

CAMP CRAFT

A Manual for Leaders Responsible for Organization
of Camp Craft in the Summer Camp

by

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BARBARA ELLEN JOY

Bar Harbor, Maine, Founder

THE JOY CAMPS

Former President

AMERICAN CAMPING ASSOCIATION

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In grateful appreciation
to my parents
for a
happy childhood
spent on my native Mt. Desert Island,
State of Maine.

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INTRODUCTION

There seems to be a need in the camping field for some specific material concerning the basic philosophy about camp craft, not only as a part of the overall camp program, but also as an experience which is necessary for children of this age. There is also a need for specific information about the organization of the activity and about the background methods and procedures which are necessary if the individual camper is to receive the maximum benefits from his participation.

There are dozens of books dealing with general camping out lore, such as use and care of equipment, fire-building, food selection, outdoor cooking, use and care of knife and axe, trip procedures, nature crafts, etc., etc. It is not the purpose of this manual to duplicate this easily acquired information. We shall, rather, present materials which we have developed in our own camp as we have built up our camp craft program over the past twenty-five years, augmented now and then by suggestions based on our observations and experience.

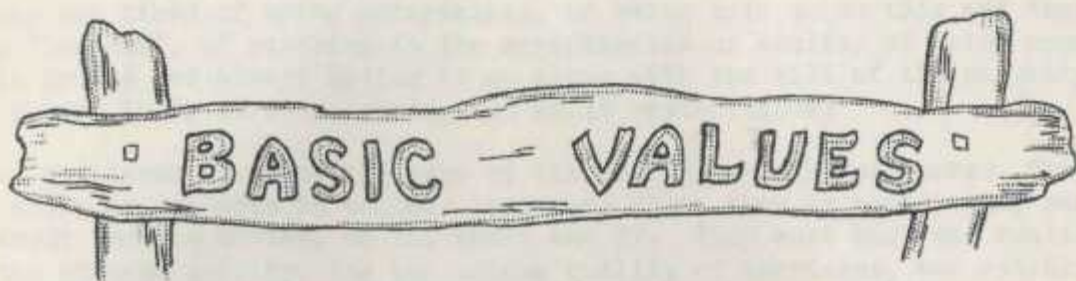
We have worked with girls and young women, but we feel many of the same principles apply to boys' camps. We have not ranged more than twenty-five miles from the main camp base, because we felt we could reach our general objectives by more leisurely exploration of our immediate territory, and by making our outing experiences so varied and so interesting that it was unnecessary to go hundreds of miles away for satisfying adventure.

The camp situation under discussion is the lake-woods section of northern Wisconsin. Sixty-three girls, ages seven to seventeen, remain for eight weeks. There are twenty-one mature leaders, of whom sixteen usually qualify as camp craft counselors. Campers chose activities twice daily, as individuals or as a member of a specific interest or project group which is not confined to any one living or cabin group. All counselors serve both as activity and cabin leaders, and are assigned to duties within their areas of greatest competence. The general objective of the camp has always been to give city children a realistic opportunity to live harmoniously together, and to acquire an appreciation of the outdoors through a sense of relation to the world of nature about them.

We state this situation briefly because it may be helpful in the adaptation and modification of these procedures which other camps will need to make on the basis of a different situation and different needs. We venture to hope that every camp which is interested in camp craft and related activities may find at least one or two suggestions which will help them to do a better job in organizing their camp craft department.

In this manual, therefore, we shall describe a simple but effective plan which counselors and campers can understand, and to which they can accommodate their work and their pleasure. We have found that harmonious and orderly conduct of the details of this department relieves the counselors from trivial harrassments and allows them time, energy and vision for doing more interesting things with the campers.

We believe that knowledge and skill are fundamental, and that the process of acquiring both provides fun and satisfaction. Since there is no end to what a person may learn about woods lore, it is the process of learning that is important. We hope what small part of the process we may have discovered may be of value to others.



Chapter I

BASIC VALUES OF A CAMP CRAFT PROGRAM

Years ago we heard camp craft defined as "the ability to take care of one's self and others in the outdoors and to get joy and inspiration from it." Although a simple statement, it is a profound one, and we have never heard a better. Much is implied in this definition - first, that the camper possesses the necessary skills and knowledge necessary for comfort, safety and health; and secondly, that by possessing these abilities, he is made free to take advantage of the aesthetic enjoyment and spiritual uplift which the outdoors always brings to those properly versed in woods ways.

Other names are often given to this activity, such as pioneering, wood or woodcraft, wild craft, real camping, woods lore. Whatever the title, we prefer to include under it all activities, physical, cultural and spiritual, which lead to direct contact with nature and with things of and on the earth.

Camp directors are busy people with a multiplicity of responsibilities and problems on their hands, minds and hearts. Therefore, if the management of any one camp believes in one activity enough to have put so much time and thought on it themselves and to ask their associates to do so, there must be good reason for so doing. These reasons have to do with values, and we shall attempt in this chapter to bring out the values we believe to be inherent in a carefully organized, broad camp craft program. It seems appropriate to start this discussion indirectly, perhaps, by considering some of the needs and desires of campers which may be fulfilled through the activities and opportunities provided in such a program.

When children come to a camp they want and expect to do and to learn things that are different from the offerings of school, playground, club, troop, recreation center and home. They are disappointed and disillusioned if they find at camp only the same sports, games, crafts and general interests to which they are accustomed in the city. Most of them must, as they anticipate their approaching camp experience, think of it as a time for new kinds of fun, new interests and adventure.

They must dream of relief from the pressure of always being on a team or on a side that is competing with another group to win a game, points, or some competitive award. Even to children who may have had no different experience, it must be monotonous to be under the stress and tensions of organized group games and classes. What a welcome change to share with peers the responsibility of doing something that is real and vital, on which not only their comfort and good times depend, but also their very safety.

Are they not tired of being entertained, of being told to do this and that, of taking "lessons", of catering to the expectancies of adults, of being organized in groups and always having to go along with the will of the majority, of being fenced in by streets, yards, and adult restrictions?

Do they not dream, too, of the ways of the Indians and the pioneers? They study these as subjects in school, they read about them in books, they see and hear about them in movies, on the radio and TV. They must know and realize that the pioneer quality, the one unique quality of Americans, was established by and has come to us from, our forebears as they pushed their way across the land. This inheritance fades as the covered wagon fades into the horizon, and the automobile and the jet planes and the atom bomb crowd our foreground. Is it not good that children of today may also, in the ways possible for them now, for a short time live the primitive life? It should not be in vain that many years ago a famous writer called the summer camp "the little cousin to the Oregon Trail", observing that it was our one best opportunity to give to our children a kinship with the soil.

There are those with a scientific bent who seek at camp the realities of the natural sciences they have studied in textbooks. The strong seek opportunities to meet the challenge of hard work, the long portage, the steep trail. The ingenious want to pit their agility and knowledge against tangible objects, predictable, impersonal adversaries. The artistic and poetic see and feel more keenly the beauty and the enchantment which around them lies. The gentle can be given the leisure to make friends with the little folk of forest and grass, and to enjoy the wild flowers and the peaceful and orderly aspects of nature. And, no matter what their individual needs may be, do they not all wish that some day they could have the time to do simple things like catching frogs, or wiggling their toes in a brook, soft grass, or even mud? Or just to sit and watch a cloud, a butterfly, a bird, or "listen to the song of God in the woods"? Or, perhaps, just to saunter along on a trail, in no hurry to get somewhere?

It is a safe guess that every camp child, whether he may be aware of it or not, has experienced these needs. That they do is a good sign that vitality, individualism, and a longing for adventure and romance are still characteristics of our people. It is well for us that camps have it within their power to fulfill these needs and to supply the means of transmitting these values.

The above paragraphs briefly cover some of the values which camp craft may provide for children, as seen through their eyes, minds, and hearts. No consideration is of greater importance, for to the degree that camp craft appeals to children by fulfilling their inner and their expressed desires, to that same degree will it be popular and completely worthwhile to all concerned.

Adults, naturally, express their ideas about these values on a more objective level. In general, camp directors who are sincerely interested in camp craft are agreed that of all activities in the camp program, this holds the greatest opportunity for practicing democratic group procedures, for practical application of nature lore and for its greatest appreciation, for building self-reliance, resourcefulness, self-discipline, and respect for other people, for natural and material things, for work, and for earned playtime. They sense, although they can never measure either, the emotional maturation and the spiritual growth which result from an understanding and appreciation of primitive processes. They know that emphasis on indigenous activities results in a more

simple type of program, one that does not exploit the campers, nor over-stimulate them by artificial motivations. They know that in a good camp craft program can be found those factors which are most likely to lead to poise, happiness, and success and a sense of serenity which is based on general good will and mutual confidence among the leaders and the campers.

Mention of these values are found throughout the literature on camping. In addition to these more common expressions of values and reasons, we wish to call attention to some others which may not be so familiar to camping people.

A psychologist who has become greatly interested in a nature-based camp program has said that the regimented space-time planning into which city children are forced without regard to natural inclinations and dispositions, has resulted in many cases in deep-seated insecurity, indecision, and indetermination. He feels that over-organized, technocratic city life and the resulting forced pattern of living have stifled and confused their elementary resources. The child becomes so involved in the complicated mechanism of our civilization that he forgets his demands for basic knowledge, but his basic insecurity and confusion remain and can become, as it often does, the nucleus of the nervous child. He believes that camps must be adjusted to their function of acting as an equilibrium for these compensatory needs of city children. In fact, he believes the summer camp is the only means actually in existence capable of playing this compensatory role. In order for camps to achieve the status of a wholesome compensatory institution, he postulates a considerably wider and more highly responsible concept of camping than has been conceived to date. He calls for greater amounts of basic information and wider understanding and use of primitive processes.

A professor of outdoor education points at the outdoors pursuits of the American public and notes the increasing need for better education among the sportsmen so that this increased understanding of the outdoors will enhance the value of their camping, fishing and hunting experiences. He mentions the long-time values to be gained and the organized camp as one source where such knowledge may be acquired. He feels in his state, where half a million deer hunters invaded the woods in the fall of 1954 that "There is little doubt that the quality of the outdoor experiences would have been much richer if those participating had had some educational experiences that developed greater skills, appreciations and attitudes for an intelligent use of the out-of-doors...There would have been better camping, more care of property and concern for natural resources, and fewer accidents".

A professional conservationist pleads that the boys and girls who come to camp should grow in ecological consciousness of the total environment. He says they must be trained to look, see, understand and appreciate and should be helped to see the balance that needs to exist if we are going to live in harmony with nature.

A national park ranger wrings his hands over the havoc wrought by "litterbugs" from one end of the country to the other. He describes "Dirty Camp Blight", the greatest internal threat to our wilderness reserves. He urges camp directors to include a thorough course of indoctrination in wilderness values, in field experience, wilderness good manners, and the techniques required for successful good living in the out-of-doors. It is to the camps these professional men turn with a plea that they turn out campers who leave no trace, who are better trained woodsmen and woodswomen than are their parents.

During and after the war, every experienced camp director of long standing received cumulative evidence from his girls and boys in service of their realization of what their camp experiences meant to them, especially as they found themselves in primitive surroundings and without facilities. Certainly there is no better justification for emphasizing camp craft than this. In this later time, these same skills will be found of greatest value and use in disaster and emergency areas, and in civil defense work.

The Division of Christian Education of the National Council of Churches of Christ in the U. S. A. and its members are turning out an ever-increasing number of excellent pamphlets on camp program. These are for use not only in church camps, which are rapidly increasing in number and quality, but also in their local church schools. The church leaders urge their people of all ages to hike, explore, and cook out together because of the spirit of fellowship which grows up through such activities. They believe and they say that through actual experiences in the care and use of natural resources a sense of stewardship may be developed, and people may be led into a growing understanding of the creative power of God in the universe. They say that a firsthand experience in the out-of-doors is the best-known antidote for a warped sense of values co-incident to a highly secularized society. All of their camp material is based on these beliefs, and it is making a highly significant contribution to camping literature.

The last and most profound expression of the values of "things natural, wild and free" will be found in Part III "The Upshot", of SAND COUNTY ALMANAC, by the late Aldo Leopold of Wisconsin. This great naturalist, philosopher, camper and lover of the outdoors has given us the last and the greatest available word on what knowledge and appreciation of the world of nature can do for people, and what our responsibilities are to preserve our great heritage to those who come after us. Especially significant is his essay on "Wildlife in American Culture", wherein he develops the theory of "split-rail values", and speaks of ethical codes, "wildlife ethics", and the cultural values in the sports, customs, and experiences that renew contacts with wild things. In the chapter "Conservation Esthetic" he segregates the five components of outdoor recreation briefly into:

1. the idea of trophy
2. the feeling of isolation in nature
3. the search for fresh air and change of scene
4. the perception of natural processes
5. the sense of husbandry.

He defines the woodcraft of the future as "the ability to perceive these deeper meanings and to appraise them critically". This great classic, written in words of exceptional beauty, should serve us all as a base upon which to build our own concepts of camp craft values, and as a touchstone by which we should judge the results of our methods and our efforts.

We started this chapter by mentioning some of the needs of campers which a camp craft program may satisfy. It seems appropriate to end it by a brief

reference to their parents and what their desires in regard to values may be. The following letter, received while the preparation of this chapter was being undertaken may well mean more than several paragraphs.

Oklahoma City, Oklahoma
January 27, 1955

Dear Miss Joy:

Will you please let me have your catalogue at your earliest convenience? I am looking for a camp for a fifteen year old girl where the camping is really rugged. Our daughter has camped with us several times where she has actually made a working camp and is rather tired of camps that are country clubs and summer resorts.

Sincerely,

Not all parents, of course, have the background of establishing a family "working camp" which, as in this case, led both the father and the daughter to seek a "camping" camp. As the years go by, however, the increasingly large numbers of present day campers who have participated in good camp craft programs in their youth will be in the market for identical experiences for their children. They will be more intelligent and more critical in the matter of seeking even broader experiences than they enjoyed. They will certainly scrutinize more closely the program and activity emphases of each camp they are considering. They will inquire what the camp is prepared to do in teaching their children survival skills and knowledge of primitive processes, safety in outdoor sports, fundamentals of conservation and use of natural resources, and in inspiring in their children a love for wholesome and vigorous outdoor recreation. They may prove to be not too interested in assurances of the availability of expensive buildings with all the facilities and conveniences of the city home or country club, in movie or TV equipment, in large mechanized workshops, or in extensive playing fields. They may well be searching for the type of camp which will give their children, in short, the deep and abiding values which can be found in the practice of the art and science of real camping.

GENERAL ORGANIZATION

Chapter II

GENERAL ORGANIZATION OF A BROAD CAMP CRAFT PROGRAM

In the first chapter we defined camp craft. We would elaborate a bit, and point out that camp craft is far from being just physical and muscular. It offers a splendid opportunity for practical nature lore, for very real cooperation in group living, and definitely has its cultural and spiritual side. Poetry, creative art, creative writing, photography, sketching and songs can be as much a part of a camp craft experience as properly burying burned and mashed tin cans or extinguishing a fire. Its scope depends on the attitude of the camp in general toward such things, and on the spirit of grateful appreciation of and reverence for the outdoors engendered in the camper's hearts by the leadership.

We all recognize the fact that it is possible these days for children to learn many skills and to have beneficial experiences during the summer other than in camps, either established, troop or day camps. In fact, tennis, handcraft of the more usual types, swimming and other water sports, riding, etc., may be learned in the summer school, in the parks, on the playgrounds, at clubs and in other types of recreational projects now available to children just as well, perhaps, as in the camps. But camp craft stands alone as the one kind of activity which can be learned nowhere else, and that fact is just one more reason why it has a special and a unique place in the program of an established camp.

For this reason it should be available to children of all ages. Participation should not be restricted to older campers or special units within the camp. Campers of all ages should be encouraged to participate in those phases of it commensurate with their level of physical coordination and strength, and of recreational interests and appreciations.

At this point, a word of caution seems in order. In Chapter I we have set forth the values of this phase of a camp program. Valuable as these camp craft experiences are, we realize that they are only one portion of a well-balanced camp program, especially in the long-term camp. It would be unwise to put such emphasis on this portion that individual sports and other especially appropriate activities are neglected or not made available to the campers. Many campers go to the camp with the desire to follow up other types of interests for at least a while, and a certain percentage may never become enthusiastic over the more strenuous aspects of tripping, for instance. We believe this is natural and normal, and that such individual differences in interests and abilities should be recognized and provided for by a broad range of activity opportunities. For instance, individual sports such as sailing, tennis, riding, archery, etc., are valuable not only because of their present value and interest but also be-

cause of their value in college and adult life. Other children find their greatest satisfaction in dramatics, crafts and other activities of a less strenuous nature. All these opportunities must be provided in order to give each camper a well-balanced selection, and it is also true that the content can be slanted towards natural processes, and good use made of them in connection with the camp craft program.

It is our observation that often a new camper will find satisfaction temporarily in these more familiar types of activity while he is becoming orientated to camp life. After he is in the swing of things and secure in his new surroundings, he gains the confidence to expand his interests and becomes caught up in the general enthusiasm for camp craft activities. Except in the trip or wilderness camps for older boys and girls, this concept of a well-balanced program is a very important one for the camp management to bear in mind.

PHILOSOPHY UNDERLYING THE CAMP CRAFT PROGRAM

It is necessary for the camp management to have definite ideas about specific goals and basic considerations which will influence and control the organization of the activity. General values and objectives are not enough. These must be brought into practical focus, so that specific policy resolutions to suit the camp situation may be carefully worked out, and consistently used as the yardstick for planning, execution and evaluation. The organizational methods involved will change, for nothing is ever done so well it can't be done better. But the basic considerations remain from year to year.

As an example of such a basic policy, we have always believed that camp craft is an activity which should be done well or not at all. There are too many dangers inherent in it - mental as well as physical - to allow it to be done in a sloppy or haphazard manner. Any possible benefits resulting from a night under the stars prove rather ineffectual if the camper returns to main camp with a cold, an earache, a case of bad sunburn, or poison ivy, an upset stomach, a cut foot, or a sprained ankle. We try not to confuse the issues of sentimentality over the outdoors life with the practical ways we take to see to it that our campers are prepared and equipped to be comfortable, secure and safe. We want them to feel that way so that they will wish to keep on with their camping interests and increase their abilities. For a camping experience can destroy forever a child's interest in the outdoors just as easily and as effectually as it can foster and build it up. So we look at camp craft not as a test of endurance of one's ability to stand discomfort, confusion and untidy living conditions, but as a unique situation in which campers and counselors can, by their own skill and knowledge, adapt themselves to primitive conditions sanely, safely and healthfully, and in a spirit of fun and adventure.

As another example, while we believe in the "learning by doing" method of education, we think that in this particular department the greater part of the learning process should be carried on in or near the main camp base. When the emergency arises or when the weather turns against the camper, that is not the time to start learning how to pitch a tent or how to build a fire. Therefore, we believe that mastery of the basic skills involved in camp craft should be included as an important part of the regular camp program, just as archery, swimming or tennis skills are included in it. Such preparedness lessens the probability of the occurrence of unnecessary vicissitudes and gives the camper a confidence and a sense of security and of at-homeness in the outdoors which is of great

mental and moral value. Children want to know how to do new things, and to feel capable of doing their share by participating up to the limit of their ability and strength. It is our belief that only by practicing these new and often difficult essential skills and by acquiring some basic knowledge in advance, are they afforded the satisfactions to which they are entitled.

These two examples will serve to explain our meaning of the necessity for basic policy considerations. There are others, of course. Each camp will have its own unique situation and each should eventually evolve its own policies. Until this is carefully done, camp craft will never become what could be called a truly successful part of the camp program.

SPECIAL PHASES IN CAMP CRAFT ORGANIZATION

In this chapter we shall only briefly mention the various phases of camp craft organization, since each will be covered in detail later. First must be mentioned the relation of camp craft to the general administration of the camp, and the ways chosen to fit in the acquisition of special skills and of trips and special projects to the general program. The planning of overnight trips, especially those of several days duration, requires greater coordination than any other facet of the camp program. Conflicts with special days or events of the in-camp program must be avoided. Coordination of dates and of matters of food, equipment, camp sites, counselors, etc., requires a great deal of planning and integration. This is not a program to be entered into lightly. The necessary shifting about of personnel, equipment and program requires the cooperation of the entire camp staff and can be successfully accomplished only after detailed consideration of all factors involved by very competent leaders.

Equipment of the right kind is a very important matter, for lack of it is often a stumbling block to a good camp craft program. Both personal and general camping-out equipment must be suitable to the strength and ability of the individuals handling it. For instance, younger children should not be given or allowed to use heavy, long-handled axes. If the instructor knows his or her business, a young child can easily learn how to handle effectively and safely, a light hatchet or hand axe. Good beds, adequate sleeping protection, suitable and comfortable shoes and clothes for night and day, decent mess kits, good cooking gear and tentage, are all absolutely essential to the successful operation of the camp craft program. The equipment does not have to be expensive, because much makeshift general camping-out equipment such as kettles, reflector ovens, tarps, lights, etc., can be made out of waste materials or out of those costing very little actual cash. And the making of this equipment is of itself a perfect example of a creative and real camp craft project. Adequate, simple equipment suitable to the type of country and to the strength and ability of its users is the criterion. Mr. Kephart says, "Ideal outfitting is to have what we want, when we want it, and not be bothered with anything else." We should add to that the absolute necessity for proper storage, proper care at all times, and constant upkeep.

In organization camps where the campers cannot be expected to bring even part of the necessary camping out equipment, the camp should have available and furnish free of charge, as it does the use of other activity equipment, the necessary personal items which campers need for trips. It would seem that the acquisition of such equipment is just as necessary as facilities for other sports, such as canoes and boats, and it can be done, if the need is considered sufficiently imperative.

Good food, and plenty of it, well-cooked and properly served gives a greater boost to camp craft than almost any other feature. Selecting, packing, care, and preparation of outdoor food is an art and a science in itself, with sometimes, alas, little transfer from the gas stove or the electric range situations. There are so many good books on this subject that there is really no excuse for any camp not to excel in providing varied, well-balanced menus for all outdoor cooking projects and for trips.

