

Dances:

Bunny Hop
Hokey-Pokey
Square dance

Hauling luggage and firewood

Hiking, running, and climbing hills

Riding horseback

Rowing boats

Plymouth (Total staff-directed time observed in physical activity:
7 hours, 39 min.)

Active games:

Counselor hunt
King of the mountain
Trailing game

Archery

Chopping wood

Dances:

Bunny Hop
Hokey-Pokey
Square dances:
Head Two Ladies Cross Over
Oh, Johnny, Oh

Dragging a log

Hauling luggage and cook-out supplies

Hiking, running, and hill climbing

Jumping off the edge of a gravel pit

Log-rolling (on dry land)

Sawing wood

South Euclid-Lyndhurst (Total staff-directed time observed in physical
activity: 5 hours, 27 min.)

Climbing ladder to observation tower

Hauling luggage and firewood

Hiking and hill climbing

Softball

Swinging on swings

Walking on the log rail of a fence ("balance beam")

Warren (Total staff-directed time observed in physical activity:
4 hours, 37 min.)

Archery

Dances:

Virginia Reel

Square dances:

Head Two Ladies Cross Over

Take a Little Peek

Hauling chairs and cook-out supplies

Hiking, hill climbing, and wading in the creek

Riding horseback

Swinging on grapevines

L. Planning Activities

Ann Arbor (Total staff-directed time observed in planning: 40 min.)

Planning who will sweep the cabin on which day

Planning evening entertainment (23 min.)

Assigning jobs for morning kitchen crew (3 min.)

Deciding who will write letters of appreciation to leaders after camp
(3 min.)

Planning how to present the new nature trail to the state conservation
agent (4 min.)

Battle Creek (Total staff-directed time observed in planning: 2 hours,
3 min.)

Choosing a name for the activity group

Planning activities for the morning and afternoon activity periods

Planning evening programs--games to be played, skits, etc.

Establishing a time for going to the camp store

Planning what to look for on a hike to "Hidden Valley"

Planning cook-out menu quantities and cook-out location (31 min.)

Deciding what to do to solve bunkroom behavior problems (9 min.)

Cleveland Heights (Total staff-directed time observed in planning:
1 hour, 52 min.)

Planning how to thank cooks for food and entertainment

Planning activities for morning and afternoon activity periods throughout the week (23 min.)

Deciding what to put on the camp diary

Assigning jobs on cook-out and choosing location of cook-out

Planning evening activities

Choosing crafts which should be undertaken (10 min.)

Making alternative plans on morning of a big snow (6 min.)

Dearborn (Total staff-directed time observed in planning: 1 hour,
58 min.)

Planning activities for morning and afternoon activity periods (50 min.)

Coordination of activities and assignment of camper duties by camper council

Planning cook-out menu (12 min.)

Choosing goals for specific daily activities

Deciding who will report at the evening "newscast" period and what will be included in the report

Orange (Total staff-directed time observed in planning: 25 min.)

Choosing activities for a rainy afternoon (10 min.)

Planning the time schedule for a square dance (1 min.)

Planning songs to be sung before parents on parent night

Planning strategy during an outdoor "chase" game

Plymouth (Total staff-directed time observed in planning: 1 hour, 18 min.)

Choosing a name for the activity group

Choosing a destination for a hike

Planning a cook-out menu

Choosing a time for different activities, e.g., selecting the day when crafts would be carried on

Choosing a work project

Selecting certain meals for kitchen duties and assigning kitchen jobs

Coordinating plans by the camp council

South Euclid-Lyndhurst

(No planning was observed during the two days spent at this camp)

Warren (Total staff-directed time observed in planning: 2 min.)

Suggesting activities for the last two days at camp, in writing

M. Social Studies

Ann Arbor (Total staff-directed time observed in social studies: 2 hours, 12 min.)

Material studied:

History of the camp, including the roles of the National Park Service and the State Conservation Department, etc.

Origin of the early settlers and reasons for their immigration (economic--potato famine in Ireland--religious, etc.)