Interesting trips - short or longer - serve as a goal for campers to work towards, and there should be a great variety of possibilities. There is actually no part of this country of ours where interesting trips are not possible in some form. Some camps, ideally located for wide wanderings fail to take advantage of the adventure their locality affords. Others, much more meagerly endowed by nature, are able to make camp craft and its allied interests the most popular of camp activities. It is our observation that variety of trips, adventure and good times are not entirely dependent on scenery or lavish endowment by Mother Nature.

We attach the title "enabling skills" to the various methods of locomotion used in taking trips. Often this type of instruction is under the direction of other activity counselors - such as the riding, hiking, mountain climbing, boating, canoeing counselors - and certain standards of proficiency and safety must be met before campers are allowed to go off on trips involving the use of these skills. "Safety through skill" must be our motto and our constant aim.

There are certain adjuncts to a good camp craft program. One is an exhibit of various fires and devices, fuels, makeshift equipment items, and other practical gadgets. This is an excellent teaching device, as well as being of great interest to visitors. It serves to give parents a more definite idea of the many worthwhile things their children are learning, which is helpful in the field of public relations.

There should also be easily available a special book-shelf of pamphlets and books on camping out, outdoor cooking, and one of nature crafts. Campers get new ideas for menus and in general soak up additional knowledge. Bulletin boards, special exhibits and displays add greatly to the general interest. Campers love to have interesting visitors who can talk to them about their outdoor experiences or explain some special hobby or work. Especially in this connection should camps seek the cooperation of professionals in conservation, soil erosion and forestry fields. Campers also enjoy visiting local places of interest such as state forests and parks, saw mills, museums, hatcheries, wild-life preserves, tree nurseries, farms, etc. No opportunity for expanding the interests of the campers in nature lore, conservation, pioneer and Indian life, and in local historical matters should be overlooked. The broader the program, the better.

But most important of all is the leadership. The number of qualified counselors necessary in any one camp to handle the camp craft program will depend, of course, on the emphasis given to it. Many counselors so qualified will have other specific activity skills, naturally. There should always be one to three top leaders who are responsible for the equipment, the preparatory work in the camp set-up, chart maintenance, food packing, and the organization of the entire department. The person in charge of the whole department will be referred to later as the head or coordinator. The camp craft counselor needs training in

the organizational details of department organization, in use of all types of equipment, and in camp craft skills as well as in those such as canoeing, hiking, riding, mountain climbing, or sailing, by the use of which the trips proceed on their way. The leader needs enthusiasm for the activity itself and for life, and must be extremely resourceful and trustworthy. He should possess the ability to keep the group working together cheerfully and to guide the organization of the group in a manner fair to each individual. He must know how to maintain proper relations and attitudes within the group and outside the group in its contact with neighbors and the outside world. He should certainly know how to maintain necessary health and sanitary conditions, and be alert to safety measures at all times and in all places, but without neglecting opportunities for fun and high adventure. First-aid and some rudimentary field medical knowledge are necessary, as is knowledge of the country through which the trip passes, and of local outdoors customs. He should certainly be alert to the necessity of keeping up appearances and keeping the group in good form and order as the group moves along on the byways, trails, and waterways. On the longer trips he should know how to read a map and use a compass. In this work there is no place for the kind of a leader who does all the work himself before an admiring but fast-becoming-bored group.

These leaders MUST have a feeling for the outdoors and primitive living. A sentimental "love of nature" is not what we mean by this, but rather a quiet sensitivity to and perceptivity of its healing and inspirational powers. Each should be that type of person who is more concerned with what happens to the individual camper as a result of the particular camp craft activity under his supervision than he is in the mere mechanics of the operation, fun though that may be. Sex does not arbitrarily make for a qualified trip leader. Except in cases in which male physical strength or protection are necessary, well-trained women counselors are quite capable of handling trips in a girls' camp. Camp craft is surely the one activity in which skill, knowledge, aptitude and training are essential, for the counselors assume grave responsibilities under normal conditions, and even graver ones in the emergencies that are bound to arise. There is no excuse for any camp sending novices to fill in as camp craft counselors merely because they are eighteen years of age or over. The camp craft leaders in any camp should be the most interesting, the most reliable, the best liked, the most versatile, and the most outstanding members of the camp staff.

And, last, there must be an interest in and sympathetic understanding of the needs and aims of the camp craft department on the part of the camp directors, program executive, and camp committee, if an agency camp. In camps where the directors themselves are able campers and trained in woods ways, one would expect to find the best camp craft program. We are considering a highly individualized activity, one that requires large blocks of time on the part of both leaders and campers, and a larger ratio of leaders to campers than normally prevails. Food costs are higher per person per day when small groups are issued the special foods they request than when the whole camp is served the same meal. Without this appreciation of values and understanding on the part of the top echelon of the camp, the best camp craft counselors with the finest equipment and natural opportunities may not meet with success in their job. And the campers may be deprived of an unequalled and perhaps once-in-a-lifetime chance to absorb the realities and the benefits of outdoor life.

Because there are so many phases of the camp craft program under discussion, at the risk of being personal, it seems wise to indicate just how these duties

were divided. Names are used in the plan, so that other directors may see the amount of responsibility which was given to any one counselor. Everybody helped everybody else, but responsibilities must be pinned down. This was all decided in meetings of the counselors concerned, and each given her preference as to what phase she felt best equipped to handle. Names after the semicolons are those of campers.

FINAL DIVISION OF WORK IN CAMP CRAFT DEPARTMENT

HEAD OF DEPARTMENT - MISS JOY

CAMP CRAFT EQUIPMENT AND ROOM	<u>Morrison</u> , Dickerman, Jefferson
TEACHING AND CHART:	<u>Jacobsen</u> , Hanson, Pitcher, Morrison; Rhein, Pirie, Laue
NATURE:	<u>Camp</u> , Williams, Eldredge
COMPASS AND ORIENTEERING:	<u>Williams</u> , Hanson
THEORY:	<u>Malley</u> , Schuerman, Jacobsen, Carey, Hanson
WEATHER:	<u>Williams</u> , Andrews, Linn
SKYSCOPE:	<u>Williams</u> , Eldredge, Linn
SPECIAL PROJECTS AND NATIVE MATERIALS:	<u>Hall</u> , Pitcher, Jacobson, Williams, Bruce
MESS KIT MARKING AND RACK:	<u>Jacobsen</u> ; Teter
CAMP CRAFT EXHIBIT:	<u>Hanson</u> , Jefferson; Linn, McArthur
JC CAMP SITES:	<u>Hanson</u> , Dickerman, Malley; Rhein, Taylor, Laue, Thomson
LEAN-TO:	<u>Jacobsen</u> ; Wills, Barker, Harris
LAKE CAMP SITES AND LEAN-TO TRAIL:	<u>Malley</u> , Hanson, Linn; Fell
TIPI AND COUNCIL FIRE AREA:	<u>Hall</u> ; Taylor
ALL FOOD AND MEALS SERVED OFF DINING-PORCH:	<u>Joy</u> , Scheurman (dietician)

INFORMATIONAL MATERIALS

Chapter III

INFORMATIONAL MATERIALS GIVEN TO CAMPERS

In the camp whose camp craft organization we are describing, the department is used as the basis of all of the indigenous activities which are continuing from year to year, as well as the base from which new projects and interests are launched annually. Except for the two off-dining-porch meals per week, every component of the program arises from the interests and expressed needs of the campers. Nothing is compulsory. Campers have always taken the major responsibility themselves for originating plans and specific requests, and have served in large numbers on the Camp Craft Committee. This is one of the major committees and it is given the duty of overall planning for the activity. A complete description of a camp committee plan can be found in Camp Publications, No. 2, entitled "A Cooperative Committee Plan for Camps".

We have gradually built up a not inconsiderable body of materials which are given to each camper who requests any or all of the items. We have done this for several reasons:

1. It helps the campers to organize their thinking and their plans and helps them in checking their accomplishments as the season progresses.
2. They can fully understand what is required of them in the way of preparation, and keep them for continued reference. This gives them experience in understanding and following printed directions without asking questions. And, incidentally, it saves a tremendous amount of explanations and detailed directions by the counselors.
3. The campers learn to keep track of pertinent reference materials of their own, and we hope it gives them the incentive to be alert to additions to it in the way of clippings, pamphlets, books, etc.
4. It may be found useful for future reference in camp positions later on, or at home in scouting, outing and family groups.
5. It gives them the good feeling of accomplishing specific and definite objectives, and of earning the right by their own efforts to go on increasingly longer trips and off on more far-flung adventures.

All of the materials appearing in this chapter are given to the campers. It has seemed best to include them in this chapter just as they stand, without comment as to their use or implementation. These matters will be discussed in Chapter IV.

TRIP REQUIREMENTS

These are revised every two years by the Camp Craft Committee, on which campers of all ages serve. In Chapter II we stated why we thought it important for campers to acquire in advance the skills and types of knowledge they will need in order to have completely satisfactory trip experiences. The campers understand the reasons for setting up these Requirements, and, to our best knowledge, they have never questioned them or felt it in the least unreasonable that they be complied with. This could well be due to the fact that they themselves realize how much more fun their trips are because of this advance preparation. Once again we wish to emphasize that participation in this phase of the camp craft program is completely on the freedom of choice basis.

REQUIRED FOR FIRST TRIP:

1. Knife
 - a. Demonstrate proper use and care. Sharpen knife correctly.
 - b. Make six good fuzz clumps.
2. Axe or Hatchet
 - a. Demonstrate proper use and care. Sharpen Axe correctly.
 - b. Notch and cut through at least two four-inch logs.
 - c. Make useable tent stake.
 - d. Split sufficient wood for fires the two safe ways.
 - e. Limb a branch or small tree. Limb or demonstrate proper limbing of a large felled tree.
- 3 and 4. Fire Building and Devices
 - a. Demonstrate proper preparation of fire site in starting all fires, and knowledge of ordinary fire prevention methods outdoors.
 - b. Demonstrate proper use and care of matches.
 - c. Prepare tinder and lay properly for fires.
 - d. Make two fires. Boil 1/2 gallon of water on one fire by using a device. Burn the other ten minutes.
 - e. Extinguish all fires properly, and clean up fire site.
5. Tent
 - a. Select site and pitch tent with partner: Old Campers, 10 minutes.
New Campers, 15 minutes.
 - b. Demonstrate ditching properly.
 - c. Strike and fold properly with partner: 5 minutes
6. Bedroll or Sleeping Bag
 - a. Make roll, pin and tie a bed roll properly (if that is personal method of sleeping out): Old Campers, 10 minutes.
New Campers, 15 minutes.
7. Knapsack
 - a. List or pack at least ten essential items to take on trips, packed from bottom to top of knapsack. Know what is worn and carried, stating length of trip.

8. Knots

- a. Make and demonstrate the uses of six knots, including: (1) Square, (2) Slip, (3) Half-Hitch, (4) Clove Hitch, and two of your own choice.
- b. Whip the ends of your own poncho or sleeping bag rope.

9. Sanitation

- a. Be familiar with methods of disposal of:
 - (1) Human waste.
 - (2) Cans, glass, garbage and dishwater.

10. Care of Supplies

- a. Know how to purify and care for water on a trip.
- b. Know how to care for food when on a trip.

11. Trees -- Identification

- a. Jack Pine, White Pine, Norway or Red Pine, Balsam, Poplar, Maple, Birch, Pin and Black Cherry, Spruce, Oak, Shadbush, Hazel Brush.
- b. Know which are used for heat fires, cooking fires, and devices.
- c. Use in fires (No. 3) local natural tinders, such as birch bark, from dead or downed trees, slivers of pitch pins, etc.

REQUIRED FOR SECOND TRIP
(in addition to previous requirements)

1. Useful Article.

Make some useful or decorative article, i.e., broiler, pot hook, pin, toaster, paper knife, totem pole, fishing equipment, etc., which should indicate some skill in use of the knife. See list of projects suggestions on store.

A different article must be made each year the requirements are being met.

2. Compass

- a. Know how to orient a compass and a map.
- b. Be able to tell direction two ways without the use of the compass.
- c. Know what one should do when lost in the woods.

3. Signaling

Demonstrate that you know the meaning of the standard whistle signals.

4. Weather

Post and predict a weather forecast daily for three consecutive days. May have a partner. If possible, fly weather flags for three consecutive days with partner.

5. Hike for three miles.6. Saw two 4" logs and demonstrate proper care and use of saw and saw-horse.

REQUIRED FOR THIRD TRIP
(in addition to previous requirements)

1. Camp Craft Exhibit.

Successfully pass a written, oral, or manual test or combination of all three covering all materials and information in the Camp Craft Exhibit. Test to be administered by the head of camp craft and assistants.

2. Lashing
Demonstrate square, shear, and diagonal lashing.
3. Nature
Identify any six of the following eight groups:

(1) 10 flowers	(5) 3 mushrooms or fungi
(2) 4 ferns	(6) cedar, hemlock, larch, and sumac
(3) 6 birds	(7) 6 constellations
(4) poison ivy	(8) 4 fish.

REQUIRED FOR FOURTH TRIP
(in addition to previous requirements)

1. Hike for five miles.
2. Outdoor Cookery
Help to cook a meal without using utensils.
3. Large Project
Do alone or with partner, on approval from head camp craft counselor

LEAN-TO REQUIREMENTS

In order to encourage younger children and new campers to start their out-of-camp experiences, less difficult requirements have been devised for going to the Adirondack and framework and canvas lean-tos across the camp bay. Since the site is within whistle distance of the director's cabin, only one counselor is necessary. Older campers frequently invite two younger ones to go, and this gives them the opportunity to act as an assistant to the counselor.

REQUIREMENTS

Numbers: One Campcraft counselor and 3 campers

Requirements:

One camper must have done the following:

1. Passed use and care of Knife and Axe
2. Chopped one four inch log
3. Split enough wood for one fire, built a fire, and used as a cooking fire
(heat water or actually cook on a trip)
4. Principles of sanitation

All three campers must have passed the following:

1. Bedroll
2. Packing knapsack.

PERSONAL EQUIPMENT CHECK LIST

This is used by campers to aid them in getting ready for trips. Each person knows exactly what is needed, as well as what is not needed, and can get herself ready without constant supervision.

PERSONAL EQUIPMENT FOR DAY AND OVERNIGHT TRIPS FOR BOTH LEADERS AND CAMPERS

COMPLETE LIST OF EQUIPMENT FOR OVERNIGHT TRIP (INCLUDING WHAT WORN).

- | | |
|---|---|
| 1. Pajamas | 10. 2 Towels; soap; toothbrush and paste; comb; washcloth; nail file. |
| 2. Loosely woven underclothes
2 prs. or sets. | 11. 2 or more handkerchiefs; one or more bandanas. |
| 3. 2 shirts. | 12. Mess Kit. |
| 4. 2 prs. stockings
(wool if necessary) | 13. Jack knife and axe or hatchet and belt. |
| 5. 1 pr. proper shoes, with
softer pr. for wear in camp. | 14. Flashlight. |
| 6. 2 shorts; 1 pr. blue jeans. | 15. Matches in waterproof case or paraffined box. |
| 7. Sweater or lumber jack. | 16. Bathing suit and cap. |
| 8. Slicker and hat. | 17. Knapsack. |
| 9. Bed roll (blankets, ground
cloth, safety pins, rope.) | |

EXTRA EQUIPMENT, IN ADDITION TO ABOVE, FOR LEADERS.

- | | |
|--|---|
| 1. Food list, menus, recipes and
list for all equipment except
personal. | 7. Ditty box (needles, thread,
safety pins, elastic bands,
darning cotton, buttons, pieces
of twine, candle end, etc.) |
| 2. Reserve waterproofed matches. | 8. Money, small bills. |
| 3. Watch. | 9. Bird glasses, bird, flower,
tree guides, etc. Poetry;
story book. |
| 4. Whistle | 10. Extra rope. |
| 5. Pencil and paper, or small
notebook. | 11. Kotex, belt and safety pins. |
| 6. Maps and compass, if necessary. | 12. First Aid Kit. |

TRIP DUTIES

Use of this item greatly simplifies the actual planning of sharing the duties on a trip, since each camper knows exactly what her duties are in each category when her turn comes around. The counselors also know what is expected of each person who is assigned to each division of the work. Use of this device speeds up the process of setting up a camp, getting the fires made, meals ready, sanitary facilities prepared, and care of gear. It eases frictions and obviates a lot of talk and direction-giving. In an emergency, it is invaluable. Further, it gives the campers a real experience in organizing the work of the group in a manner which is efficient, equitable, reasonable AND definite. Counselors can more easily keep themselves free to assist the group which need help the most, as the others can proceed about their work without constant direction and checking.

OUTLINE OF TRIP DUTIES

COOKS

1. Short, fast dip (if any).
2. Look again at menus, unpack food.
3. Tell fire builders what kind of fire.
4. Cook food.
5. Get out eating dishes from mess kits and serve the food (either cafeteria or as at home). In other words, cooks act as hostesses and are the only ones to handle the food.
6. Put away all food and pack away in containers for the night or for moving on. Turn empty food bags wrong side out and pack away. If necessary, resort and repack food supplies for future use.

FIRE BUILDERS

1. Short, very fast dip (if any).
2. Prepare fire site.
3. Be responsible for matches.
4. Get wood.
5. Build fire as directed by cooks and keep it going.
6. (Breakfast fire builders prepare wood the night before and put it under cover.)
7. Put out the fire or give responsibility to someone else.
8. Clean up fire site.

CLEAN-UP AND SANITATION

1. Dig Johnnie and garbage pit (on first arrival).
2. Arrange refrigeration or cooling system (on first arrival).
3. Put on dish water in first empty kettle reported by cook.
4. Scrape dishes with paper napkins.
5. Wash all dishes. Arrange according to situation, either as separate mess kits or in general piles.
6. Wash dish towels and hang them up.
7. Put away all dishes.
8. Fill in Johnnie and garbage pit and cover with standing sticks to indicate form use.

CAMP MAKERS AND BREAKERS

1. Take duffle and bed rolls up from landing place.
2. Pitch tents.
3. Unroll the bed rolls and put knapsacks under cover.
4. Put up lanterns.
5. Bring up canoes or turn over the keels towards the water.
6. Take care of paddles (NEVER lay on ground in piles) and distribute kapoks to tents after they are used at meal.
7. Take care of axes and other general camp equipment.
8. Reverse above process when striking tents and breaking camp.

THEORY SHEETS

Eventually we found that a certain amount of written elementary knowledge was helpful to campers as they worked at the theory parts of their Requirements. This grew out of a set of instruction sheets which a group of camp craft counselors worked up for their own use. After several revisions, the document

was hectographed so that each camper might have a copy. We soon found that its use saved a great deal of time for the counselors as the campers progressed, since it became unnecessary to repeat all this to individuals or small groups. By having the information in their possession, campers could review it from time to time alone or together, and it served constantly as reference material, not only in camp, but for use elsewhere. It is not complete and will always be in process of revision. It also proved to be a useful tool for new counselors who were trying to learn a lot about camp craft in our locality in a short time. Camps in different locations would, of course, need to change such a document to meet their own local situation.

THEORY FOR CAMP CRAFT

FIRE SITE

1. In clearing, away from dead and living trees, shrubs, stumps, etc. - why
2. Clear ground to bare earth - 3 ft. radius - why
3. Circle fire with rocks, green logs, dampen ground.
4. Watch wind-wood on windward side, lighting fire - why
5. Watch for ground fires--especially in pine forest areas--if possible danger soak ground with water, dig hole and line bottom and sides with rocks or gravel for foundation
6. Possible implements to use in case fire is out of hand:
 - a. shovel
 - b. wet burlap
 - c. pail of water
 - d. stamp with feet (if fire not too high)
 - e. sand
 - f. broom of some sort
 - g. switch or branch of green leaves
 - h. dampened clothing or poncho (in emergency)

USE AND CARE OF MATCHES

1. Keep dry
 - a. paraffin, water tight container
2. Distribute throughout duffle in case one container lost, wet, etc.
3. Light fire on windward side
Set close to tinder and hold until catch--why only in one place
4. Disposal
 - a. Never throw into woods
 - b. Only safe if can break
 - c. Should bury or throw into fire, fire preferable

PREPARE TINDER

1. Three types here--pitch pine, birch bark, soft wood shavings; fuzz clumps
2. Use:
Shred and crumple birch bark into ball
Use shavings as is in center of fire material

WOOD

1. No rotten wood
2. Split--burn more readily; smaller, bark retards catching fire
3. Start with dry wood, green catch late with good fire
4. Hard and soft woods--trees requirement with Miss Camp
5. Getting wood--
 - a. Low branches and fallen trees during dry weather
 - b. Dead standing timber or dead branches on live trees any time--
wet by rain, dried by wind
Drag to site before chopping
do not chop at night

EXTINGUISH FIRE

1. Show how done
2. Why sprinkle water on -- so can use site again, goes farther, doesn't raise ashes into face
3. Wet down from outside in so put fire out and doesn't spread sparks
4. Rake coals and embers several times while putting fire out
5. Fire not out until embers can be handled
6. Do not make mud with too much water
7. If no water, use one of methods mentioned under fire site
8. Clean up--
 - a. Save all larger pieces of wood for future use
 - b. Bury ashes leaving bare ground
 - c. If not to be used again--clean up site so looks as if never used.

CAMP SITE

1. Wood and water supply
2. Suitable spot for tents: No stones or roots, few trees if possible, no dead branches overhead, place for fire and cooking site.
3. High ground--drier; low level ground--bugs; check high water, mark if near water
4. Best view
5. Above ideal conditions--find spot which can meet as many as possible of above criteria
6. Back to prevailing winds which bring storms

TENT

1. Pitch
 - a. Open side away from bad weather direction and prevailing winds if local area is known, pitch according to known wind and weather directions; if not known, pitch according to general bad weather directions; E, SE
 - b. Check spot for branches, roots, etc. which might prove to be uncomfortable sleeping
 - c. Always use ground cloth to check dampness
 - d. Try to find level ground

2. Ditch
 - a. Observe contours of ground
 - b. Ditch according to direction from which water will run into tent
 - c. Method of forming trench
 - d. Save soil and sod to fill trench in order to cover up traces of campsite
 - e. Ditch should be deeper in location where water is to run
3. Strike
Reverse of pitching as far as method is concerned

WATER

1. Lower pail to bottom of water source--free of surface material
2. Boil for at least 10 to 15 minutes
3. Aerate by pouring back and forth into sterile receptacles--return oxygen and flavor

SANITATION

1. Human
 - a. Not too far from tent site, in screened place
 - b. Downstream from campsite if near water
 - c. Depth depending upon length of trip
 - d. Fill in as used
 - e. Secluded area but marked against danger of accident
2. Garbage
 - a. Burn tin cans first before disposal
 - (1) Easier rust and disintegration
 - (2) Food out so won't attract animals
 - (3) Flattened so doesn't catch animals and can be more easily buried.
 - b. Burn paper and other burnable items
 - c. Use Johnny pit or another pit for disposal of all unburnable garbage. Glass bottles, trash picked up in cleaning up camp site. (old tin cans, nails, etc., when found)
 - d. Never throw garbage in fire because it might not burn
 - e. Scrape dishes before washing with paper napkins and throw into fire and burn.
Never put scraps or garbage in water
3. Grease pit
 - a. Disposal of waste liquid including washing and dish water which can kill plant life because of lye
 - b. Not always necessary on short trips

SUPPLIES

1. Packing
 - a. White bags
 - (1) All dry materials in plastic or paper bags and then in white-bags--label with tags
 - (2) Firm vegetables in plastic bags and then in white bags
 - (3) Soap preferably in the paper bags so no particles remain in bag to taste other foods
 - b. Tins
 - (1) Liquids not in original container

- (2) Meats in paper bags when possible and then in tins--greasy plastic bags hard to clean
- (3) Soft vegetables in plastic bags and then in tins
- (4) Eggs rolled individually in newspaper; then in tins
- (5) Crackers, cookies, slices of bread in cookie tins--bread in plastic bag or wrapper first
- (6) Jelly--plastic bag and then can
- c. Original container
 - (1) Cereals, bread, syrups, etc., when needed in those quantities or on longer trips where a great deal may be needed
- d. Black Containers
 - (1) Can be used for almost anything. Good in smaller quantities or for salad dressings, butter, and things of that type; take several

2. Method of packing

- a. Label everything as to material and when to be used. Pack according to meals--last on bottom and work up. If longer trip, use divisions according to type--tins, cans, duffle; refrigerated material, water buckets; white bags and staples pack according to use.
- b. If hiking, consider weight as well as meals
- c. Heaviest on bottom where possible
- d. Smaller equipment such as dish mops, towels, spoons, some matches, can go inside of water buckets.
- e. Milk and water in respective containers

3. At Campsite

- a. Food supplies away from marauder--by hanging over branch of tree or over pole between two trees with rope lift (securely tied)
- b. Tarp protection of food and equipment
- c. Equipment
 - (1) Canoe paddles hung up in tree by rope
 - (2) Boats and canoes turned over--keel upward toward lake side
 - (3) Hatchets not left where animals can get at them
 - (4) Regular equipment in burlap except when other provisions made, such as homemade cupboards, orange crates, ready provisions.

4. Refrigeration

- a. In lake--watertight containers; weight down with rocks; build small crib for materials
 - (1) Careful of animals and washing of waves
- b. Pit--near the lakeside if possible where cool
 - (1) Line with leaves, grass, etc., rocks in bottom
 - (2) Cover with wet burlap
 - (3) Cover pit with branches wet down
 - (4) Be sure to mark
 - (5) Be sure in containers other than paper and white bags
- c. Evaporation--orange crate covered with burlap sack with ends dipped in water held with rock
 - (1) Two #10 cans one above the other with water in upper and cheese cloth leading to other; wrap can in damp cloth and hang in trees

KNAPSACK

Pack according to use--that to be used first on top, last on bottom--lightest on top and heaviest on bottom.

1. Bottom to Top

a. Extra clothing:

- (1) Boots, shoes (shoes in boots)
- (2) Jeans, shirt, shorts, underwear, socks

b. Evening wear:

- (1) P.J.'s
- (2) Toilet articles (soap, tooth paste, tooth brush, comb, brush, in center or outside pocket.)
- (3) Flash light in center in towel or P.J.'s. (Turn flashlight batteries around before packing.)
- (4) Towel, washcloth
- (5) Swim suit and cap

c. Rain coat and hat on top to waterproof and for easy access.

KNIFE1. Care:

- a. Keep sharp
- b. Keep dry (wipe off if wet and oil often--especially hinges)
- c. Do not put in fire
- d. Do not cut knots or resinous wood, or use as another tool

2. Use:

- a. How to hold (not thumb)
- b. Hand parallel to stick, if making shavings
- c. Sliding stroke, away from same place on blade
- d. Use always for some definite good purpose
- e. Do not whittle towards self
- f. Do not lay on ground, open or unopened
- g. Tape for blisters
- h. Do not jab into hard material (could fold up and cut fingers)

3. Demonstrate:

- a. Opening and closing
- b. Sharpening
- c. How to wear sheathknife

AXE1. Parts:

- a. Helve, head, wedge, eye, fawn foot, poll, bite

2. Care: (when not in use)

- a. Wearing in sheath, or in chopping block
- b. Carry in hand (bite out)
- c. Handing to others
- d. Keep dry
- e. Keep sharp
- f. Never in flame
- g. Watch always for loose head
- h. Never lend or borrow

3. Use:
 - a. Always for some definite purpose
 - b. How to hold (left and right)
 - c. Feet at right angles (never on log)
 - d. Free swing--all underbrush and twigs out of way
 - e. Chop only at something substantial
 - f. Avoid knots
 - g. 45° angle of entry
 - h. Proper width of V (danger of too wide or shallow strokes)
 - i. Lift straight over log
 - j. When a smaller log on larger, ALWAYS where two pieces of wood touch.
 - k. Never stand too close to chopper, or walk in front or in back of person chopping
4. Demonstrate
 - a. Use and care
 - b. Two four-inch logs
 - c. Tent stake
 - d. Split wood two ways
 - e. Limbing tree
 - f. Parts of axe

TRIP CHECK LIST

Our last addition to materials given campers is the following Trip Check List which each camper about to leave to go out on an overnight trip presents to the person in charge of taking the trip out. Copies were available in the library on a clip.

Name of Camper _____	Cabin _____
1. Has passed all Camp Craft requirements for _____ trip.	
_____ Camp Craft Counselor	
2. Has passed Canoeing for _____ trip.	
_____ Head of Canoeing	
3. Has passed Riding for _____ trip.	
_____ Riding Mistress	
4. Has met Health requirements.	
_____, R.N. Health Counselor	
Date _____	

In addition to collecting this slip from each camper, the person in charge checked each camper to see that she had in her possession:

1. Trip Duties sheet.
2. Dark glasses or hat with suitable visor.
3. Knapsack and sleeping bag with large red tag on each, with owner's name in large black marking pencil. The tags were sold through the camp store and a large china-marking pencil hung there by a string for all to use.
4. Paddle with a typed adhesive strip with her name just below handle. Strips were made in the office by running through a typewriter a two-inch strip of adhesive tape pasted on a strip of bread-wrapping paper.

OTHER MATERIALS AVAILABLE

Certain materials to help the campers with specific information are available permanently on bulletin boards, in the library, in other prominent spots around the camp, or made available for purchase.

1. Outdoor Recipes. This is No. 65 of Camp Publications, entitled "Tried and Tested Outdoor Recipes". It is sold at cost through the camp store.
2. A list of projects to be considered in fulfilling No. 1 under Requirements for Second Trip, and No. 3 for Fourth Trip. This was posted on the side of the camp store on the dining-porch, where it was very obvious to campers as they went to and fro or stood in line for store service. The projects are listed by page numbers in reference books kept in the arts and crafts workshop. Campers are encouraged to look up the projects which may interest them. Of course by so doing they become acquainted with the best available literature on nature and Indian crafts, whittling, makeshift equipment, etc. The current version of part of this list will be found in the Appendix.
3. On bulletin boards and on library walls and cupboards are posted permanently the U. S. Cloud Formation charts, whistle signals, weather flag information, tree growth and planting charts, and other types of similar information.
4. On movable bulletin boards around the main lodge are posted a state survey depth map of our lake and the shores, two enlarged aerial photographs of the camp and surrounding country, topographical maps of all trip territory and the camp locale. From time to time locally printed maps of trip territory are displayed.

FREE MATERIALS

To add to the campers' store of helpful materials to aid them in working on the Requirements, or to give them a sense of building up reference material, from time to time the following items were obtained and distributed.

Sets of colored bird cards from the Arm and Hammer Co. and from the Singer Sewing Machine Co.

"It's a Snap" and other booklets on photography from Eastman Kodak.

"How to Forecast the Weather", from Mutual Life Insurance Company of New York.

"Nothing's More Fun than Eating Outdoors", National Dairy Council, Chicago.

"Along the Trail", The Kellogg Company, Battle Creek.

"Skillet Skills for Camp and Cottage", the Borden Company, Ltd., Toronto.

Booklets on knots and lashing from various rope and cordage companies.

"When you are in the Woods", New York State College of Forestry, Syracuse, \$1.10.

Current pamphlet from Reynolds Metal Company on use of aluminum foil in cookery.

Booklets from conservation sources in the state, such as "Wisconsin Forests,"

"Trees of Wisconsin", "Wisconsin Game Fish", "How a Tree Grows", etc.

Similar booklets are obtainable in every state, we are sure.

"Enjoy your Vacation". Ontario Department of Health, Toronto.

MEETING REQUIREMENTS

Chapter IV

METHODS USED IN AIDING CAMPERS TO MEET REQUIREMENTS

As a choice activity in the regular camp program each camper may choose to go to the camp craft practice grounds to work for the one morning period, or for either or both of the afternoon periods on those parts of the Requirements which are handled there. The camper makes her own decisions about what she prefers to work on there, except at certain times when the counselors in charge announce before the total program is arranged that the emphasis will be on one certain item, such as tent-pitching, bed-roll making, whistle signals, compass, etc. There are always several counselors on duty at the grounds, so it is easy to split up the responsibilities for specific items when the period is an unspecialized one. The following parts of the Requirements are arranged separately from the practice ground choices and are conducted as a distinct choice activity:

- Weather Lore
- Compass and Maps
- Hiking, ordinary hikes or for some specific purpose, such as nature lore projects
- Theory Tests
- Tree identification and check tests
- Useful article - choose as an arts and crafts activity
- Special cookery groups, such as finding and cooking edibles, cooking without utensils, etc.

On rainy days when it is not possible to work outdoors, special groups are arranged for knot-tying, theory, bedrolls, knapsack packing, whittling, etc., so that the work may progress in spite of the weather.

In addition to working on Requirements at the practice grounds and in special interest groups as listed above, campers can ask for and receive full credit for achievement of all items possible on cook-outs, day, supper, and special trips and cruises, as they do their share of the duties. The counselor in charge of these events prepares a slip with the camper's name, date, and the requirement met, and puts it in the post-office box of the counselor in charge of the camp craft chart. Then there is no question about the camper receiving the credit she has earned.

The camp craft chart on which individual progress is indicated is a regular-sized large bristol board sheet, with an addition tacked on the end. Camper's

names are placed alphabetically along the left margin, on lines, and the spaces to be blocked in correspond to the divisions and sub-divisions of the Trip Requirements. Linoleum blocks, each symbolizing the particular subject, are used to stamp in the squares. Camper members of the Camp Craft Committee assist the counselor in charge of the chart in doing this. A smaller, similar chart is kept on a clip board at the camp craft grounds, and the daily mark-up on the master chart is made from that and from the credit slips given to the chart counselor. Thus campers and their visiting parents can see at a glance what progress has been made. Please understand that there is no compulsion about this. Campers who are interested in participating in other activities are not pressured to work on camp craft. But it is interesting to observe that the reports from the trips are so lively and enthusiastic and the plans for each on the bulletin boards so intriguing that those campers, especially the new ones, who may be doubtful about all this, soon feel the contagion and most of them eventually start out on their camp craft careers.

Before the camp craft program gets underway, about three days after camp opens, the head of camp craft gives a demonstration to the whole camp which covers fundamental skills in use and care of knife and axe, and of fire-building and fire prevention. This is held at the practice grounds. This is an important part of the camp craft program, because it is imperative that everybody concerned, both counselors and campers, are thoroughly aware of the do's and don'ts regarding the safe handling of sharp-edged tools, and of the details of the specific skills to be practiced and learned. To avoid confusion of supervision and teaching, and accidents, every person uses the designated methods all the time, everywhere. An informal and friendly talk, it lasts about an hour. It is quite detailed, and done slowly and clearly. The campers bring their hatchets and knives, which are required equipment, and become acquainted with names of the parts and with methods of keeping their tools clean, sharp and in safe condition. Questions are asked, and the needs for precautions, as well as for safe use, are thoroughly demonstrated and discussed.

The reader observed in the last chapter that the Trip Requirements consist for the most part of successful performance of various skills. There is also included a certain amount of theoretical knowledge. This fact, plus our desire to enable the campers to understand the skill processes in detail, was one of the reasons we evolved and adopted the Theory Sheets. In order to provide a quick check, by ready groups, the counselor in charge of the "theory" in the department set-up devised simple sets of questions which can be used for this purpose. Different questions are given each group which announces its readiness to be checked on these items in the Requirements. It is done on the true and false principle, and takes only a few moments. If this plan were not used, each camper would have to be queried separately. Samples of some of these questions will be found in the Appendix.

Much informal discussion of these matters takes place at the camp craft practice grounds between campers, and campers and counselors before the individuals are ready for this routine check. And the successful completion of the checking device is not the end of the learning process. Each camper is carefully observed and supervised as she later puts this knowledge to practical use on trips and in all subsequent camp craft activities.

The number 1 item under the Third Trip is handled as quite a serious test and entails much concentrated studying of the camp craft exhibit and the theory

sheets. Of the latter because certain of the displays in the exhibit are practical applications of the theory information. Slips of paper are prepared as individual problems, and are given to either two girls working together, or to a single girl, depending on the type of problem. Here are samples of a few of these slips:

- Single:** Make a good improvised snap broiler or toaster and toast well two slices of bread. Jam furnished!
- Single:** Make an acceptable frying pan out of tin can or of aluminum foil, and a pancake turner. Fry an egg acceptably (do not break yolk) using both articles. May use fire being used by another group.
- Double:** Make a swinging camp crane to accommodate a No. 10 makeshift kettle, which is to be hung from a crane by a pot hook you will devise. May use wire or wood, as desired. Boil $\frac{1}{2}$ gallon of water in kettle. One hour.
- Single:** Make a lumberjack saw horse and saw six pieces of four-inch popple on same. $\frac{3}{4}$ hour.
- Single:** Demonstrate three out of the four following types of lashing - square, diagonal, shear, running.
- Single:** Make three different kinds of simple dingle-stick devices which will acceptably support a No. 10 kettle half-full of water over a fire site. Build a fire and heat $\frac{3}{4}$ full kettle of water to boiling point using one of the devices.

The written test, partly true and false and partly essay or outline form, is given the afternoon after the practical one in the morning. This may seem, it is true, a bit like school procedure, but the atmosphere and the subjects are so unlike the school situation that it seems to stimulate interest, rather than dampen it. In fact, it is an exciting day for the participants, who scurry back and forth in a pleasant state of agitation. Here are a few of the questions which have been used:

1. Explain principles involved in primitive refrigeration methods.
2. List nine soft woods which are found on the main camp site or which you have seen or used on trips.
3. Which is apt to be heavier, given same size pieces of wood?
 - seasoned oak
 - green popple
 - water-soaked seasoned popple
4. What type of fire would you use to barbecue spareribs?.....
5. What type to bake pie-pan biscuits?.....

6. Do you loosen or tighten guy ropes before a rain?
7. What is the only safe series of steps to be used to wash dishes on a trip? Itemize step by step after the eating utensil or dish leaves the owner's hands when finished eating until it is put away.
8. Name five different sorts of artificial tinders that are inexpensive and not cumbersome to carry.
9. What are the three main tinders we use here?

One summer we had in mind the possibility of a longer and quite hard trip. More campers were eligible for it than there were places available, so we devised, for that one occasion only, a special rating sheet. The campers concerned were advised of the general requirements and bases of rating, but the actual rating was done by all the camp craft counselors on the basis of observation over several weeks. This is not a device to use all the time, but is one which might have use for some special purpose.

RATING SHEET FOR JUDGING ELIGIBILITY OF CAMPERS

(Rated on a scale of one to ten)

I. Camp Craft Requirements (10 points)

Quality of the work done on the Camp Craft Grounds and the degree of interest shown in passing the Requirements.

II. Canoeing (Total 10 points)

- A. Skill (9 points)-- $\frac{1}{2}$ point for each requirement passed under the headings of "BOW", "STERN", "SINGLE" and "TRIPS" on the Canoeing Chart.
- B. Endurance and Strength (1 point)--this is over and above the endurance requirement on the Canoeing Chart, and will be judged by performance on trips and in the canoeing activity in Camp.

III. Attitude (Total 10 points)

The general relationship of the camper to other campers, the counselors, and her actions and feelings concerning rules to be followed, work, planned and unplanned recreation.

- A. On trips--overnight, supper, day, special and lean-to. (6 points)
- B. In camp activities, in cabin duties, and cabin relationships. (4 points)

IV. Ability to Perform Tasks (10 points)

Doing a job well, and demonstration of the use of skills learned on the Camp Craft Grounds.

V. Cooperation (10 points)

A willing attitude when asked to do something extra, and assisting others, such as helping with other committee work when needed.

VI. Initiative (10 points)

Perceiving what needs to be done, and doing it; doing a job without too many questions, offering your own ideas and carrying them out, and having a general knowledge of the situation.

VII. Ability to Follow Directions (10 points)

Understanding of instructions given and following them explicitly.

Total (Possible 70 points)

To any who may be lead to believe that these plans are cut and dried, so to speak, we should point out that this is not the impression made on the campers. This is true for several reasons, some of which have been mentioned. They understand the reasons for all this, and have an important part in setting up the Requirements. It is not a compulsory program. They seem to feel that it means more to them to earn the privilege to go on trips than if just anybody could go any time she had the notion to do so. Anticipation is whetted because they have a chance to say what they want to eat, where they want to go, and with whom. And they are smart enough to know that their trips are more fun because they have this fundamental knowledge and training. And they appreciate the fact that what they learn is put to practical use and is not abstract or unrelated learning. This fact also holds true for most of the nature lore activities, which are tied up with the routine camp craft activity, are a part of the crafts division, or are separated entities in the form of innumerable special expeditions. In the following chapter we shall try to explain how all these various projects and activities are planned and executed.

COOK-OUTS, TRIPS

Chapter V

METHODS OF ARRANGING COOK-OUTS, TRIPS AND SPECIAL PROJECTS

As stated earlier, two meals during the week are handled by the camp craft department in order to relieve the kitchen staff. The latter has no responsibility for preparing the food for these two meals, except for picnic suppers when a hot dish like baked beans, chili, etc., is made ready, or when an ingredient or two has to be pre-cooked, as indicated in the chili recipe in Chapter VIII. The kitchen staff leaves after the previous meal is cleared up and does not reappear until time to get the next one. Usually Wednesday and Sunday night suppers are the routine cook-out times. On all-camp day trips, which are taken at least three times during the eight weeks, the noon meal Wednesday is substituted. On the two or three Sundays when Vespers take the place of the morning Sunday Assembly, then the cook-out takes place at Saturday supper time. This is all arranged well in advance so the kitchen people can plan for their time-off, which is a very important point in camp administration. Counselors also know that they will all be needed for these events and consequently do not ask for their free time out of camp at the times scheduled.

ALL-CAMP COOK-OUTS

The simplest of these is the picnic supper, served cafeteria style, which takes place at varied points on the camp grounds. Sometimes it is near the main lodge, in the open spot near the flagpole overlooking the lake. Sometimes it is at the archery range, or at one of the cabin points. If it rains, the Food Preparation Committee works in the kitchen, the food is served cafeteria style from a table near the kitchen door inside the lodge, and the campers sit at their regular table places on the dining porch. If the picnic is near the main lodge, campers are asked to leave the cases and the portions of their mess kits they will not need at their place at the table on the porch. This simplifies things at the picnic site, and also when it comes time for each camper to put her clean things away in her kit.

For these picnics, as well as for all of the all-camp cook-outs, the menus are prepared a week or more in advance by the head of camp craft and the dietician. This is necessary in order to assure good buying methods. For a simple picnic, the usual committee plan is as follows:

Food Preparation and
Transportation
5 p.m.

Dietician, in charge
Two counselors, five campers

Equipment
5:15 p.m.

Two counselors, five campers

Serving

One counselor, six campers. One person to serve each item on menu.

Clean-up

Mess-kit wash-up
Nurse in charge, two counselors and four campers

Kitchen clean-up
Two counselors, four campers

It will be noted that the Clean-up Committee is divided into two parts. The duties of the mess-kit part will be explained in the chapter on Equipment. The other half cleans up the cooking and serving utensils and works in the kitchen. In order to be sure that all was exceedingly well when the cook arrived to get the next meal, after others had worked in her domain, we eventually evolved the following check-up directions.

1. Leave the tank pumped full of water and be sure the valve is turned properly when finished.
2. Sweep the floor.
3. Close down the sky light over the stove.
4. Empty the small kitchen garbage pail into the big pail in the alley.
5. Flatten any tin cans and place in can pail in alley.
6. Hang up dish towels, dish cloths, etc.
7. Put every kettle, utensil, etc., back in its proper place.

This was a good idea, as all camp directors and cooks will appreciate!

Here are three sample menus for such an event:

Baked beans	Chili	Escalloped corn
Cabbage salad	Crackers	Carrot sticks, celery,
Bread and Butter	B and B sand-	and quartered tomatoes
sandwiches	wiches	B and B sandwiches
Dill pickles	Tossed vegetable	Banana
Ice cream bars	salad	Cookies
Punch	Pickles	Lemonade
	Doughnuts	
	Milk	

Another main dish for such an event is the Poor Boy sandwich, which is so popular on the Gulf coast. Large round hard rolls are buttered on top and bottom, with a slight hinge left on one edge. Lettuce leaves, slices of cooked ham, cheese, tomatoes and bacon are each put in a separate container lined up on the cafeteria table in the order named, and the campers go down the line collecting the items. This was a very popular outdoor picnic supper, although it did take more preparation on the part of the Food Committee than the others listed above.