Dates of early settlements (about 1830) and subsequent land ownership (e.g., one farm having seventeen owners in 125 years)

Living conditions of pioneer families and early farming methods (e.g., lack of citrus fruits, storage of apples, cistern for water supply, killing forest trees by girdling them, clearing rocks from cultivated fields, windmills for power)

The final dates for Indians of the area

The effect of industrialization and growth of auto factories in Detroit upon farming of the area

The use of scouring rush (Equisetum) by the pioneers for scouring pots

The economic impracticality of removing timber from a swamp ridge in pioneer days as reason for the presence of one small area of virgin timber

Map-reading skills with an aerial photo map and directional concepts in connection with compass work

Activities which included most of the above social studies material:

Talk by state park ranger about his work and about state recreation areas

Orienteering (map and compass) trip to an old, abandoned farm

Historical hike to another abandoned farm

Geology field trip to abandoned farm area

Battle Creek (Total staff-directed time observed in social studies: 2 hours, 8 min.)

Material studied:

History of an abandoned farm: why the people left, what happened to the house, what crops were raised, what outbuildings were there and for what were they used, what materials were in the foundation and in the cellar hole, when was it abandoned

The saw mill industry: source of logs, selection of trees to be cut, method of getting the logs to the saw mill, operation of the mill, use made of the lumber

Floods in Chicago--example of soil and water conservation problems

Indian lore and Indian history: the Indian language giving way to English among present-day Indians, Indian signs, skin jugs used by Indians, true Indian story about adventures of two Indian men

Activities which included most of the above social studies material:

Hike and cook-out to abandoned farm

Truck trip to a sawmill

Campfire talk by an Indian

Cleveland Heights (Total staff-directed time observed in social studies:
1 hour, 10 min.)

Material studied:

Indians: four important Ohio Indian tribes, several Indian customs adaptable to school camp, comparison of speech by Logan (Mingo Indian chief) with Lincoln's Gettysburg address, showing of wood from the Logan Elm (historical site where Logan spoke), discussion of western cliff-dwelling Indians

Pioneers and early settlers: old barnyard; old barn, its construction and use; old wagon road; old plow furrows; old house with a "widow's walk"; signs of an old cider mill; cornerstones of pioneer's one-room cabin; old conglomerate rock quarry which provided foundation stones; pioneer family cemetery (including discussion of such things as Civil War soldier and the reasons for so many children's graves); overshot water wheel; use of Indian help by pioneers for making cord

Present-day farming: sugar barn and the making of maple syrup, manure spreader, tractor-powered buzz saw

Discussion of geographical locations in tracing path of water from camp to the Atlantic Ocean and in discussing origins of folksongs sung at camp

Activities which included most of the above social studies material:

Campfire discussions

Field trip to Pioneer Cemetery and old quarry

All-day hike and cook-out to historical rock ledges

Dearborn (Total staff-directed time observed in social studies:
2 hours, 29 min.)

Material studied:

Indians: Indian sign for attention (raised hand), use of honey locust thorns as needles by Indians

Pioneers and early settlers: old split rail fence, former gristmill site, piles of rocks cleared from fields; old cemetery (including such things as ancestry of people who settled in the area, causes of their deaths, date of early settlement, reasons for coming to the area, and religion of the early settlers)

Vote-taking and majority rule as the primary method of making decisions in a democracy such as ours

Game, its history and legal aspects: establishment and enforcement of game laws, differences between a felony and a misdemeanor and their penalties, the Waterloo Recreation Area in relation to game, history of gun-carrying by conservation officers, history of hunting and fishing licenses, operation of short-wave radio for law enforcement

Soil Conservation Service and Soil Conservation Districts: purposes and operation of them, use of aerial photographic maps in soil mapping

Waterloo Recreation Area: purposes of the area, manager's house and headquarters of the Recreation area, public fishing sites and farms within the area, recreational facilities in the Area (e.g., Burns Lodge), village of Waterloo and Waterloo Cemetery

Sanitation problems in country living--the use of septic tanks for sewage disposal and the lack of city water supplies

Activities which included most of the above social studies material:

Discussion and field trip led by state conservation officer

Map and compass study--making a map of camp

Discussion and field trip conducted by an agent of the U. S. Soil Conservation Service

Field trip to a pioneer cemetery

Bus trip through the Waterloo Recreation Area

Evening "Newscasts"--camper reports on activities of the day

Orange (Total staff-directed time observed in social studies: 1 hour, 51 min.)