BARBECUES

These all-camp barbecues took place at the barbecue pit on the main camp site. This is a rock-lined pit about six feet long, three feet wide, and one to one and a half feet deep. The depth varies depending on what is to be cooked and the amount of coals needed to do the job. When the fire is ready and the Cooking Committee is ready to proceed, two pieces of lead pipe are laid across the pit crosswise, and on these a heavy gravel screen lengthwise. When our first one wore out after years of hard use, we replaced it with one discarded by a local sand and gravel company. If the fire is at first too hot to use with the pipes flush with the top stones at the edge of the pit, four short, thick logs are taken from the wood pile, two placed endwise together outside the stones on each of the two longer sides of the pit, and the pipes supporting the screen put on top of them. When the fire is less hot, they are moved and the screen is thus brought nearer the coals. Two heavy garden rakes are used in handling the screen, the prongs catching on the screen from underneath so it can be easily lifted and set aside temporarily, even when the meat is on it. Sometimes if the top coals cool off, and the fire has to be raked up from underneath to renew the heat, it is necessary to remove the screen to one side while this is done.

The committee set-up for such an event is as follows:

Fire	
2:15 p.m.	Head of camp craft, supervisor One counselor and one camper
Food Preparation and Transportation	
4:30 p.m.	Dietician, supervisor two counselors, five campers
Equipment	
5:00 p.m.	Two counselors, five campers
Cooking	Head of camp craft, supervisor Three counselors, four campers
Runners	Two campers
Serving	Three counselors, five campers
Clean-up	As for picnic supper
Ponchos	Council members from each cabin take ground cloths or ponchos so everybody will have something to sit on while eating

Suggested menus for such an event:

Pork chops	Steak	Spare ribs
Buns	Buns	Barbecue sauce
Lettuce salad with tomatoes	Barbecue sauce	Quartered tomatoes
Pickles	Pickles	Carrot sticks
Watermelon	Cabbage and raisin salad	Buns
Milk or punch	Ice-cream bars	Pickles
	Milk	Banana
		Punch

Other all-camp meals which have been successful are emus, corn roasts, spit-cooking of roasts, fowl, small pig, legs of lamb. Many other ideas for such meals may be found in "Outdoor Cookery for Crowds", Camp Publication No. 58.

PROGRESSIVE SUPPERS

At least two or three times each summer the all-camp cook-out is in the form of a progressive supper. The Camp Craft Committee attends to food preparation, transportation and serving, and clean-up. The Special Events Committee has charge of arranging the clues, laying out the course, and organizing the groups. Camp Publications No. 61 gives directions for this type of popular event.

DAY AND SUPPER TRIPS

These all-camp expeditions require considerable effort on the part of the management and counselors. As many as eight or ten groups have to have food packed and ready at the same time, equipment assembled, and a time schedule met. Several years ago the program director worked out a plan which certainly helped in making preparations less difficult, and the actual handling of the groups much more orderly and efficient. Because of this improvement and the smoother handling of details and of personnel, it was heartening to note that both the campers and the counselors enjoyed them more than ever before.

In the following plan, the person referred to, Miss Camp, is the program director.

REVISED PROCEDURE FOR ALL SUPPER AND DAY TRIPS

A. PERSONNEL

1. Miss Camp to have campers and counselors assigned to groups at time of preceding meal.
2. Read off names of each group after the meal.
3. Counselors in each group meet with their campers before leaving the Dining Porch.
 - a. Assign one of the counselors (who is not packing food) to be in charge of assembling and campers and the boats. Have them all ready to go (oars, paddles, kapoks, knapsacks, mess kits, etc.) when the food is brought to the dock. Riding or other groups make similar plans.
 - b. Assign specific places in each boat or canoe to each person.
 - c. Go over in detail the equipment which is to be taken, and how it is to be packed (2 campers sharing a knapsack, etc.)
 - d. Assign one camper to get the mess kits.

B. FOOD PACKING

1. The menu will be posted in each case the day before, and packers assigned.
2. Miss Camp will also have ready the day before the numbers (but not the specific people) who will be in each group. It will be posted in Counselor's Room.
3. The counselors assigned to food packing (or the head packer) figure out AMOUNTS in each recipe for each group the night before (of a Day Trip) or the morning before (of a Supper Trip). Check plans with dietician before starting to pack.
4. Arrange (on a Day Trip) for other counselor to take responsibility for cabin clean-up and do minimum amount of cabin work before reporting to the Camp Craft Room.

NOTE: Counselors will take JC Cook Book or special recipes without fail.

The riding mistress handed in to the program director the day before the names of the campers who would go out on horseback. The second counselor for this group goes by car, taking horse feed and trip supplies, and the group of campers who would swap and have the long ride back on the horses. Otherwise, individuals were assigned to each group by the program director, unless there were special requests made by campers for a certain group for some special project. This happened often. The first part of the summer campers who had not passed their canoe or sailboat tests went in boats or by land. This and other personal factors are taken into consideration by the director in making assignments. In addition, she kept a seasonal chart which was checked by her after every day or supper trip to show to which of the many available camp sites each individual camper had gone that day. By so doing, duplications of assignments to camp sites were minimized and the campers enjoyed the widest possible use of the sites. This careful consideration of seemingly small details by the program director paid off well in good organization, good spirits, and additional fun for all concerned, especially the counselors. The camp nurse went on all these short expeditions, being assigned to a site nearer the main camp in case of emergency. She came back early so as to be on duty in her cabin as the other trips came in. One of the directors and one of the food packers, usually the one in charge, stayed in camp. The latter was then on deck to receive the equipment as the trips came in, inspect and put it away, and put away any left-over food supplies. The head of camp craft kept a running list of food packers, so that the responsibility for such a big job was distributed equitably during the season among the camp craft counselors.

OVERNIGHT TRIPS

The overnight trips, lasting from one to four nights out, depend for timing and personnel on the progress made by individuals in meeting the Requirements, as explained in Chapter III. The first group of six or so to get ready for the first trip, usually old campers, goes off in a fanfare which excites the interest and curiosity of new campers and incidentally stimulates the efforts of those already making progress up the ladder. Some times two groups have qualified at the same time, and go out the same day. Since the war we have given the name of "waves" to the various groups as they qualify, by number. We have found that the campers themselves are the best means to arouse enthusiasm over trips among the new girls as well as among those old campers who may be hesitating about starting to renew their qualifications. Also, the impetus for com-

pleting the Requirements so as to be able to go on a trip with special friends is effective. Friends rally to the assistance of aspirants and help them by going over the theory parts with them, and by actually coaching them in the specific skills. This attitude of helpfulness for and interest in the welfare and progress of others is, we think, an excellent by-product of the plan.

Each group formulates its own plans by submitting a complete menu for each meal of the trip, asking for certain counselors among those qualified to take trips out, and suggesting the camp site to which they wish to go. Insofar as possible, these requests are honoured. It is often necessary for the head of camp craft, whose job it is to coordinate all this, to meet with the group and go over the menus. Campers have to learn that perishable foods have to be planned for the first day, for instance, and many other rudiments of trip planning are bound to come into the discussions. But all this time and effort is well worth the result, because it is through this planning for their own trips that the campers learn the fundamentals and feel the satisfactions which come from active participation in all angles of the project.

True, it would be much more efficient, less expensive, and less time-consuming to have the adults provide several "packaged" menu plans for various types of trips and allow campers to choose the one they wanted. Food and equipment packing would be reduced to an easy routine for food amounts, lists of equipment and supplies would be worked out for each "package" and set up in advance for easy distribution. But, because we believe that camper participation in and responsibility for preparing themselves for the trip and for planning for it on all levels is the secret of an effective, vigorous, valid, and popular camp craft program, we do not approve of and have never used this "package" plan. Larger camps may think they have to do so, but those who do might reconsider their objectives and methods in the light of the educative deficiencies in such a plan motivated and executed by adults.

When all details are decided, the complete plan is typed out to include site, personnel, times of departure and return, menus by days, and any special directions or requests. This is done on white bond paper, with three onion skin carbon copies. The original is put on the Trip Board, the first carbon copy given to the trip leader, and the second and third to the program director and to the dietician. Any requests for special foods to be supplied before the packing starts, or to be delivered to the camp site or to some station while the trip is en route, are checked on the latter with a red pencil. The copy given the program director is kept on her desk in a certain spot so the camp secretary may easily check the whereabouts of each camper at any time when visitors may arrive. The head of camp craft enters the personnel of each trip on her master chart on which every out-of-camp trip, long or short, and every all-camp cook-out or other project which involves food supplies away from the main camp, is kept by days.

A schedule of Trip Duties is a useful adjunct. The one we use has four divisions or groups, to correspond to the four divisions on the Trip Duty sheet. The counselor in charge of the trip has a meeting the day or night before the trip is to go out. Usually at that time the groups are decided on, and the names written in on the left side. It is wise to put each of the four most able campers down as chairman of one of the groups. Except for one night trip, it is best to have each group continue the assigned duty for the period of one day. The schedule is tied around a tree trunk near the camp kitchen area, or tacked up in some other conspicuous place so that the campers may be aware of the duration of present duties and the change to others.

SPECIAL TRIPS, PROJECTS, AND EXPEDITIONS

Under this heading is grouped those special short trips out of camp which the campers request. No camp craft requirements are involved, except for the lean-to, as noted in Chapter III. Basic enabling skills are required, naturally, for trips by sailboat, canoe and horseback. Otherwise, the initiative comes directly from the campers, either by handing in a request accompanied by menus and other desires, or by means of signing up for a specialized expedition, such as going to collect driftwood or to photograph purple wild orchids. Those most constantly on the Trip Board are lean-to trips, sailing cruises, fishing breakfasts, all day hiking, boat, fishing and canoe trips. On all these, special requests for food supplies are made, together with the list of participants, the name of the leaders of choice, and the date desired. Before such a plan is handed in to the camp craft coordinator, the counselor involved signs the request. By adding this detail, the coordinator knows that the counselor in question is free to go out of camp at that time and, further, that she has entered into the discussions of the campers who evolved the plan. The slip is then given to the camp craft coordinator by an appointed messenger, and so many pile in at times that there may be three or four under her plate at a meal, and after every turn about camp pockets have to be emptied systematically on the office desk. The date of receipt of the plan is noted, as often there are so many requests that there is a waiting list for especially popular trips such as the lean-to or sailing cruises.

When the final plan is made, date assigned, etc., it is written or typed up by the coordinator and put up on the Trip Board. The menu is always included in this write-up. It is put on the long half of an $8\frac{1}{2} \times 11$ sheet, with two onion skin carbon copies. One of the latter is given to the program director and one to the dietician. Any special foods which it will be necessary to have in supply for that particular trip are checked boldly with a red pencil, so as to catch her eye. Getting small amounts of special items is a real headache for the dietician, but it has been our good fortune to have always had people in that position who appreciated the objectives of the camp craft program and who were willing and glad to do the extra work involved. The other carbon copy is spotted on the desk of the program director, as noted in the section on overnight trips. Each trip, as stated, is also entered on the block daily calendar kept by the camp craft coordinator. This is blocked off in squares by days for each of the two months, and it is an important adjunct, because the coordinator has to know exactly who has gone or plans to go where and with whom.

There is one more wrinkle in all this which should be mentioned. Each type of trip is written up on a special coloured paper. The key to this is posted on the Trip Board, so visitors may understand the system. Each original remains on the Board until the trip returns, when it is removed personally by the coordinator. These trip colours were as follows:

White	- Overnight Trips
Pink	- Sailing Cruises
Gray	- Lean-to
Green	- Fishing Breakfasts
Orange	- Riding Trips
Yellow	- All day hiking, boat or canoe Trips
Blue	- Miscellaneous special trips, such as sketching, nature photography, swamp, driftwood trips, etc.

By the simple expedient of posting all these plans, all the campers are thus exposed to the multiplicity of trip possibilities and plans. It has proved to be a successful interest-stimulating device. Countless happy hours are spent by the small groups in making their plans and decisions, and one successful adventure leads on to another. It is understood that these groups are not constant in make-up, but that each varies as to personnel. Old campers take care that new ones, young and older, are included in all the non-requirement trips, and in the overnight trips just as soon as they can qualify. There seems to be something about the spirit engendered by this type of activity which makes those who love it want to help others become both proficient and enthusiastic.

The sailing cruises are so popular that it eventually became necessary to have two types, A and B. Cruise A goes out at 11 a.m., after the morning period, and returns at 2:30 p.m., in time for the boat to be used for instruction during the two afternoon periods. Main foods chosen for this are makings for sandwiches, which are usually made on board. Cruise B goes out at 5 p.m. and returns about 8:30 p.m. They can take a cook-out supper, if they wish, and land on one of the islands. This constant use of the larger sailboat could only be done, of course, where there are three sailing mistresses to divide the load.

Fishing breakfasts are more popular the first part of the summer than later, when the camp craft trip program is in full swing. Various factors involved in the preparation for these made it necessary to work out the following set of directions to help the counselors in having everything ready so the group will not be delayed in pushing off.

SUGGESTIONS FOR HANDLING FISHING BREAKFASTS

PREPARATIONS TO BE MADE THE NIGHT BEFORE BY COUNSELORS IN CHARGE OF TRIP:

1. Pack in folding water buckets:-

Cereal	One extra No. 10 can
Brown Sugar	Paper Napkins
Jam or Honey	Matches
Pancake Flour	Two pieces Soap
Salt and Pepper	Steel Wool
Small Amt. of flour for flouring fish before frying, if desired.	Two Dish Towels; One Dish Cloth
Bacon rind for greasing pans	Newspaper (For Holding Fish Entrails)
One loaf bread (if desired) and butter for toast.	Two large frying pans (C.C. Supply)
Would suggest using	One large Alum. Kettle to contain made cocoa
<u>EITHER</u> the toast <u>OR</u> Pan- cake Flour, depending on the amount of fish captured.	Water Jug and Contents
	Knife, Hatchet, Canvas Gloves, Bandana

2. Pack and leave ready in the root cellar or refrigerator:-

Fruit	Bacon - Three slices per person
Milk for Cereal	Butter

3. Have bait, fish boxes, measuring sticks, mess kits, and supplies down to boats by 7:10, so can start directly when the campers show up. Better check on state of available fish poles before supper the night before (so can get hooks, etc., needed when store opens).
4. Check with entire group the night before going on trip to see that they understand what they are to do, and assign boats and any duties necessary. If desired, assign two of older ones to help get supplies down to dock.
5. Cocoa is to be taken already mixed with milk, from the kitchen. This will only have to be heated up. Counselors may take powdered coffee, of course.
6. Fry all fish in one large pan and any pancakes to be cooked in the other. DO NOT use INDIVIDUAL frying pans at all.
7. If the woods are wet, take along dry tinder and kindling from Camp from the large woodpile. Go to lean-to if it looks threatening or starts to rain while out.
8. Counselors on Trip:
 - a. Arise QUIETLY ten minutes before bugle and proceed as suggested above.
 - b. Eat fruit on way to fishing grounds.
Fish until 8:30 or so, then send one boat load to the camp site to build the fire and get out food. Other boat can continue to fish for awhile longer.
 - c. Put dish water on early.
 - d. Try fish sandwiches some time.
9. Please be back in about 10:20 so that supplies can be checked in and counselors will be ready for swimming duty without too much hurry.
10. Please do not allow the campers to clean the fish at the edge of the water and of course never from the boat when it is beached. It should be done on a plank, log or stump in a newspaper, and the entrails completely burned up in the fire. Bones and skin left after eating should also be burned. It is impossible to bury fish refuse, as animals will be sure to dig it all up.
11. As you go by boat dock on way to main lodge, be sure that the boats have been emptied by the maintenance man, in case of showers during the night.

The all-day special hiking, boat, riding and canoe trips, on our own lake and to neighboring lakes, streams and camp sites are continuously popular. The trips and explorations planned by photography, compass and map, berry-picking, driftwood and nature lore enthusiasts, and those with other special hobbies too numerous to mention offer that something extra which adds a fillip to the pursuit of some special interest.

Another special type of project which is important to the general welfare of the camp is the "work crew". The first week or so of camp these different groups clear up the trails leading from the main camp along the lake and to other sites, fix up the Adirondack lean-to and get it ready for business, repair fireplaces, tarp frameworks, devices and tables, clear beaches for landings, and in general put the old camp sites in good repair. They get balsam boughs for the lean-to and sphagnum moss for chinking it. Later on in the summer, similar crews are organized to establish new camp sites. We always make a point to give these crews great amounts of their special foods, which scarcely detracts from the enthusiasm! The counselors in charge of these crews are those to whom special areas of the camp craft set-up are assigned, as indicated at the end of Chapter II.

One of the greatest benefits these short trips provide is that of getting away to new surroundings, in small groups and with campers from other living groups. There is no pressure and there is sufficient time for doing the simple things children love, as well as for dips, explorations, quiet times, etc. There is also plenty of time to do things well, to have kindly chats and little friendly wanderings, and to soak up the sunshine and strength from the good earth. These simple expeditions are not spectacular, no great number of miles are covered per day, and no record has to be equalled or broken. Each of them is the own idea of the participants. They are carrying out their own plans and desires, doing their own work, and each her own share of it. Many such good days are the fabric of camp memories and they are, we believe, the basic factors in the benefits and benisons which children should receive from a camp experience.

EQUIPMENT CARE

Chapter VI

USE, CARE AND PACKING OF CAMP CRAFT EQUIPMENT

In Chapter II the importance of adequate equipment in the camp craft department was mentioned briefly. We shall discuss first the necessity for a proper storage and distribution unit or center. This could be an entirely separate building used only for the storage and distribution not only of all the trip equipment but also of all types of food supplies sent out on trips. In such an arrangement, it would be necessary to have it located near kitchen, water supply and refrigeration sources, as presumably such facilities would be provided and ordinary staples as well as all special trip foods would be available there in ample quantities. This is a highly specialized unit and one which demands careful planning of details.

It is quite possible, at least in reasonably small camps, to handle an adequate camp craft program without such a specialized building. A small wing or addition near the main commissary is usually adequate. It does not have to be a large space or room, but it does have to be efficiently organized so that every inch of wall, shelf and floor space is utilized. Shelves, partitions in them, nails, hooks, boxes, hook-up-and-let-down tables, etc., should be very efficiently arranged so as to cut down extra walking about and movements during food packing. Running hot and cold water and a sink are certainly desirable. If this unit is near refrigeration facilities and staple kitchen supplies there need be kept in it only special trip food supplies, such as mixes, small tins and a few other similar items in addition to the actual equipment used for packing food and for cooking. Tents, tarps, folding canvas water buckets (which we use for packing one-meal trips) may be kept elsewhere. In fact, it is better to keep them apart from the food-packing area in camps where there is no separate camp craft center. Then the canvas goods may be packed separately and avoid congestion. The place where they are stored should be dry and dustproof, and well up off the floor. Every camp can find a spot where some extra shelves can be put up without being unsightly. As a suggestion, we solved our problem by the simple expedient of making two good-sized triangular shelves in two corners of the camp library by fitting wide ship-lap boards across the plates.

One other piece of equipment that is important is a series of stout, short clothes lines with plenty of spring-type clothes pins. In locating these lines, it is wisest on all counts, especially that of public relations, to choose a spot well away from any areas into which visitors might wander. We all know that dish wipers, cloths and mops come back from trips the worse for wear, even when they are "washed" by campers before returning or in the camp craft sink, for that matter. They have to be thoroughly dried before being sent to the laundry, hence the hidden clothes lines. White food bags, canvas water buckets,

food duffles, tents, etc., also have to be dried, aired, sunned and brushed several times during the summer, as well as at unpacking and packing-up times, and the lines are handy for these purposes also. Small galvanized wash tubs and an old-fashioned folding tub rack are also useful adjuncts. The former we use in the mess kit washing procedure to be described later. They are also used for rinsing out soiled white food bags and mosquito tents.

With the exception of watersports equipment, that used for camp craft is usually the most expensive and consists of the greatest number of permanent items and of current supplies of all types. Much of this type of equipment needs careful handling, whether in or out of use. Its use and maintenance take time, thought, and special knowledge on the part of counselors and management, even though the duties of the latter may be only supervisory. Consistent, reasonably careful use and care of this equipment should be stressed with both leaders and campers. Abuse and destructive handling of it should not be tolerated. For is it not fundamental that the young should learn not only conservation in the realm of nature but also practical lessons in prudent and vigilant use of equipment and supplies of a material nature which are vital to their comfort, health and safety? Counselors who "slam-bang" equipment around, allowing it to be torn, mutilated or lost, and who waste supplies present a poor lesson, indeed, to the campers. And they pile up needless expense to the camp and unnecessary problems for the management. Therefore, one of the first things to do in the matter of equipment is to thoroughly and rather emphatically acquaint all counselors who will be handling it in any capacity with the standards of the camp in this respect, and to give them the instruction and the information they need in order to follow the standards. Beyond that is the need for constant supervisory action by a qualified person within the circle of management. It is all too true that much unnecessary damage is done to trip equipment, including canoes, by improperly trained counselors who are sent out on trips. This would seem to be the fault of the management, and the leaders who bring in mutilated canoes, torn tents (and probably worn-out campers) should not be blamed too much for the loss and irritations involved.

The amounts and kinds of equipment - whether purchased or made at camp - will depend to some extent on what the camp requires the individual campers to bring for their own use. We carry on our required list for campers a sleeping bag or ground cloth, knapsack, hatchet, knife and six-piece mess kit. Camps which cannot or do not require these personal items necessary for camp craft participation must plan to stock them or their equivalent as activity items for issuance to the campers as needed.

In most camps fundamental equipment consists of the following: Bags for packing foods (waxed fabric, glassine, cellophane, plastic); buckets and cans with bails and tight covers for water, milk, punch; books and pamphlets (tree, recipe, orienteering, knots, knife and axe, etc.) for teaching aids in addition to those in the general or special libraries; canteens, dish towels, mops and sponges; duffle bags, knapsacks, pack baskets, grub boxes, canvas water buckets; Dutch and reflector ovens; frying pans and griddles; files and carborundum stones; grates, grills, broilers, charcoal stoves; extension and long-handled forks; nesting aluminum and other types of kettles; granite or aluminum mixing pans; set of steel letter dies for stamping names on mess kits; tarps for temporary and kitchen shelters; shelter and mosquito tents, poles and pegs; pot hooks, rope tighteners, waterproof match boxes, shovels, pop corn poppers; plastic screw-top jars, canisters, and many types of tins with covers suitable

for packing food; salt and pepper shakers; toilet paper holders; miscellaneous large metal and wooden spoons; pancake turners; can openers; hanks of rope; first aid kits of various sizes (always turned in at the end of a trip no matter what the duration to the nurse for replacement and checking) burlap and onion sacks for use in addition to duffle bags for food carrying; compasses; maps; repair kits; heavy cotton gloves; folding and regular lanterns; folding, light weight small bow, pocket, or home-made demountable saws; small tools; plier-like tongs; light-weight camp axes with sheaths; packboards and special carrying and portaging equipment as necessary; No. 10 makeshift kettles. The equipment room should also have a good supply of metal-rimmed tags of several sizes, gummed labels, string, binder twine, steel wool, funnels, clothes pins, carbon paper, corks, assorted sizes of screw-top tin covers, aluminum foil, waxed paper, whisk brooms, scrub brushes, small wash tubs, adhesive tape, sewing and repairing items, measuring cups, and many other smaller items which counselors will discover are handy in their work there. Then there are the mimeographed or printed materials which are so important - equipment and food-packing lists, special recipes, copies of materials given campers, trip schedules, and routine directions and special directions devised to cover specific situations. To all this, add a few good jokes or cartoons!

A complete, alphabetical inventory of these permanent supplies should be given the counselor in charge of equipment when he takes over his duties, and each item checked off with the number on hand at receipt. We do this inventory as follows: items are typed at far left of $8\frac{1}{2} \times 11$ lined paper. Half inch columns are drawn in, set off with a red line. Each column is divided in half with a black division line. This affords ample room for figures at start and at the end of the season, each column being a year. Twelve columns are thus made available. The camp bookkeeping system should have categories for equipment purchased for each major activity, with name of item, company from which purchased, date and cost. Provision should also be made for replacement cost data, noting added amount of capital expenditure for higher costs at time of replacement. After the season is over, and the cleaning and packing up process begins, the inventory should again be issued with any new equipment acquired in the meantime added. This inventory is absolutely a fundamental requirement for departmental operation, and it is also a necessity in case of losses by fire or burglary covered by insurance.

Only equipment which is in perfect condition should be kept on hand for issuance. If items become worn or damaged during the season, they should be withdrawn at once. If repairs cannot be made to them in the camp, they should be sent away to a shop where they can be, or replaced with a new item as soon as possible. Constant check should be kept on tent ropes, loops, poles, stakes, etc. which in our case are tied up inside of each tent when issued. The checking in of equipment after each trip use is also very important, as things must not be put away damp, dirty or rusty. On pack out days, referred to in Chapter IV as all-camp day or supper trips, the head packer stays in camp to be on hand to receive and check the equipment as it is brought back. For single group and short trips the counselor in charge of the group is also responsible for checking in the equipment, hanging out dish towels, and putting all supplies and equipment back in circulation.

We use the following alphabetical list of all types of equipment which any group could want, with line at left of each item to denote number.

EQUIPMENT LIST

Issued to _____

Issued by _____

Date _____ Number on Trip _____

Camp Craft Equipment List:

_____ Aluminum Coffee Pots
 _____ Aluminum Kettles
 _____ Aluminum Kettle Covers
 _____ Aluminum Kettle Bales
 _____ Axe or Hatchet with Sheath (extra)
 _____ Black Containers
 _____ Can Opener
 _____ Cans with Covers
 _____ Canteens
 _____ Cleanser
 _____ Compass
 _____ Dish Mops
 _____ Dish Towels
 _____ Dutch Oven
 _____ First Aid Kit
 _____ Folding Lantern and Candles
 _____ Folding Water Buckets
 _____ Food Bags:
 _____ White
 _____ Brown
 _____ Frying Pan and Handle
 _____ Grill (Charcoal)
 _____ Grill (Wire)
 _____ Ground Cloths
 _____ Hank of Extra Rope
 _____ Kapoks
 _____ Kerosene Cans with caps (for water)
 _____ Knapsacks
 _____ Large Spoons
 _____ Metal
 _____ Wooden
 _____ Map
 _____ Matches in container
 _____ Mending kit (canoe)
 _____ Milk Pail with Cover
 _____ 2 quart
 _____ 1 gallon
 _____ Mixing Pans
 _____ Mosquito tents
 _____ No. 10 kettles with bails
 _____ Paddles
 _____ Personnel
 _____ Extra
 _____ Pancake Turners
 _____ Pie pans (baker)

_____ Plastic Bags
 _____ Plastic Containers
 _____ Pop Corn Poppers
 _____ Reflector Oven and Pan
 _____ Salt and Pepper Shakers
 _____ Saw
 _____ Soap
 _____ Spatula
 _____ Steel Wool
 _____ Tarps
 _____ Kitchen
 _____ Large
 _____ Tents
 _____ Baker
 _____ Pup (whole)
 _____ Tab
 _____ T. P. in Container
 _____ Trench Shovel

Returned by _____ Date _____

Checked in by _____ Date _____

The head packer for each trip or expedition uses this list as a check as she packs food supplies and assembles equipment. She makes a carbon copy which is placed on a hook when she leaves. The counselor who brings the equipment in from the trip has to check her list with this copy as the items are received by the counselor in charge of equipment (if she is available), or she puts it back herself. It is easy to leave pieces of equipment at camp sites if such a list is not in the hands of the trip leader, so we consider use of these two lists necessary from both angles, in packing things up on the trip for the return, as well as in checking them in at main camp. Older campers often help with both processes. The carbon copy is often referred to while the trip is out to see what pieces of equipment are out of stock. Often, too, we will send another trip to take over the camp site, and it is very necessary for those packers to know what is available there, as their menus are different and additional cookery items, for instance, may be necessary. Also, the numbers may be greater, which would require more tentage. An extra pup tent is always sent along to serve as a shelter for wood supplies and those extras which need to be under cover and for which there is no room in the sleeping tents.

The end of the camp craft season, usually several days before the closing day in a long-term camp, is the time to start the checking, repairing, straightening out, cleaning and packing up process. Often campers can help in many ways, which is a good educational procedure and one they enjoy also. In our camp each counselor is assigned certain duties in the general closing-up process, on the basis that they would consider it part of their job to turn back to the management all equipment and supplies, and the living cabins as well, which they have used and enjoyed all summer, in as good condition as when received for their use at the opening of the season. That means the equipment is packed up for storage in another building, with contents of each box or carton plainly marked on the outside of each. Items needing repair in the city are bundled up ready to be taken or sent later.

The various camp craft counselors are routinely and equitably assigned these specific responsibilities as part of their closing duties:

1. Wash (if necessary), air and sun, brush and mend tents, tarps, bags, etc.
2. Leave tied up those items which need to be repaired or refurbished by an outside specialty company.
3. Clean all kettles, cans, food containers, etc.
4. Pack all equipment for storage, marking contents plainly on outside of each box.
5. Discard all equipment and supplies not suitable for future use.
6. Give order for new equipment and replacements, including explicit information about size, etc.
7. Leave order for groceries, canned goods, and all supplies needed for special use of camp craft department at beginning of next season.
8. Remove dirt and rust from shovels, etc., and grease all such tools, ovens, etc., with lard.
9. Repaint and re-stencil cans, water pails, etc., which need it.
10. Clean up camp craft practice grounds, exhibit, and camp craft room.
11. Turn in list of mimeographed materials on inventory, with numbers of each needed to start next year.
12. Turn in routine and special reports asked for, and all inventories.
13. Give suggestions for doing it all better next summer.

With several people working at these duties, and with the benefit of a head start on the outside cleaning jobs and some of the equipment jobs (such as washing and drying mosquito tents), it can all be done, if the weather is good, in two days, even less. Younger counselors should be assigned to help, so they can gain practical experience in these duties when the time comes for them to assume them. This past summer the counselors instituted a plan by which minor repairs to equipment used were done by each trip group after their return. That idea lightened the work at the end. All tents, tarps, etc., MUST be put away thoroughly dry, as well as repaired, and packed away in a dry place. The end of the camp season is THE time to get every item of camp craft equipment ready for immediate use for the pre-camp training course, when time is at a premium and so much has to be done in an all too-short period.

CARE OF MESS KITS

Camps which do not have campers use individual mess kits, but provide sets of eating utensils for trips will have no interest in this section, although it would do no harm to be reminded of the sanitary aspects of clean utensils for

outdoor use. It is common knowledge that intestinal upsets are frequently caused by rancid grease or deteriorated food particles left in dishes. And it should be common knowledge among camp directors that, no matter how high may be the standards set for performance of routine procedures, carelessness and poor supervision can upset the best of intentions and instructions. The problem of the ever-clean mess kit is one that is always with us. In our camp the mess-kits are used by all individuals at least twice a week, by many several more times, and often for several days at a stretch. The two all-camp meals per week provided the solution for this problem, for at least one of those meals would be in the form of a picnic, barbecue, etc., on the camp grounds, which meant that the mess-kits had to be washed en masse. It was noted in Chapter IV that a special committee for attending to mess kit clean-up was included in the plans for the outdoor picnic, barbecues, etc. Here was our chance to see that each mess kit got a good going over and was put back on the rack in a safe condition. A routine for this procedure was worked out by the camp dietician and nurse, as follows:

Place two long benches, thickly padded with newspapers, parallel and about four feet apart, between the kitchen and the road.

Place on each bench in this order:

1. Pan and rubber spatula for scraping out mess kits, if necessary.
2. One tub (foot tub size) half filled with hot soapy water.
3. Next tub of clear, hot water for rinsing.
4. Next tub of Hilex solution for sanitizing.
5. Clean dish towels for drying.

Appoint a committee member to take care of each of the given items above, one set for each bench. Extra counselors fill in.

Form line of campers starting at end of each bench, on outside edge of each. Camper hands mess kit to No. 1, who scrapes it, if necessary, and then puts it into the tub of hot, soapy water. No. 2 washes the dishes and utensils and puts them into the hot rinse water. No. 3 rinses them, and puts dishes into the sanitizing solution. No. 4 removes dishes from sanitizing solution and hands them to No. 5, who dries them thoroughly and then hands them to the owner, who has walked along beside the bench while the committee members have been processing her dishes.

The camp nurse acts as supervisor, checking to see that the process is done satisfactorily.

Each camper takes her clean dishes and immediately goes to the dining-porch to her place, where she left the canvas cover and unneeded items before she left to go to the picnic. The mess kit is assembled there, and put back on the rack on her nail.

Hints:

- Long-handled dish mops are most satisfactory.
- Long-handled kitchen tongs (such as used to reach for things in an oven, to handle objects in hot kettles, etc.) are excellent to use in Nos. 2 and 3.

One counselor should be responsible for adding extra hot water in each tub several times during the process. Or for emptying and refilling any one of them if need is indicated. When extra water is added to No. 3, extra Hilex should also be added.

After the process is over, dish towels are rinsed out, hung up to dry outdoors, and then put in the soiled laundry box.

There are several other considerations in the apparently simple matter of mess kits which should be mentioned. First, where shall they be kept when not in use? Certainly it is unwise to have campers keep them in their living quarters, where they can be misplaced, mixed up, or tumbled around so that the covers will come unsnapped and dust allowed to get in. The camp craft equipment room or immediate environs is no place for them, for they should be accessible at all times, and available without disturbing people who are working. After several years of unsatisfactory handling, we devised a very simple expedient which every camp could adopt. We happen to have an "alley" between the ice-house and the kitchen, which is entered from the main lodge side by a lattice door. The carpenter built a sloping roof on the back wall of the ice-house, about eight feet from the ground, which extended out far enough to protect anything beneath it from rain. Nails were put into strips of batten placed a foot or so apart, and the nails staggered. Adhesive name-tapes are put above each nail and the kits hung by their straps on them. Names are arranged alphabetically by cabins, with those for the younger children placed on the lower nails. Owners may get at them easily, and the counselor in charge of the rack can see at a glance if they are all there, or inspect any which may be reported as needing a check.

Each item in the kit must be carefully marked. The outside cover can be marked with name in black marking pencil, or with a name-tape. Each metal piece of every kit we stamp by using the steel dies mentioned earlier in the chapter. This is done very soon after camp opens by the counselor in charge with volunteer camper assistance. In the case of long names, just enough of the name is used to make the identification easy. These mess kits used to come in canvas covers, but they do not seem to do so any more. Campers have the choice of making their own drawstring bags at the arts and crafts workshop, or buying an inexpensive bag at the camp store. These we buy from army surplus stores, either ditty bags with strings, or small rucksacks with straps. The latter are preferable, as there is plenty of room for eating utensils. Extra spoons and forks are kept in stock at the camp store for the inevitable replacements which are necessary as the summer wears on. The cups which come with the kits, those abominable ones made of aluminum, are replaced with tin cups.

As might be expected in this department where so much has to be done and so often under the pressure of time, it is necessary to write down certain suggestions and admonitions for the counselors to follow. Each person handling the equipment must do so in an orderly and uniform manner, otherwise a small chaos would result. Personal relationships may easily be strained in such a situation, and it is better for all concerned to be aware of exactly what procedures should be followed. The following suggestions, which are revised frequently in the light of counselor conferences and supervisory observations, are tacked in a prominent place in the equipment and food-packing unit.

- ...Heavy layer of sheets from large carton boxes should be put on the floor where any kettles or other equipment may be placed. The whole floor could be so covered, if desired.
- ...Oilcloth on shelves and tables should be kept clean and fresh. Dietician has ample supply.
- ...Small and large metal-rimmed tags should be kept sorted out alphabetically and always placed on their proper nails. When necessary, erase pencilled labels on certain ones and use over. Add new titles and nails as necessary.
- ...All canvas items (reflector oven cases, buckets, etc.) should be kept off floor. If they are to be stored under table, they should be kept in wooden box or strong carton.
- ...Box and packing tin covers or tops should be placed in wooden box divided into compartments for different sizes. Tins should always be kept upside down with lids off. It is a help to number each tin and its cover, so it is easy to match them. Can mark with black china marking pencil, or with gummed label which is then treated with coat of shellac.
- ...Make new No. 10 kettles often, saving heavy wire bails for new ones. Arrange with dietician to have them saved ahead of need.
- ...When the white food bags and plastic bags are returned to the camp craft room, they should be wrong side out, and tags removed. If dry and clean, should be put in proper partition on shelf. If soiled, should be rinsed out and hung on line. If wet, or even damp, should be dried before putting away. Tags should be put at once on proper nail.
- ...All wet dish towels, cloths and mops should be washed or rinsed, as necessary, and hung out on lines to dry. When dry, should be folded and put in the receptacle provided. Counselor in charge will bundle them up on day they are to go to laundry, and personally give them to the dietician to take. Same person responsible for getting clean supply on return, and for keeping ample supply on hand at all times.
- ...The nail keg waste basket should be kept in the room at all times, and not allowed to get more than three-quarters full. Greasy papers, etc., should not be allowed to stand in it, as mice would be attracted. No food scraps should ever be thrown in it.
- ...Canvas water buckets are hung up to dry by tying a piece of twine from the bottom strap to clothes line. Brush out often so no crumbs or dirt will lodge in the seams. Never put them away when wet or damp.
- ...Be sure that all water cans, canteens, and milk buckets are thoroughly rinsed and turned upside down on papers to dry out before they are put upside down on the nails provided. Wash all milk cans in hot, soapy water and rinse.
- ...Tarps and tents should be brushed off and be thoroughly dry when put away.
- ...Iron ovens, tin and galvanized articles must be thoroughly dry before putting away.

- ...Flit cans which may be taken on trips if desired, should never be brought inside the camp craft room, but kept on layer of papers in designated high shelf on back porch. Never pack them with other equipment or kits, but keep separate from everything else, right side up with cap screwed on tightly. Best way to take them is wrapped in a layer of newspaper, with loop handle indicating which side is up.
- ...Be sure tight, correctly fitting covers and caps are sent out on all milk, water, punch pails, and on cannisters, tins, etc.
- ...A list of all equipment needed by each group should be made out before starting to pack. Check all menus to be sure the proper cooking and baking utensils are included. Keep in mind that such articles as kettles for heating water and pans for mixing should be included. Use Equipment List in doing this, making a carbon to leave behind. Check each item off on this List as it is used or packed.
- ...When putting pup tents on lines to dry, please
 - Put up in halves
 - Take out both ropes
 - Hang so edges do not touch ground
 - Turn at least once during the drying process
 - Brush off any dirt that has accumulated
 - Clean off stakes and poles, put in sun to dry on papers, or put under cover. Don't leave on ground.
- ...Tarps and large tents should also be hung so edges do not touch ground. Turn at least once.
- ...Although definite counselors have accepted responsibility for keeping the camp craft room and equipment in good condition, it is imperative that each person who uses both should do her share to keep the place in good condition at all times. Equipment from trips should be turned in in perfect condition (unless otherwise reported to those in charge), and every effort be made to cooperate with those in charge to keep the room in order and the equipment handled properly.
- ...Don't hesitate to consult with head of camp craft if any doubt about amounts or kind of equipment to be taken. For longer trips, it would be wise to show her the list before starting to pack.
- ...All camp craft counselors are held responsible for understanding and following the methods and procedures outlined in the reprints "Packing Food for Trips" and "Care of Food and Equipment on Trips", of which several copies are available in desk drawer in counselor's room. These are Numbers 51 and 59 of Camp Publications.

In addition to the above suggestions which have to do with equipment at the main camp, there are a few more which have had to be made from time to time which apply to trips, and which are not covered in the two reprints mentioned.

In forming lines to pass equipment up to the camp site when unloading canoe or truck, please do not allow the campers to throw or toss the articles. Each should be handed to the recipient. This is a safety measure.

When getting the equipment ready to load, and when unloading it, please put the different kinds of gear in separate piles. That is, all bed rolls, all knapsacks, all tents, all food supplies, all paddles, etc. Knapsacks should be set up straight. Place articles with red personal tags so they will show. Neatness and orderliness in such matters will be found to pay off.

- ...Duffle and sleeping bag for each person should be put in her canoe, together with an equitable share of general equipment and food supplies. Places in each canoe will be assigned or chosen before leaving camp, with advice of canoeing counselor. Always put kapoks in right places, with paddle belonging to occupant of that position before loading. Double check at every loading station to be sure nothing is left ashore.
 - ...Canoes should be tipped over for night, with bottoms toward water. Tip over well, so can't be blown back by wind. Lash or batten down if a bad storm.
 - ...Paddles and kapoks should be taken up to camp site and placed out of reach of porcupines, the rain, or possible unwelcome visitors.
 - ...When putting canoes into shore, especially where it is rocky or pebbly or there are logs, go at a very slow speed. When getting out, loading or unloading a canoe, there should be no space visible under the bottom. That is, the bow should be resting on shore and the rest of the craft in the water. Never try to carry a loaded canoe, and never set foot in it except when afloat. If one of the loaders will be willing to wade alongside (when it is not possible to pack it at a dock or from a log) it will be found to be very helpful.
 - ...The tarps are only to be used as shelters. They are not to be put on the ground or used as tables or food preparation centers.
 - ...If a child is hurt and has to be brought back to camp, only one counselor is to accompany her.
 - ...Do not pack empty jars (if any) in the bottom of food bags.
- Be sure to instruct your campers to take out their flashlight batteries and turn them around in the handle before packing them in their knapsacks.
- ...Soap kettles on bottom and sides before using them over fire. We let a certain amount of "black" accumulate on bottoms of all aluminum kettles, so don't wear out campers trying to scrub it off. Put layers of newspaper between kettles when nesting them.
 - ...Please do not tell or allow campers to wash out mess kits, kettles, etc., from boats or canoes when beached. Nor should they do so along the shore. It will be found helpful if mess kits and kettles are rinsed out and wiped out with paper napkins before being washed. Each camper may use her own napkin to wipe out her own mess kit before the washing process. Two kettles of hot water should always be used, one soapy for washing, and one very hot clear for rinsing. Put on dish water before sitting down to eat, if possible.

...Please wash out towels and cloths before bringing them in, and try to bring in all equipment as dry and as clean as possible.

Just in case it may seem to those who have never been personally responsible for the care and use of equipment by dozens of counselors and hundreds of children that such details are tiresome and unnecessary, we can only say we do not agree. Fortunate is the camp director who can engage counselors who are so experienced that they need no supervision and no suggestions. If one is ever lucky enough to get one or more such paragons, it is because some other camp director had given them good training in fundamentals, either as campers or as counselors. Or because such counselors had had the unusual advantage of camping with their families, who were themselves well-trained in such matters. Or perhaps they may have been exposed in college counselor training courses or outing clubs to teachers who got their training in a good camp and not only from books and lectures, or by looking at flip-charts and visual aids. It is one thing, too, to have general knowledge, but quite another to add the unpredictable human element to the picture, as well as having to contend with the vagaries of the elements in nature. Camping out, in which care and use of equipment is a more important factor than the uninitiated or the academicians may realize, is a fairly exact science. The art of camping out, towards which we strive, will be found to be quite dependent on the amount of information we have about the scientific side. It is the purpose of enumerating these details to bolster the latter, and thereby to enhance the chances of achieving the former.

FOOD SUPPLIES

Chapter VII

PACKING OF TRIP FOOD SUPPLIES

In this chapter we shall consider the packing and preparing for transportation of the more common types of food supplies taken out on short and long trips. The choice and selection of foods, menus and recipes, as well as considerations of weight, perishability and local situations (fuel supply for cooking, climate, topography, type and length of trips, age and abilities of campers, methods of transportation of equipment and supplies, etc.) we shall not attempt to cover. Much of the basic information about trip foods is easily available, and it would be impossible to consider all the local factors which govern adaptations of general principles.