Material studies:

History of camp: period of use as an amusement park, old interurban trolley line and its connection with camp, construction of log cabins on camp property, the role of the Community Fund in camp operation

Pioneer life: log cabins and log fort on camp property as replicas of those used by the pioneers, wild plants used as food by pioneers

Social problems in connection with conservation (e.g., the amount of water needed per capita per day)

Directional concepts and map-making

Background information (country of origin, etc.) for folk songs and stories used at camp

Activities which included most of the above social studies material:

Orientation walk around the main camp area

Drawing pictorial maps of camp

Scavenger hunt (e.g., search for plant used as food by pioneers)

Rain hike along old trolley line

Showing motion picture film, The River, and accompanying discussion on conservation

Evening story-telling session by a visiting librarian

Talk by the high school principal on the social and natural history of the camp area

Plymouth (Total staff-directed time observed in social studies: 39 min.)

Material studied:

Operation of the Michigan State Park Division: purchase of park areas, number of park personnel, problems of maintenance of property

Island Lake State Park: history of the park and its shelterhouse, the role of the Civilian Conservation Corps in construction of facilities, the law regarding liability of parents in case of vandalism caused to buildings by juveniles, the ownership pattern of the land area around Island Lake

Huron-Clinton Metropolitan Authority: ownership of Kent Lake Dam, operation of dam, reasons for construction of the dam, differences in policies of land acquisition between the Huron-Clinton Metropolitan Authority and the state of Michigan, legal problems involved in the fact that Kent Lake lies in two counties

Gravel pit: operation of the gravel pit and its associated works, problems of land exchange between the gravel company and the state recreation area

Deserted farm, old cemetery, and swamp roadway

Activities which included most of the above social studies material:

Truck trip through the Island Lake Recreation Area, conducted by a state park ranger and including stops at Kent Lake Dam, gravel pit, camp ground, deserted farm, and Island Lake State Park

South Euclid-Lyndhurst (Total staff-directed time observed in social studies: 1 hour, 32 min.)

Material studied:

Indians: peace pipe ceremony; food of Indians; principal groups of Indian tribes in the United States; Indians and Indian trails of Ohio; the importance of flint and Ohio's Flint Ridge; Indian costumes, war clubs, rattles, and flutes; Hopi Snake Dance; Indian arts and crafts; basic Indian dance steps; Indian benediction

Social problems involved in water pollution, soil erosion, and floods

Activities which included most of the above social studies material:

Discussion and demonstration of Indian lore by a resource person (high school teacher) during a campfire program

Showing of the motion picture The River (and accompanying discussion)

Warren (Total staff-directed time observed in social studies: 1 hour, 17 min.)

Material studied:

Map making

The way of life of a former, neighborhood hermit

Activities which included most of the above social studies material:

Making maps of the camp area, including one session of hiking and measuring distances and another session of converting data into an actual map

Discussion of the life of the former, neighborhood hermit and exploration of his deserted farm to learn from the visible remains how he lived

N. Work Experiences

Ann Arbor

Bed-making

Cabin and washroom clean-up

Dining hall and kitchen duty

-helping prepare food
-setting tables
-waiting on tables
-clearing tables
-washing dishes

Packing at end of week

Battle Creek

Bed-making	Dining hall and kitchen duty
Cabin and washroom clean-up	-setting tables
Check dam construction	-waiting on tables
	-clearing tables
Chopping, sawing, and hauling logs for basket-making splints	-drying dishes
	Lean-to construction
	Packing at end of week

Cleveland Heights

Bed-making	Dining hall duties
Cabin and washroom clean-up	-setting tables
	-waiting on tables
	-clearing tables
	Packing at end of week

Dearborn

Bed-making	Dining hall and kitchen duties
Cabin and washroom clean-up	-setting tables
Packing at end of week	-waiting on tables
	-clearing tables
	-washing dishes

Orange

Bed-making	Dining hall duties
Cabin and washroom clean-up	-waiting on tables
Changing mattress covers	-clearing tables
Chopping firewood	Packing at end of week

Plymouth

Bed-making	Garbage burying and scrubbing of garbage cans
Cabin and washroom clean-up	Packing at end of week
Chopping and sawing firewood	Replacing log bench in amphitheater
Dining hall and kitchen duties	
-setting tables	
-waiting on tables	
-clearing tables	
-washing dishes	

South Euclid-Lyndhurst

Bed-making

Cabin and washroom clean-up

Dining hall duties

-setting tables

-waiting on tables

-clearing tables

Warren

Bed-making

Cabin and washroom clean-up

Dining hall duties

-waiting on tables

-clearing tables

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