The first consideration is that of how much of each item of food should be packed so that an ample supply will be available for the menus and the recipes included in the trip plan. As stated in Chapter IV, this is all decided on, written up before the packing begins, and a copy given to the packers. Our packers use the following Food List in deciding amounts, writing in the "Check" column the total amount of each item which will be needed for the entire trip.

Check	No. of Meals	No. of Persons	Item	Check	No. of Meals	No. of Persons	Item
			Apple Butter				Carrots
			Apricots				Catsup
			Bacon				Celery
			___ Slices				Cereal
			___ Rind				___ Hot
			Bananas				___ Cold
			Beans				Cheese
			___ Baked				Cocoa
			___ Green				Coffee
			Biscuit Mix				Cookies
			Bread Stuffs				Corn
			___ White				Cornbread Mix
			___ Brown				Crackers
			___ Buns, Hamburger				___ Graham
			___ Buns, Weiner				___ Saltines
			Butter				Dressing
			Cabbage				___ French
			Candy				___ Mayonnaise
			___ Hersheys				Eggs
			___ Personal				Flour
			___ Other				Fruit Cocktail

Check	No. of Meals	No. of Persons	Item	Check	No. of Meals	No. of Persons	Item
			Fudge Mix				Peanut Butter
			Gingerbread Mix				Pears
			Grapefruit				Peas
			Honey				Pickles
			Jam				___ Dill
			Jelly				___ Sweet
			Juice				___ Mixed
			___ Apple				Potatoes
			___ Tomato				Prunes
			___ Other				Pudding
			Lemons				Punch
			Lettuce				___ Cherry
			Macaroni				___ Grape
			Marshmallows				___ Fruit
			Meat				___ Lime
			_____				___ Orange
			_____				Raisins
			_____				Rice
			Milk				Salmon
			___ Evaporated				Salt
			___ Fluid				Sausage
			___ Powdered				Shortening
			Mustard				Sugar
			Onions				___ White
			Oranges				___ Brown
			Pancake Mix				Soup
			Peaches				Spaghetti
							Syrup
							Tea
							Tomatoes
							___ Fresh
							___ Canned
							Tuna Fish
							Vegetable Mix Canned
			SPECIAL ITEMS				

We have found that, although the packers may have the best of intentions, they are prone to over-estimate needs in such matters as the number of cans of items needed, for instance. For that reason, except when packing for short trips with relatively simple food requirements, the packers check their prepared Food List with the dietician before the actual packing is started. This collaboration has saved several disasters of having too little, as well as the bother and extravagance of having too much. There is posted in the camp craft room a list of how many pieces or servings are in a particular can, original box or carton, pound of this and that, which is a help when estimating amounts when original containers are called for. The dietician, or her special deputy in the camp craft division, is on hand or available to get out needed special supplies from the strictly kitchen facilities, as it is wise to have only one person enter this domain during the hours the kitchen staff is on duty. While the cook is making a cake, for instance, she should not be disturbed by answering questions or dropping her work to get out special supplies. This would not be a problem

where an entirely self-contained food and equipment unit is provided. When a trip is scheduled to go out in the morning, the non-perishables are packed the afternoon before. Perishables, such as butter, eggs, fruit, etc., are packaged, marked, and put in a designated place in one of the refrigeration or cooling units ready to be put in the carriers the next morning. Camps which use the "packaged" trip menu plan, described in Chapter IV, will have a much less complicated food-packing problem.

The second consideration, of equal importance as how much food, is that of how to pack it for transportation in the carrying gear in use in each particular camp. Regardless of what type of carriers are used, the following directions may be found practical and useful. When alternatives are noted for any one item, in case it is not obvious that one pertains to short trips and another to long ones, an (S) or (L) will be used.

Bacon	Wax-paper lined tin
Bread and buns	Original wrapper, covered tins
Bread, cake, biscuit and pancake mixes, flour	White food bag, original box
Butter and fats	Wax-paper lined tins (L), hard plastic jars
Cabbage and lettuce	White food bag
Candy bars	White food bag, tins (L)
Catsup	Cannister with pouring hole
Cereals, dry	Original container
Cereals to be cooked	White food bag
Cheese	Wrapped in wax paper, in white food bag
Cocoa, cocoa and fudge mix	Glassine bag in white food bag, original container
Coffee, ground	Glassine bag in white food bag
Coffee, powdered	Original jar wrapped in newspaper in tea billy
Cookies and crackers	Original container, covered tins
Dressing	Hard plastic jar, cannisters (L)
Eggs	Wrapped individually in newspaper and packed in kettle or tin, original carton

Fruit, dried	White food bag
Fruit, fresh (soft)	Covered tin
Fruit, fresh (hard)	White food bag
Jam, jelly, peanut butter, apple butter, honey	Plastic cannister, tin, original tin
Macaroni	White food bag
Marshmallows	Original container, white food bag
Meats, dried	Original package in tin
Meats, fresh	Glassine bag in white food bag, wax- paper lined tin
Milk, powdered	Glassine bag in white food bag
Mustard (French)	Hard plastic jar, cannister
Pepper and salt	White food bag (L), special plastic shakers
Pickles	Plastic cannister, or glassine bag in tin
Pudding mix	Original box or envelope
Punch, lemonade concentrates	Glassine bag in white food bag (L), original envelopes (S). Take mixed in milk buckets (S).
Rice	White food bag
Spices	Original small cans
Sugar, white	Converted salt carton (S), white food bag
Sugar, brown	White food bag
Syrup and molasses	Original small tins, cannister with pouring hole
Tea	White food bag
Vegetables, dry	White food bag
Vegetables, fresh (hard)	White food bag

Vegetables, fresh (soft)	Glassine bag in tin
* * *	
Soap	Hard plastic soap box, with adhesive tape straps
Soap powder	Old salt boxes or tooth powder tins
Scouring powder	Original container with adhesive tape over minimum number of punched holes
Steel wool balls	Glassine bag in white food bag

In compiling the above list it is taken for granted that all ordinary food supplies which come in small-sized tins or cans will be purchased separately for camp craft use, and will be taken intact. These supplies would include canned meats, sausage, fish, fruits, vegetables, milk, baked beans and vegetable and fruit juices, to name the most common. We realize fully that it is possible to buy especially tinned butter, jams, etc., for use on long wilderness trips. However, such items are expensive and have to be purchased from special concerns that outfit such expeditions. For these reasons they would only be stocked by the more highly specialized trip and pack camps.

There are two reasons why such items as jam, peanut butter, catsup, pickles, honey, etc., appear on the above list. The first is that these items are sold in small sizes only in glass containers, which are not advised for general trip purposes, especially long ones in rough country. Secondly, these items are usually furnished from the bulk camp supply, which is purchased in institutional sizes or large containers from the wholesale grocer. It is more expensive and requires extra handling and storage to stock duplicates of many of these items in small sizes when it is quite possible, with a minimum of extra work and planning, to tap the main supply source. This reasoning applies also to other items, such as cookies, crackers, cereals and mixes, and many others which are less costly when sold in large unit quantities. The exception to this reasoning, that of buying small-sized cans, is mentioned in the preceding paragraph.

Some camps prefer to use the many concentrated, dehydrated, non-perishable, waterproof packaged products for out-of-camp meals which are widely advertised. There is a wide variety of such products available - beverage bases, cocoa mix, soups and chowders, instant potatoes, puddings, cake, pastry and pancake mixes, complete "dinners" of various types, syrup mix, and others too numerous and varied to mention. They are advertised as "tasty, convenient and economical". Many of these products are, indeed, an improvement over the older forms of dehydrated and concentrated foods. They are light to carry, easy to pack, and the adjective "convenient" is a true description of them all. In camps where such matters are a major consideration, these food packets should be systematically investigated one by one. We have tried samples of many of these and found some excellent. Others, however, were far from "tasty" or attractive, and the contents of the envelope did not turn out the number of servings specified. At least, not the size of servings we are accustomed to on trips. We also doubt

if they are as "economical" as the advertisements say. They are doubtless economical of time and labor in packing and in the amount of packing equipment necessary, as contrasted with the packing of conventional trip food supplies. Our advice is to sample each item critically and to be sure they will appeal to the campers before laying in a large supply. In the next chapter will be described some home-made mixes which have proved acceptable.

DISTRIBUTION OF PACKED SUPPLIES TO CARRYING DEVICES

Although the fundamentals of packing up the food supplies are basically the same in most camp situations, the receptacles into which these supplies will be packed for transportation on long trips vary considerably in different parts of the country. The mere mention of the names of some of these food transportation devices will indicate their diversity: Adirondack pack-baskets, Duluth or Poirer pack, grub or "chuck" boxes, pack board or frame for use with tump line, canvas duffle bag, panniers or kyaks. The available books on camping trips in the deep wilderness, mountains, deserts and on the long trails written by specialists in these matters discuss the advantages of each type for each special purpose. Camps or organized groups, the latter especially in the west, which do extensive camping of a specialized nature are well-supplied with specific information to meet their needs.

Of the transportation devices mentioned above those in more common use in most camps are probably the grub box and the waterproofed duffle bag. Reinforced with handles on side and bottom, with throat and drawstring at the top, the latter may be purchased in a 9" x 24" and 12" x 36" sizes. It is light in weight and is easily handled. As fast as they are emptied, they can be tucked together into one bag, thus constantly reducing the number of articles to be handled. We have found that burlap bags, tied tightly at the top, are useful for two specific purposes: One, to carry all the mess kits; two, to carry the larger cooking utensils, such as kettles and frying pans.

For one-meal trips and for carrying the noon meal when travelling, the collapsible canvas water bucket is satisfactory. So also is a medium-sized Adirondack pack basket. As a makeshift device, a one-half bushel round fruit basket with wire handles is also good. We do not approve of carton boxes as carriers. These can be and are used, however, as special containers for eggs in original cartons and for other breakables and crushables, and are packed on top of the Duluth packs in the Canadian wilderness.

There are several methods of distributing the packed food supplies to the carrying devices of choice. Some think it advisable to put all the staples in one carrying unit so marked, and then pack the remaining units according to the items which the menus for each day call for, reserving one unit for each day's use, or possibly combining days. Others, keeping the idea of the staple bag, put all the breakfasts, all the lunches, and all the suppers together in bags so marked. On longer trips where large supplies of staples are necessary, some packers prefer to group together certain general types of supplies, such as crushables, cereals, canned goods, etc., into separate carrying units.

These methods apply, obviously to situations where the food is carried entirely separately from the camper's personal equipment. There are, however, cases where food, bedding, and personal clothing all have to go into carrying devices together. It is no small problem to accomplish such a feat of packing which

entails distributing weights equitably and safely, packing a melange of articles so that the pack is smooth in the back, rides evenly and properly, and is distributed and arranged in a manner which will make for orderly use. Careful lists must be made and husbanded. In this system, one pack is especially constructed for carrying the cooking utensils and the food supplies for the next meal.

But whatever the system, each carrying unit number, and its contents should be plainly marked on a stout label tied firmly on it in a relatively safe and particularly conspicuous spot.

So far we have been discussing distribution of supplies for one trip at a time. Another type of distribution problem appears when several groups go out at one time, as happens on all-camp supper and day trips. The menus for these are identical as far as the main items are concerned, but often each group will choose a different method of making biscuits, for instance. So this has to be taken into consideration in packing the equipment for each group. After several temporarily trying mix-ups caused by the eager messengers from one group going off with a part of the food belonging to another group, and the latter being "practically starved" as a result, we hit on a very simple scheme to keep the peace. Handles were sawed off ten old brooms. One end was pointed, and a thin slit sawed in the other. As many of these as needed were pounded in the ground in the area outside the camp craft room, at considerable distance from each other. A card with a number written in bold letters on each half of it was stuck in the slit. As fast as the numbered carrying devices were packed, water and punch cans filled, etc., they were deposited by the stake with a corresponding number. Since each of the groups was given a number in the original plan, that problem was conquered once and for all.

MISCELLANEOUS HINTS

As seems to be inevitable in handling the detailed phases of camp craft organization, a few extra suggestions have been compiled for the handling of food in addition to those to be found in the two reprints previously mentioned.

No sandwiches should be made in camp for use on trips. The "makings" should not be opened or prepared until it is time to get the meal ready.

Leave all foods in cans, containers, skins or natural coverings until time to prepare meal. This is especially important for canned meats, meat spreads, dressings, and other perishables.

Open cans of food only as the contents are used for immediate consumption. In other words, don't open all the cans of corned beef, fruit, etc., until you know the contents are needed for the immediate meal.

Cheese will be issued in one piece by dietician. Slice as used only. Exception, right number of cubes will be issued when angels-on-horseback on menu.

Mix punch for short trips and first meal of long trips at camp. Add ice, if desired.

Meals for each day are balanced. Please follow the menus exactly as outlined, except in case of emergency. Supper and lunch menus for each day may be switched, if so doing fits better with plans for the day. Please always use cooking methods specified, which is an important health measure.

If any food is left over which can be used in camp, please put it in a clean container and bring it back. Turn it in to the dietician, her deputy, or to the person checking in your equipment, who will take care of it. Please do not waste food, since part of your and the campers' training is to learn to conserve supplies.

Please report any shortage of supplies furnished, any lack of sufficient equipment, or any new ideas for doing things better, new recipes, etc., to the head of the department.

SPECIAL RECIPES

Chapter VIII

HOME PREPARED MIXES, SOME SPECIAL RECIPES, AND SPECIAL COOKERY

For several years we have made our own "mixes" of the most common of such items used on trips -- ginger bread, baking-powder biscuits, pancake, corn bread and fudge. Based on our experience, we believe that camps which do not care to use the commercially prepared mixes will find this plan satisfactory.

Our dietitian makes up a large amount of each mixture as needed. Each is placed in a large covered tin obtained from the bakery. On the outside is taped the recipe for using each on a small scale. In addition, carbon copies of each of these recipes, typed up on small pieces of onion skin, are clipped together and tacked up by sets on the camp craft section of the counselors' room bulletin board. Counselors then take off a copy of the recipe as needed.

This is a neat, easy, sanitary and economical way to handle such items. There are no partly opened boxes on the shelves, and the exact amount needed for each group can be measured out accurately, put in a white food bag, tagged, and used without waste. It would be quite possible, in order to save measuring out the mix for each use, to do it up in small packages wrapped in cellophane bags in units of four and of six servings. These numbers are suggested as most groups go out in multiples of them.

The recipe for mixing each item in large quantity is given, followed by the recipe used for the smaller group. All recipes are based on standard measuring equipment and level measurements. Credit for working out these recipes goes to a former dietitian, Mrs. W. A. Willson, Wausau, Wisconsin.

GINGER BREAD MIX

(large quantity)

- 2 1/2 qt. Flour
- 3 c. Brown Sugar
- 2 2/3 tbsp. Baking Powder
- 2 2/3 tbsp. Ginger
- 2 tbsp. Cinnamon
- 1 1/3 tsp. Cloves
- 2 tsp. Soda
- 1 1/3 tsp. Salt

Sift flour once. Measure and sift together with the other dry ingredients. Stir contents of container thoroughly before measuring for use.

Yield: 96-100 generous servings

(small scale)

Mix ingredients in container thoroughly before measuring.

- 1 1/2 c. Mix
- 1 Egg (beaten)
- 6 tbsp. Melted Fat (not hot)
- 6 tbsp. Molasses
- 1/2 c. Boiling Water

Combine beaten egg, melted fat, and molasses, and add to mix. Blend. Add boiling water gradually and beat until batter is smooth.

Yield: 8-10 servings

CORN BREAD MIX
(large quantity)

2 qt. Flour
5 tbsp. Baking Powder
2 c. Sugar
2½ tbsp. Salt
2 qt. Corn Meal

sift flour and measure. Sift together the flour, salt, sugar, and baking powder. Add corn meal and mix.

Yield: 100-125 servings
(small scale).

stir mixture before measuring.

Add: 2 c. Mix
1 beaten Egg
¼ c Melted Fat (not hot)
1 c. Milk

Yield: 12-14 servings

FUDGE
(large quantity)

8 lbs. (4 qt.) Sugar
2 c. Cocoa

Sift together the cocoa and sugar

Yield: 96-100 servings

(small quantity)

Proportions: 3 c. Mix
1 c. Milk

Combine mix and milk and cook until soft-ball stage. Let cool. Then beat until mixture is no longer glossy. Pour on greased pan or serve on crackers.

Yield: 10-12 servings

PANCAKES
(large quantity)

4 qt. Flour
1 c. Sugar
1 1/3 tbsp. Salt
4 tbsp. Baking Powder

Sift flour once. Measure. Sift together the flour, sugar, salt, and baking powder.

Yield: 175-200 medium cakes
(small scale)

2 c. Mix

Combine: 1 beaten Egg
2 tbsp. Melted Fat (not hot)
2 c. Milk

Add liquid ingredients to the mix. Stir enough to make a smooth batter.

Yield: 18-24 medium cakes

BAKING POWDER BISCUITS
(large quantity)

4 qt. Flour
10 tbsp. (5/8 c.) Baking Powder
4 tsp. Salt

Sift flour before measuring. Pile lightly into quart measure and level.

Yield: 96-100 generous biscuits

(small scale)

2 c. Mix
add:
1/4 c. cold Fat
Cut the fat in and add:
3/4 - 7/8 c. Milk (enough to make a soft dough)

Mix enough to blend ingredients thoroughly.

Yield: 12-14 biscuits (generous)

SOME SPECIAL RECIPES

people who are interested in outdoor cookery are always collecting books on the subject as well as clippings and jottings from here and there. In our case we have a mimeographed recipe book which is available at the camp store, as mentioned in Chapter III. But experience in using these recipes with children often shows up minor faults in either the recipes themselves or in the directions given. And usually those from other sources need to be modified to some extent in the constant endeavour to make such things foolproof. Also, counselors often bring recipes they have used successfully at other camps, and these must be added to the store of outdoor cooking ideas.

These improved or additional recipes must be made readily available. We type them up in carbon copy sets of six on onion skin, cut them into small sizes, clip two or three sets together, and tack them up in a special place on the wall in the counselors' room. As recipes are indicated on their trips, each counselor takes one from the set to use. If there is anything left of it by the time the camper cooks get through with it, it is replaced on her return.

The following recipes are some which will not be found in other outdoor cook books in exactly the same form.

FUDGEMALLOWES

- | | |
|-------------------------------|--|
| 2 Marshmallows per serving | 1 c. milk ($\frac{1}{4}$ c. powdered milk, fill |
| 2 graham crackers per serving | cup with water and stir vigorously) |
| 3 c. Fudge Mix | 1 pat butter |

Place graham crackers in a covered tin near the fire to warm and crisp. Prepare fudge according to regular recipe, cook to soft ball stage. Add butter and beat for two minutes. Place a marshmallow on each warmed cracker, cover generously with hot fudge!

SALMON WIGGLE (6)

- | | |
|----------------------|--------------------------------|
| 1 can salmon (1 lb.) | 1 can mushroom soup (No. 1) |
| 2 cans peas (No. 2) | $\frac{1}{4}$ c. powdered milk |
| 1 c. water | |

Drain the salmon and break into small pieces. Drain the peas. Pour the mushroom soup into a kettle over a low fire. Fill the soup can with water up to one inch from the top. Gradually add the powdered milk to the water and stir vigorously until all lumps are dissolved. Pour the milk mixture into the heated soup, and stir until smooth. Then add the drained peas and salmon. Allow to heat slowly until the mixture is very hot.

SQUAW CORN (4 people)

- | | |
|---------------------------|-----------------|
| 2 slices bacon, cut fine | 1 egg |
| 1 #2 can cream style corn | Salt and pepper |

Fry bacon over low fire until crisp. Remove bacon, add corn and heat. When corn is hot, remove from fire and add egg - stir briskly until egg is well blended. Return to fire and heat just a few minutes. Add crisp bacon. Season and serve immediately.

HAMBURGER A LA FOIL

Two meat balls in each package, plus thinly sliced potatoes -- FF style -- onion lengths, carrots. Grease generously at bottom and top with bacon drippings. Wrap in foil, double thickness, tucking edges in well and "crimping" so there will be no leakage. Place directly in fire or over coals.

Allow 1/5 pound of hamburger for each person, which is a very generous serving. Please smooth out foil and save for future use.

CAMP TRIP-EASY SALAD (8)

- | | |
|--|------------------------|
| 1 can mixed vegetables | 1/2 c. French dressing |
| 1 medium head lettuce or
1/2 large head | Salt, pepper |

Thoroughly drain mixed vegetables. Wash well with one cup of very cold water. When the vegetables have drained completely, pour French dressing over them. Mix and let stand while shredding the lettuce. Add vegetables and dressing mixture to the lettuce. Salt and pepper lightly, and toss until completely blended.

EASY DESSERT

For a special outdoor dessert or special treat or party for little girls, we suggest making a quick frosting out of confectioner's sugar, milk or water, and flavouring, and putting it between two vanilla wafers. On the top wafer, put a large blob of frosting and stick an animal cracker in it. Simple, but they love 'em!

SUBSTITUTE FOR STEAK KABOBS

Kabobs (3 meat cubes, bacon strip and onion slices strung on a stick) were always very popular with campers. But the HC of steak has forced us to abandon this delicacy for the time being. An acceptable substitute for the meat cubes is one-inch cross sections of weiners.

CHILE-CON-CARNE (6)

- | | |
|--|---------------------------------|
| 1 cup browned ground beef | 1 can kidney beans, not drained |
| 3 slices bacon, cut in 1/2 inch
squares | 2 cups cooked spaghetti |
| 2 medium sized onions, cut fine | 1/2 teaspoon chili powder |
| 1 #2 1/2 can tomatoes (or 2 #2 cans) | Salt, pepper to taste |

Fry bacon slowly until crisp and brown. Remove. Put in finely cut onions and cook slowly until soft. Then add tomatoes to bacon, onion and fat and cook for 5 minutes. Then add beans, undrained, and spaghetti. Let the entire mixture cook slowly for ten minutes before serving. Stir carefully several times while the mixture is cooking.

Chili con carne is a hearty outdoor meal, but in hot weather there is danger in carrying raw meat. So we have the cook brown the meat and cook up a batch of spaghetti the night before. The meat is kept cold in the icebox, and put in last of the trip supplies, the container wrapped in layers of newspaper to keep it as cool as possible until use.

KOMAC STEW (4)

1 can #2 tomatoes	salt and pepper
2 onions - medium sized	8 slices toast
2 eggs	2 slices bacon

Cut bacon into small, neat squares. Fry until browned well. Remove from fat. Add peeled and finely minced onions, and cook until onions are soft and slightly browned. Add tomatoes and bacon to the onions-and-fat mixture, and simmer about half an hour. Add eggs one at a time, stirring vigorously after the addition of each egg. Season to taste. Serve on hot toast in mess-kit pans. Good chance to make toast on twig broilers. Use low fire (no flames) to insure low cooking temperature.

MACARONI AND CHEESE (For 8)

2 cups Macaroni	1 pound Cheese
2 Onions	Rind of Bacon
1 can Tomatoes	

Drop the macaroni into boiling salted water and cook until soft; drain. Meanwhile fry onions chopped fine until brown. Add tomatoes and diced cheese. Add mixture to macaroni and blend thoroughly over fire until cheese melts slightly.

MARSHMALLOW FLOAT

1 cup Powdered Milk	2/3 cup Sugar
4 cups water	6 level tablespoons Cornstarch
8 tablespoons Cocoa	16 fresh Marshmallows

Heat the milk in a small pot. Mix sugar, cornstarch and cocoa together in a cup or paper bag. Add this to the warm milk and keep stirring till well mixed. By the time it boils the pudding will be done. Now take off the fire and put in the marshmallows. Mix just a little, until they melt a little, and the rest will float on top. Dry ingredients may be mixed beforehand and carried in a paper bag.

HEAVENLY HASH (For 12)

1 can Peaches	3 Oranges
1 can Pineapple	1/2 package Marshmallows
1 can Pears or Cherries	1 can Condensed Eagle Brand Milk

Drain fruit and chop; dice oranges and marshmallows and mix in Eagle Brand Milk.

SPANISH RICE (For 4)

1 package Minute Rice	1 #2 can Tomatoes
1 chopped Onion	1/2# diced Bacon
1/2 cup chopped Celery	Seasoning
1 green Pepper (optional)	

Cook bacon and remove from fat. Cook onion, celery, (and pepper) in bacon fat. Heat rice with tomatoes. Combine bacon and vegetable mixture with rice. Season to taste and simmer until thoroughly cooked.

COCOA

Allow 4 teaspoons (rounded but not heaping) of prepared chocolate for each person. To this add $1\frac{1}{2}$ measuring cups of milk. (Milk should be prepared on the standard basis of 1 part powdered milk to 4 parts of water.) Heat thoroughly to dissolve chocolate. Add 1 can evaporated milk to the cocoa and heat. Do not boil! (Note: Evaporated milk is added only to give richness to the cocoa. Use a small can for groups of six or fewer people, a large can for groups of more than six.)

HOW TO USE POWDERED MILK

Proportion: 1 Part Milk
4 Parts Water

Place the milk in a pan; add enough cold water while mixing to form a smooth paste. Then add remaining water and mix.

COOKING OF SWEET CORN

1. Bring slightly salted water to a rapid boil. Drop in shucked corn with all silk removed carefully. Boil 12 minutes.
2. Turn husks back carefully and remove all silk. Put husks back and twist a bit at the end or tie with a small piece of string. Then soak in water in kettle or in lake for about 5 minutes. Bury in hot coals (coals under, between, and over all ears) for 15 minutes.
3. Prepare corn as in 2, but do not soak. Lay directly on bed of hot coals, turning as necessary so no one side gets burned. Keep turning until done (about 12 minutes).
4. Same as 3, only place ears over a grill close to good, hot coals.
5. Remove husks and silk, leaving an inch or so of the stock at the large end of the ear. Thrust a sharpened, green stick into large end of ear. Roast directly over coals, turning as you would a hot dog. Will turn a dark brown when done. Has a real good sweet "parched" taste.
6. Remove husks and pare off any blemishes. For each ear to be cooked, cream 1 tablespoon of butter until soft, work in -- if desired -- $1/4$ teaspoon salt and dash of pepper or paprika. Spread evenly on corn. Then wrap each ear loosely in aluminum foil, and seal. Roast about 15 minutes on grill over hot coals, or direct on coals, turning frequently. Serve in partially unwrapped foil.

SOME DIFFERENT WAYS OF COOKING OUT

Once in a while it is a good idea to do something "different" at camp, just for a change and absolutely just for fun. We first got the idea of cooking in a boat from observing the sandboxes for cooking on the decks of the sponge boats at Tarpon Springs, Florida. Some years later we purchased a clay brazier at St. Kitt's, BWI, and lugged it by hand back to Wisconsin. Then at last we got busy on the idea of cooking somewhere else than on land. When the posted menu

indicated a supper to be cooked over a fire, there was considerable speculation for the camp sites indicated were the float and a boat.

The brazier was used on the float for frying hamburgers. Charcoal from the barbecue pit served as fuel. In order to keep the hot ashes from possibly falling out of the bottom wind vent on the wood platform, an old sheet of galvanized iron was placed on three bricks, and the brazier rested on top. Draft and thus the hotness of the fire is controlled by either facing the vent away from the wind or by placing a small sheet of metal in front of the opening. We used an old wire shelf from a refrigerator to place over the top, to hold the fry pan. If the reader would like braziers for outdoor cooking but can't readily concoct an excuse to go to St. Kitt's for one, iron ones may be purchased from Abercrombie and Fitch and probably other sporting goods houses. In camps which go in for pottery, it would seem quite possible to make them.

In the boat we used first an old dishpan as the receptacle for the sand in which the fire was built. This was placed on an old metal barrel top, which in turn rested on three bricks placed apart on the bottom of the boat. The next year we improved on this scheme. We happened to have an old, shallow galvanized pan, about $2\frac{1}{2}' \times 1\frac{1}{2}'$, with a 2" side all around. We made a rack of 2 x 4's the size of the pan. We then cut a piece of asbestos the same size, and secured the edges from crumbling by making a "selvage" edge of 2" adhesive tape, folded over on the edge. The asbestos was put on top of the rack, underneath the pan. In the pan itself we placed three bricks in the sand, separated and arranged on their sides. The fire was built between them, and another old wire rack used as cooking surface. On a smaller scale, this arrangement could be modified for use in a canoe or in a sailboat when anchored for dinner on a sailing cruise. And on a fishing trip in calm water, the fish could be caught, cleaned, cooked and consumed without going ashore.

Cooking in a metal wheelbarrow is a sensible idea and children like it. For one thing, it means that groups can cook out and enjoy the scenery in places on the camp site where fireplaces cannot be constructed or fire sites allowed to mar the landscape. The fire site is merely wheeled to any spot desired. The barrow is filled about two-thirds full with sand, fine gravel, or just plain dirt. A temporary lug pole can easily be erected if kettles are to be hung. There is even room for a reflector oven, bracing up an old sheet of galvanized iron for the reflector for the fire. In fact, any sort of outdoor cooking may be done on it very easily.

CRAFT EXHIBIT

Chapter IX

THE CAMP CRAFT EXHIBIT

An annually rejuvenated camp craft exhibit is a most satisfactory device for arousing an interest in the program and in dispensing knowledge in an interesting and attractive manner. Not only is it of value for counselors and campers, but it is also a prime attraction for visitors and a good public relations medium. For one thing, it shows visiting parents, better than volumes of words or yards of pictures, what outdoor skills and knowledge the camp craft activities afford their children.

The location should be in a central and prominent place on the camp grounds, and as near to the camp craft practice grounds as this first qualification permits. Ideally, it should be in a spot by which visitors pass as they make their tour of the camp facilities. It should have definite boundaries, and be either in a rectangular shape or circle. The units are placed around the edges, with some in the center, so that the displays are not crowded together too much and so that it is easy to make the circuit and not miss any.

The displays could include kinds of fires used in the camp, devices, sanitation and refrigeration methods, improvised gadgets and utensils, fire-building methods, artificial tinders, common fuels in use, a camp kitchen set-up, and semi-permanent projects used in outpost camps. In each case, the item is constructed properly in all details. If necessary, its use can be made clear by accessories, such as No. 10 kettles hung over the devices. When an item is in miniature, as a pit for underground cookery or an altar fire, this is noted. There should be no item just for show. Each should be something which is used by campers.

A typed card accompanies each unit. These can be thumb-tacked to the flattened top side of pointed sticks about two and a half feet long driven into the ground at such an angle that adults can easily read the typing from a slightly stooped position. Approximately three-quarters of the cards are 3 x 5, the balance 4 x 6. The information on each, written in chatty style, covers pertinent details concerning construction, use, good and bad points, etc. Conservation of natural resources, forestry methods, and fire prevention are constantly stressed in this information.

The unit displaying the natural fuels common in the locality is one of the most useful and interesting. The first two 4 x 6 cards will indicate how this is done in our locality. The samples are freshly cut in the whole, half and quarter. Thus both bark and grain are shown. This section is supplemented with units showing natural tinders prepared for use, proper and improper ways of laying fires, etc.

The exhibit is erected about the second week of the season, by which time new campers have sufficient knife and axe skills to participate with the older campers. The cards to be used are divided up into eight or so sets, with a mixture of hard and less difficult units in each set. Counselors and campers are divided into as many teams as there are sets of cards. The teams are arranged so that each has on it the more and the less experienced, the younger and the older campers. The cards are given out after breakfast and before going back to cabin duties each team has a meeting to go over their project, arrange for tools, etc. Consequently, at nine o'clock when the work starts, all goes smoothly. It is finished by noon. Careful pre-planning and equitable distribution of the cards are important so that the work will not become tiresome nor the interest lag.

This is the busiest morning of our entire camp season, for between fifty and sixty people are involved in the project. The results are most worthwhile and the participants are proud of their work and of their share in such a big project. The campers spend many hours studying the cards and the displays, and we believe it to be an excellent visual aid in learning the details of camp craft methods and procedures. Use of it saves untold verbal explanations and directions; it provides a uniform background of pertinent knowledge which is valuable, and, in addition to all this, it serves as a focal point for visitors. The campers take great delight in explaining the displays to their parents and guests, and never fail to emphasize just what their particular contribution was to the whole project.

Such an exhibit can be simple or it can be made elaborate. But it can be planned to fit the situation of each and every camp. We have seen it used to good advantage at in-camp institutes; and also in connection with the camp craft skills portion of college and university counselor training courses.

In order to give a definite idea of the type of information and the diversity of the different units in such an exhibit, we have copied off exactly in the pages to follow some of the cards which we use. The size of the copy will indicate the size of the card. The first two of the 3 x 5 size is one unit, placed in front of a display of the artificial tinders mentioned. The first two of the 4 x 6 cards is in front of a fuel display. Otherwise, each card is used for a single display, or for a group of items treated as a complete unit in itself.

ARTIFICIAL TINDERS AND FUELS

Good campers usually carry in their kits some type of artificial tinder for use in wet weather. These may be old candle ends, not-fireproof kodak negatives, pieces of old celluloid articles, oiled bread paper, empty shotgun shells. The latter, filled with the sawdust or ash mixture mentioned below, are effective. Carbide of calcium is good, as is also the manufactured tinder, marked #1. Sawdust (dry) mixed or saturated with crankcase oil, kerosene or gasoline, and packed in an air-tight tin is effective. Another very good tinder for wet weather is made by mixing two cups of strained ashes from a firepit with about 24 tablespoons of kerosene or gasoline. The paste is made up into little lumps as big as peas and dried. A "pea" as large as a marble will burn 4 minutes.

The waxed roll (#4) is made by rolling 4 to 8 sheets of newspaper tightly, and tying about every 2 inches, the whole length. A section of this is soaked well in melted paraffin or old candle wax. After cooling, this length is cut into discs, as shown. It can be placed at the bottom of a fire-lay or used inside of a Roosevelt (#10) tin stove. The canned fuel is made by forming a wick from strips of a carton, and saturating it with either ordinary kitchen grease or with paraffin or candle wax. This will make an excellent flame or homemade "Sterno" or Heatab. Put into a rough wire frame which will hold a can or kettle over the flame, it will serve to boil food, or with a frying pan can be used effectively. A smaller sized can can be used inside a Roosevelt stove with great success.

FIRE BUILDING

Before the fire is started, the wood (tinder, kindling and fuel) should be prepared. Sort in sizes roughly, and place on the WINDWARD side of the fire. Always light the match on the windward side too, so that the flame from the match may be blown into the tinder. Small whittled clumps of soft wood (pine, poplar, basswood, etc.) make good tinder. So does birch bark, and SPLIT, dry, small twigs.

Decide where you are going to light the tinder, and then hold the match steady there until the tinder ignites. By the way, flame burns upward.

AN AXE LIVES IN WOOD

But the easiest way to park it is to put the blade end farthest away from you sharply into the chopping block. If the chopping block is a large log lying on its side, the axe should be put in parallel to the grain. NEVER lay an axe on the ground, or throw it at a tree, or be careless with it. A carelessly used axe is just as dangerous as a gun. It is a tool to be respected. Never put an axe into a standing tree, whether it (the tree) be dead or alive.

A CAMP CUPBOARD

These are particularly handy at our favorite camping spots, where they remain (as do the rustic tables) as permanent equipment. Between meals, the cupboard is pulled up out of reach of animals. When pulled solid against the horizontal pole, it will not sway in the wind. To turn this into a cooler, merely put a pan of water on top and drape cheesecloth or burlap over it, with one end or the middle of the cloth held in a pan of water by a rock or a tinful of water with a small hold may be suspended over it providing a constant drip.

CAMP ROOSEVELT STOVE

This handy little stove is made from a No. 10 gallon tin. A handful of twigs or chips is all that is needed to make the top hot enough to be cooked on directly or to serve as a stove top for cooking in a pan.

Pancakes and hamburgers are the favorite foods for cooking on this device. It is a saver of fuel, of course, and, in addition, it is a safe way to cook with in places where there are forest fire hazards.

MAKE-SHIFT TABLE

This is just one of many different sorts of make-shift "furniture" which can be made by lashing branches together. Sometimes they can be attached to living trees, but often artificial "legs" must be made, as out of these forked sticks. Devices such as this make out-door cooking and housekeeping much easier, and also make for greater neatness and efficiency.

THREE USEFUL GADGETS ALL MADE OF TIN

Make-shift frying pan, pancake turner, and cup.

If cooking utensils are not washed in water, but wiped off clean with a greasy rag and kept out of dampness, they will remain rustless and therefore usable for a long period of time. Many other similar articles may be made according to need, initiative and ingenuity.

MINIATURE PIT FOR UNDERGROUND COOKING

Line a pit with stones, and then build a large fire so as to get stones red hot. Or build fire over hole and put rocks around in the wood, so they will fall into the hole. Then, when stones are hot and wood burned into coals, remove any embers and place green wet leaves on. Then placed on this are wrapped meat or vegetables, covered with leaves, wet. Before piling on earth, arrange a stick upright so that when earth is on, there will be a tunnel back to where the food is when stick is removed. Pour in some water, then close hole to keep steam in. This sort of cooking is done by steam, NOT by direct heat.

HUNTER, TRAPPER'S OR WOODMAN'S FIRE

2 green logs (or water-soaked if dry logs used) laid not quite parallel. Wider end towards wind. Hollow earth out slightly between logs for fire bed.

Can be made with 2 rows of flat stones (non-poppable) or bricks.

Idea: To rest coffee pot, kettles or pans over logs and cook over coals between the logs. Can control heat in different sections by raking away embers.

Green sticks laid across make a good grill for broiling meat or making toast over coals. Fire can be controlled by using stick or rock for chuck under the log on the windward side.

CEREMONIAL OR COUNCIL FIRE

A large teepee of dry branches is erected inside a framework (log cabin) of green or wet logs. The flame follows UP the dry branches, giving out both HEAT and LIGHT. Feed fire by putting in sticks on end, which are held in place by the non-burning framework. This type of fire is NOT suitable for cooking. Use for evening council fires, around which campers sit.

MINIATURE ALTAR-FIRE FOR COOKING

Made of large, green logs carefully notched at the ends, this is an excellent fireplace of a semi-permanent camp site, or for one used by various groups of people. It has two distinct advantages:

1. There is no danger of fire running underground, as the crib is filled with rocks, sand, dirt.
2. It is not necessary to stoop as when fires are built directly on the ground.

The lug poles and pot hooks are used exactly as in the other fires. Reflector ovens may be used on it if the top is large enough to accommodate a wind break. Small rocks or a depression in the surface facilitate the building of the fire, as it is difficult to build one in an all-flat surface.

SEMI-PERMANENT FIRE PLACE

When 3 or 4 meals are to be cooked at one spot, it is a good plan to make a more permanent fire place. This one has a chimney (made out of two #10 tins) and a "hot plate". When such a fire place is built up from the ground on a foundation to a point which makes the stooping down unnecessary, it is more convenient.

LOG REFLECTOR FIRE

When baking in a reflector oven has to be done, or heat and light thrown into an open tent or lean-to -- such as ours across the Bay -- the heat must be controlled. So the fire is built in front of a back-stop. This one is made of green logs covered with clay to make them resistant to fire. Note the two ways the logs are braced in back. The reflector oven is placed in front of it, and the heat is thrown in that direction on top and from underneath. Biscuits, pies, bread, escalloped dishes, baked potatoes, cake, etc., may be baked in our Stonebridge folding reflector ovens and in our improvised oven, as well as they can be baked in the electric oven at home.

TRENCH FIRE

Good points:

1. Leaves no scar or trace, earth and sod replaced after fire out.
2. Less dangerous as to spreading fire.
3. Conserves fuel.
4. Gives direct heat. Pans placed across trench.

Possible bad points:

1. Harder to build.
2. Requires tool, or sharpened flat stick.

HOME MADE REFLECTOR OVEN

Made by cutting a 5-gallon oil can kitty corner and inserting galvanized wire upon which pan is to be rested.

Of course, this is not as handsome or convenient as the expensive purchased kind, but if it can bake biscuits and costs nothing, isn't it a good idea?

MINIATURE PRIMITIVE SAW HORSE

Quickly made saw horses of this type may be seen outside hunting shacks in this part of the country. Those saw horses are for use mainly with a buck saw, small pulp (metal), or folding (metal) saw. When a cross-cut saw is used, usually just two stout poles are lashed together (as at the ends of this one) and three people work at it--two to saw and one to hold the log in place.

GREASE PIT

For disposal of dish-water at a semi-permanent camp site. The hole is lined with large rocks, then smaller stones or pebbles on top. When bits of food, grease, etc., collect on the top pebbles, a fire is built on top and the refuse is burned. This is then clean and ready for continued use.

"A good camper leaves nothing but her thanks."

PRIMITIVE LATRINE

Sanitation and waste disposal are two important bits of camp craft knowledge. If a shovel or large trowel are not at hand to use to throw the layers of dirt back into the trench, a handmade shovel can be made (as illustrated) by fitting a crotched stick inside a tin and pounding the tin flat upon it. Similar holes are used for disposal of cans (burned out in fire and then pounded flat), garbage, dish water, etc.

After each use, the earth is sprinkled back on the trench, so that it is always sanitary. All such holes and trenches are carefully covered when the campers leave. "A good Camper leaves no trace."

DOUBLE BOILER

This is a make-shift double boiler for outdoors cooking. There are two ways of using such a device:

1. Shown here with both kettle pails hanging from the same lug pole and suspended over the fire.
2. The bottom and larger kettle is set directly on the fire and a few large rocks placed in it so that the top and smaller kettle may rest on the rocks by having the water line approximately up to the middle of the top kettle.

RUSTIC BROILERS

There are several kinds of rustic broilers. Don't make one of "twigs", for they aren't strong enough and burn up. Those of fairly strong branches, woven together are good. But best are the "snap broilers", made by inserting fair sized green twigs into two inner sides of a large crotch, by means of holes punched in sides of crotch with knife.

KINDS OF WOOD COMMON IN THESE PARTS

1. Pitch pine stump, from which tinder slivers are made. Too smoky to use as fuel.
2. White Birch hard wood for coals. Use only dead and down.
3. Oak hard wood for coals. Use only when dead and down.
4. Pincherry--an inferior wood, soft. Good for devices.
5. Poplar--an inferior soft wood. Good for devices, and when dry and split makes good fuel.
6. Black Cherry--a good wood to use, but as the fruit of it is good for both men and birds, it should not be cut carelessly.
7. Pine Knots--the hard coal of the woodsmen. A collection of these is found drying outside the tent of every good camper. They burn like hard coal or charcoal briquettes, and they are grand!!
8. Red or Norway Pine--one of the three common pines in this region. The other two are White Pine and Jack Pine, and all are commercially classified as soft woods. Red and White Pine are easily split and make good tinder and kindling, but none of them are good for making a sustained fire for cooking or warmth.

These woods are usually available in "dead or down" condition in our forests. Being pitchy, they are disagreeable to handle and of course are not good for broiling sticks on account of the objectionable taste and the pitchy condition. The Red and White Pine are very handsome trees and without them this region would be far less attractive. Do you ever stop and "smell" the pine aroma?

9. Arbor Vitae (cedar) is a very useful wood, as it has high resistance to rotting from wetting, weathering or submersion in soil. That is why the large posts supporting our dock are made of CEDAR. It is split very easily and is excellent for straight

whittling and chip carving. Its variegated colors make it especially attractive for these purposes. Cedar has a delightful odor. It is of course a soft wood and desirable only for tinder. It is dangerous to burn large chunks in dry weather, as it "pops" and throws sparks to a considerable distance.

10. Jack-Pine
11. White Pine (Directly over this is a White Pine Tree)
12. Maple.

Samples of each kind of fuel will be found on a plank directly in back of this sign. Each has a corresponding number on a small card in front. Note grain in halved and quartered pieces.

LAYING THE FIRE

This is the way to lay a fire, without frills and fuss. Split (dear reader: kindly note that split sticks catch fire infinitely better than bark-covered ones either seasoned or green) dry twigs OR split pieces of pitch pine are laid directly over the tinder (clumps of birch bark) and a little hole leading to the most inflammable pieces of tinder left on the windward side of the fire through which the match is applied. The kindling should be in several sizes, from the finer up to the fuel size. It is laid loosely so that the flame will not be squelched; but not so loosely that the underneath layer is out of contact with that above it.

This is not the "teepee" of printed page fame. The so-called "teepee fire" is no use whatsoever as a cooking or warming fire, except in the following cases:

1. The inside of the Council Fire (as per model)
2. In its phase as a pyramid fire (see model fire)

So we urge you campers to lay and tend an outdoor fire in the fashion of REAL outdoor people, with minimum of effort. To do this, they must know the various kinds of wood AND fuel values of each.

ALUMINUM FOIL COOKING

Aluminum foil, with a melting point of 1200 degrees F., easily withstands the temperature of hot coals. One can cook IN it, eat ON it, and then throw it away (if extravagant). It eliminates pans, pots, kettles, and plates, AND dishwashing!

Two airtight envelopes, one surrounding the other are necessary to prevent burning. We have found the foods have more flavor if well-coated with bacon grease when being done up in the inside package.

The exhibit to the right shows how an apple would look when wrapped and ready to be baked. The one at the left shows how a stew pan can be made of a forked stick and 2 thicknesses of foil. Water may be boiled in this, and it is used like a kettle. Chops and thin slices of meat can be broiled in foil by loosely wrapping the meat or even by just laying it on an open piece of foil spread on hot coals.

RELATED ACTIVITIES

Chapter X

ADJUNCTS TO THE CAMP CRAFT PROGRAM, AND RELATED ACTIVITIES

The permanent camp craft exhibit described in the previous chapter is a very valuable and important adjunct to the camp craft division, and well worth the effort it takes to prepare and maintain it. There is great value, also, in having a continuous series of small exhibits or displays on tables or shelves by which campers pass and over which they may linger and ponder. These need not be large nor imposing. In fact, they are of the greatest interest when the campers themselves have contributed the items in the display or helped to arrange it. It can be as simple a thing as old pieces of axes, log chain links, and other relics picked up on a hike to an old lumber camp site abandoned sixty years ago. Or a couple of basins with pitcher plants and sun dew collected on a swamp trip. It adds to the interest if the campers who have a hand in these projects make an announcement to the whole camp concerning them. The hobbies of leaders can be utilized, also, and the fact that their elders think such concerns worthwhile make a lasting impression on children.

Here are a few random suggestions for such exhibits:

- Useful articles made to fulfill camp craft requirements.
- Edible foods in the vicinity.
- Collection of blueprints of flowers and leaves.
- Good nature or scenery snapshots taken in camp.
- Butterfly collection and tray with supplies needed to start one.
- Nature oddities.
- Exhibit of local flowers as they come in season. Kept in uniform glass bottles with labels marked in pencil, so names can be changed as the flowers are.
- Similar exhibit of tree leaves, and shrubs.
- Exhibits of special pictures of nature, historical, and other pertinent subjects.
- Weekly exhibit of books in camp library on a special subject, arranged by Library Committee.
- Plaster casts.
- Sketching of outdoor subjects.
- Collections of rocks and minerals, ferns, grasses, mosses, shells, fossils, Indian relics, galls, bird feathers, etc., etc.
- Collection of nature poems, songs, and stories.
- Driftwood articles.
- Crafts from native materials.
- Different kinds of knives.

The list of such exhibits can be as long and as diversified as the interests and the imaginations of the camp personnel. Many of them are more interesting when supported by typed cards giving considerable information. Insofar as possible, the campers should be permitted to handle the objects exhibited.

Bulletin boards should be utilized more than they seem to be in camps. In Chapter II the use of material on permanent boards was mentioned. In addition to these boards, there should be several others which can be used for varied subjects by the simple expedient of changing the headings. To carry through such a plan it is necessary to build up a special file of clippings, articles and pictures, classified by subjects. The collecting of these is an interesting hobby for any camp director, especially the clipping of jokes. It is amazing how quickly such a collection can grow in a few years and what a valuable source of information it can become. For the camp craft board, which often spills over to adjacent wall and cupboard door space, we recommend an assortment of pictures, and illustrated articles on conservation, historical, pioneer, Indian, nature, camp craft techniques and equipment, cowboy life, and all other related outdoor subjects which appeal to children. Jokes, some pointing up attitudes and skills (or their lack), others just plain funny, should interlard the more serious items.

The boards should be changed regularly, about every five or seven days. In order to make it obvious that a change of material is due, it is a good idea to leave the boards blank over the period of one meal. Where children are accustomed to finding interesting and entertaining material spread before them in this way, it is certainly gratifying to the bulletin board keepers to see them cluster quickly around the new displays. It is our belief that adults in camp have failed to realize the great potential possibilities in arousing interest in and disseminating knowledge of a wide range of subjects which such a plan as this provides. The information and the attitudes which children absorb by perusal of such material in their leisure time is truly immeasurable.

Books are another important adjunct. We have mentioned having readily available a special shelf for outdoor cookery books and manuals. The private library of the camp, augmented by books on summer loan from state, city and county libraries should contain adequate reference books on nature subjects as well as books on general camping out and woods lore, natural resources, stories, poetry, etc., which have to do with the outdoor life. Nature, camping, forestry, natural history and sporting magazines are also interesting to campers. Incidentally, they are also a wonderful source for clippings for use on the bulletin boards.

An informative and interesting discussion on books of natural history may be found in Chapter 35 of the Mentor Book, "The Wonderful World of Books". The chapter is entitled "The Meaning of the Life Around You" and is written by Miss Shirley A. Briggs of Washington, D. C. We are proud to say that she is one of our former campers.

There are, of course, many other useful adjuncts to a camp craft program which can be devised by those who believe that it is of prime importance to help children acquire a lifelong and loving appreciation of the world of nature about them. There is no limitation to such efforts, just as there is no limitation to the boundless interests of children and no boundary to the knowledge they may acquire about the natural resources in their camps.

RELATED ACTIVITIES

In Chapters II and III brief mention was made of some of the auxiliary projects and activities which make the indigenous program one of continuous interest to campers. The resources used in these endeavors should never be too technical, since that approach would tend to destroy the natural interest that all children have in the world about them. Conservation, for instance, doesn't have to be labelled as such. We are striving to create attitudes and to make the desirable practices involved interesting, purposeful, and active. Neither does nature lore have to be labelled. Children see, smell, touch and use the infinite natural resources around them oblivious of any idea of compartments of learning. They soak up the beauty and the peace around them without adult suggestions or instigation.

Happily for campers the country over, there are good materials available on the intelligent use of natural resources and native materials in the camp program. In the Nature Crafts section of the bibliography in the Appendix we shall list those commercially printed books we consider the best available. Others will be found in the Annotated Bibliography referred to in that section.

In October, 1951 the American Camping Association sponsored a Workshop of Conservation at Lake Geneva, Wisconsin. Federal, state and private agencies and organizations interested in conservation and wild life sent top-flight representatives. Camping was also represented by competent people. The reports which came from the Workshop groups were ably edited by Miss R. Alice Drought and published by the Soil Conservation Service of the United States Department of Agriculture, in March 1952. It is entitled "Conservation in Camping" and may be obtained free of charge direct from the national office of the American Camping Association, 343 South Dearborn Street, Chicago 4, Illinois.

The whole gamut of indigenous activities is covered so well and so completely on pages four to twenty-two in this publication that it seems unnecessary to abstract any of the material for inclusion in this manual. The ideas and suggestions set forth are the most complete and the most carefully considered of any now available in print. The writer took part in this Workshop and still considers it the most stimulating and the most worthwhile of any meeting of any sort she ever attended. Each reader of this manual is urgently advised to obtain this splendid pamphlet and to use the excellent ideas it contains in any camp, institute, or counselor training course with which he may be connected.

APPENDIX

- I. SELECTED BIBLIOGRAPHY
- II. SAMPLES FROM USEFUL ARTICLES AND PROJECTS LIST
- III. SAMPLES OF QUESTIONS USED IN THEORY TESTS

I. SELECTED BIBLIOGRAPHY

The following lists of books, to the author's best knowledge, cover the most useful references now in print. Many others will be found in "The Annotated Bibliography of Camping" prepared by the writer for the American Camping Association, and directly available from its office at 343 South Dearborn Street, Chicago 4, Illinois. The latest edition of this is April, 1955. The address of Camp Publications is 6 High Street, Bar Harbor, Maine, from which a price list is available on request.

OUTDOOR COOKING

- "THE OUTDOOR PICTURE COOKBOOK", by Bob Jones. Hawthorn Books, Inc., 70 Fifth Avenue, New York 11. 1954. \$2.95.
- "THE OUTDOOR CHIEF", by Paul W. Handel. Harper Brothers, New York, 1950. \$3.00.
- "THE OUTDOORSMAN'S COOKBOOK", by Arthur H. Carhart. The Macmillan Company, New York. 1944. \$1.95.
- "OUTDOOR COOKING", by Cors and Bob Brown. The Greystone Press, New York. 1940. \$2.50. Out of print.
- "COOKING OUT-OF-DOORS", Girl Scouts, Inc., 155 East 44th St., New York City. 1946. \$1.00.

GENERAL WOODSLORE

- "CAMPING AND WOODCRAFT", by Horace Kephart. (Two volumes in one). The Macmillan Company, New York. 1923. \$2.50.
- "WILDWOOD WISDOM", by Ellsworth Jaeger. The Macmillan Company, New York. 1945. \$2.95.
- "THE HIKER'S HANDBOOK", by Douglas Leechman. W. W. Norton and Co., New York. 1944. \$2.50.
- "THE JUNIOR BOOK OF CAMPING AND WOODCRAFT", by Bernard Mason. A. S. Barnes Company, New York. 1944. \$3.50.
- "WAY OF THE WILDERNESS", by Calvin Rutstrum. Burgess Publishing Company, Minneapolis, Minn. 1952. \$3.00.
- "CAMPING CAN BE FUN", by R. W. Weaver and A. F. Merrill. Harper Brothers, New York. 1948. \$3.00.

ORGANIZATION OF CAMP CRAFT

- "THE ART OF LIVING OUT OF DOORS IN MAINE". 1954. \$1.50. Purchase from Maine Development Commission, Augusta, Maine. Make check out to Maine Camp Director's Association.

"YOUR OWN BOOK OF CAMP CRAFT", by Catherine T. Hammett. 1950. \$.35. Obtain direct from American Camping Association.

"CAMP CRAFT A B C's", by Catherine T. Hammett. Girl Scouts, Inc., New York. 1941. \$1.25.

574,169 NATURE CRAFTS

"FIELD BOOK OF NATURE ACTIVITIES", by William Hillcourt. G. P. Putnam Sons, New York. 1950. \$3.95.

"NATURE CRAFTS", by Ellsworth Jaeger. The Macmillan Company, New York. 1950. \$2.50.

"EASY CRAFTS", by Ellsworth Jaeger. Macmillan. 1947. \$1.95.

"BOOK OF NATURE HOBBIES", by Ted Pettit. Didier Publishers, New York. 1947. \$3.50.

"NATURE CRAFTS FOR CAMP AND PLAYGROUND", National Recreation Association, New York. 1953. \$.50.

LEADERSHIP

"CAMP COUNSELING", by A. Viola Mitchell and Ida B. Crawford. W. B. Saunders Company, Philadelphia. Revised 1955. \$4.75.

"THE CAMP COUNSELOR", by Reuel A. Benson and Jacob Goldberg. McGraw-Hill Company, New York. 1951. \$4.75.

"THE CAMP COUNSELOR'S MANUAL", by John A. Ledlie and Francis W. Holbein. Association Press, New York. \$.75.

"SO YOU WANT TO BE A CAMP COUNSELOR", by Elmer Ott. Association Press, New York. 1946. \$.75.

"TALKS TO COUNSELORS", by Taylor Statten and Hedley S. Dimock. Association Press, New York. 1939. \$.75.

"THE THEORY OF CAMPING", by Frank L. Irwin. A. S. Barnes Company, New York. 1950. \$3.00.

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II. SAMPLES FROM USEFUL ARTICLES AND PROJECTS LIST

This list was compiled with the cooperation of an arts and crafts counselor in order to help the campers decide on a useful article each had to make to fulfill a camp craft requirement. We wanted to afford each camper ample choice, and we also wanted them to become familiar with some of the good books on use of native materials. The books were kept at the crafts workshop and the work was at least started there, although many times it was taken with the camper to work on in her spare moments. A copy was posted in the workshop and the original on the side of the camp canteen, where it was very much in evidence and served as the basis for many a momentous decision.

BOOK OF WOODCRAFT - Bernard Mason (A. S. Barnes & Co., NYC, 1939)

Profilers	149
Pothooks	148
Hot Rock Handler	155
Bark Water Dipper	244
Simple Bark Boxes	245-248
Noggins	291-295
Wooden Spoons, Forks, Knives, etc.	298-301
Wooden Napkin Rings	302-303
Paper Knives	304-306
Woodcraft Brooms	306-311
Wooden Buttons	314-315
Whistles	326-328
Candlesticks	328-330
Coat Hangers	351

KNIFE CRAFT - Boy Scouts (Boy Scouts, Inc., NYC, 1940)

Paper Knives	7-10
Tent Peg	11
Coat Hangers	13-14
Candle Holders	15
Spoons, Knives, Forks	11, 12, 24
Miniature Totem Poles	16-18
Neckerchief Slides	19-21
Noggins	21-23

INDIAN CRAFT - W. Ben Hunt (Bruce Pub. Co., Milwaukee, 1942)

Throwing Stick (Rabbit Sticks)	90
Candle Soonces	109
Fungus Work	108
Photo Album	118-119

WHITTLING & WOODCARVING - E. J. Tangerman (McGraw-Hill, NYC, 1936)

Totem Poles	38
Fishing Bait (Plugs)	43
Whistles	45-46
Fish Line Reel	46
Spoons	46
Noggins	46
Pancake Turner	46

ULSTER GREEN SHEETS - (Dwight Divine & Sons, Ellenville, NYC)

Candle Holder	Fish Scaler
Clothes Pins	Coat Hanger

BEJ SAMPLES - (Arts & Crafts)

Bobber for Fish Pole
Totem Pole
Basseriino (Fish Bait or plug)
Miniature Chopping Block & Axes
Fish Measuring Stick & Reel (Hand line)

INDIAN AND CAMP HANDICRAFT - W. Ben Hunt

Hopi Tihus Dolls	16-17
Totem Poles	18-19
Indian Symbols and Designs	32-33
Miniature Camp Fires	47
Ladles, Bowls, Cups	48-49
Birch Bark Baskets	50-51
Neckerchief Slides	62-63
Camp Knife	64-65
Knife and Axe Sheaths	66-67
Bird Houses	74-75

BEN HUNT'S WHITTILING BOOK - W. Ben Hunt (Bruce Pub. Co., Milwaukee, 1944)

Sharpening the Knife	33
Using a Pocket Knife	17-21
Bark Whittling	23
Birds	24-25
Penguins	29-31
Wooden Jewelry	32
Lapel Pins, Brooches	33
Belts, necklaces, bracelets	34
Zipper pulls, necklaces	35-36
Mayan Designs	37
Ornamental Brooches	38-39
Kachina Dolls	40-45
Neckerchief Slides	46-48
Totem Poles	49-51
Marquesas Island Stilt	
Steps	52-53
Turtle Paperweight	54-55
Scarlet Ibis	56-58
The Pensive Pelican	59-61
Loon	62-64
Bird Sticks - Kingfisher	65-67
Book Ends	68-72
Faces and Figures	73-74
Set of Whittled Chessmen	75-77
Indian Head Neckerchief	
Slide	78-79
Grizzly Bear	80-84
Howling Wolf	85-87
Ducks	88-96
(Wall decorations or pins)	
Seal	97-100
Pack Mule	101-105
Whittling Spirals	106-107
Open Spiral	108-110-111

MORE BEN HUNT WHITTLINGS - W. Ben Hunt (Bruce Pub. Co., Milwaukee, 1947)

Neckerchief Slides:	
Rattlesnake & Crow's Skull	13
Birds:	
Miniature Decoy Ducks	19
Owl	24
Green Cormorant	26
Female Cardinal	30
Male Cardinal	30

MORE BEN HUNT WHITTLINGS - (Continued)

Animals:	
Norwegian Pigs	37
Otter	40
Zebra Colt	43
Buffalo	46
Rearing Horse	48
Bull Moose	52
Human Figures:	
Ethiopian Boy's Head	62
Indian Head	65
Mountaineer Moonshiner	68
Little Fisherman	71
Buccaneer	75
Groups:	
Canoe in Rapids	81
Indian Travois	87
Mexican Oxcart	91
Caricature:	
"Houn' Dawg"	99
Big Bad Wolf	102
"Drizzly Bear"	106

A COMPLETE BOOK OF MODERN CRAFTS - H.A. Reynolds (Blue Ribbon Books, NYC, 1940)

Wood-Carving and Whittling 180-187

CREATIVE HANDICRAFTS - M. R. Hutchins (Sentinel Books, NYC, 1944)

Wood Carving 109-123

COOKING OUTDOORS - Girl Scouts (Girl Scouts, Inc., NYC, 1947)

Utensils made from natural material and scraps 19-20

ARTS AND CRAFTS - With Inexpensive Materials (Girl Scouts, NYC, 1941)

Wood:	
Hike Sticks	81-95
Whistles	
A Noggin	
A Mattet	
A Broom	

ARTS AND CRAFTS - (Continued)Wood: (con't)

Stool and a Chair
 Wooden Book Covers
 Bracelets, Tie Slides, Rings
 Kachina Dolls
 Fiddle -- one string
 A Wooden Marimba
 Camp Gadgets

EVERYBODY'S HANDICRAFT HANDBOOK

(Progress Press, Wash. D.C., 1946)

Wood Carving and Whittling: 20

Bark Whittling
 Whittling Tricks--chain and
 ball in box, interlaced
 hearts

Chip Carving:

Incising
 Carving in Relief
 Figures in the Round
 Finishing

WILDWOOD WISDOM - E. Jaeger

(Macmillan, NYC, 1945)

Birch Bark Craft 307-327
 Tin Can Projects 191-195
 Candlesticks, articles from
 wood 421-437

EASY CRAFTS - E. Jaeger

(Macmillan, NYC, 1947)

Fungus Lapel Ornament 19
 Woods Whistle 37
 Totem Toys 42
 Rocking Animals 44
 Indian Pipes 58
 Indian Designs 64
 Indian Toy Bird 72
 Iroquois Wampum Design 100
 Picnic Crafts 128

YOUR OWN BOOK OF CAMPCRAFT

Belts, candlesticks, knives
 spoons and forks 140-141
 Camp broom 170

LET'S WHITTLE - Leroy Ryan, Jr.

(Manual Arts Press, Peoria, Ill., 1948)

Camel 14-19
 Pelican 20-22
 Water Fowl 23-25
 Dog 26-27
 Begging 28-30
 Wood Duck 31-45
 Chicken 35-38
 Black Bear Cub 39-41
 Elephant 42-44
 Bear and Cub 45
 Old Horse 49, 81
 Owl 53
 Deer 56, 75, 117
 Parrot 59
 Zebras 64
 Mountain Lion 68
 Fleas--(dog) 72
 Mama and Baby Kangaroo 78
 Giraffe 85
 Flamingo 95
 Pancho 90
 Mare and Colt 99
 Figures 104-111
 Circus 112-116

BOOK OF NATURE HOBBIES - Ted Pettit

(Didier, New York, 1947)

Bass plugs 187-189
 Insect cages for pets 128-131
 Butterfly spread board 115-117
 Fire-making set 101-103
 Wood Collections 89-90

NATURE CRAFTS - Ellsworth Jaeger

(Macmillan, 1947)

Grass Mat Looms 5-6
 Indian Willow Bed 7-8
 Rush Mats 9-11
 Camp trencher 28
 Spoons and Forks 29-31
 Burl noggins 33-34
 Twig brushes 34
 Buttons 39-41
 Shoe horn 46-48
 Driftwood Crafts 48-49
 Bark Crafts 50-65
 Fire Sets 61-66

NATURE CRAFTS - (Continued)

Whistles	68-73
Slush lamps	73-74
Katchina Dolls	80-83
Totem Poles	82-85
Porcupine Match Holder	85-86
Pack Frames	89-92
Candlesticks	103-104
Twig Belts	105-106

III. SAMPLES OF QUESTIONS USED IN THEORY TESTS

- T. Fuzz clumps are made from soft wood.
- T. When birch bark from dead trees is used for tinder, it is separated into thin strips and crumpled into a loose ball.
- F. Pour on a lot of water quickly to put out a cooking fire.
- F. When whittling, place thumb on back edge of knife blade.
- T. To tighten loose head on hatchet temporarily, soak in water.
- F. Water has to be boiled only five minutes for purification.
- F. Burn bulky garbage in fire.
- F. Never place used tin cans in fire, since they will not burn anyway.
- F. Using a knife to poke at a hot fire will not hurt the blade.
- F. If wind is coming from the east, the match to start the fire is applied on the opposite (west) side.
- T. If a rain is coming, tent guy and peg ropes should be loosened.
- F. Leave canoe paddles on ground alongside your tent at night, so you know where they are.
- F. If sitting in your pup tent during a rainstorm, it is okay to have your head or back against the canvas.
- F. Resinous wood makes good coals for broiling.
- T. Hatchet is worn back of hip, with blade pointing towards the back.
- F. When chopping in two a 6" log that cannot be turned over, a 3" V is sufficient.
- T. Before starting to use a hatchet, underbrush, overhead and underfoot obstructions should be removed.
- F. When ditching a tent, scatter the removed soil around, as you will not need it for any purpose.
- F. When packing a knapsack, heaviest articles are placed on top.
- F. When camping on a strange lake, it is okay to throw used cans and heavy garbage, etc., out in the lake beyond your swimming and landing area.
- T. Rain hats and coats are packed in top of knapsack for easy access and waterproofing purposes.

- T. Black cherry is a more useful and valuable tree to men and birds than pin cherry.
- P. Pitch tents in a nice, grassy hollow if you can find one at camp site.
- T. To split wood use another log, or a chopping block to support piece of wood being chopped.
- P. Canoes should be turned over at night with inside towards the shore of lake.