This manual presents information and ideas for the teacher or advisor interested in forming a hiking club. Suggestions are made for club organization, activities, advisor responsibilities, hiking equipment and skills, safety, first aid, and map and compass use. A list of guide books for the Washington area and a list of general instructional books are included. This work was prepared under an ESEA Title III contract. (Not available in hardcopy due to marginal legibility of original document.) (PR)
INTERDISCIPLINARY OUTDOOR EDUCATION

HIKING

FOOT GEAR

FIRST AID

PROPER GEAR

CAUTION

SURVIVAL

ESSENTIALS

FUN TRAILS

MOUNTAIN CLIMBING

CLOTHING
AN INTERDISCIPLINARY OUTDOOR EDUCATION PROGRAM

Under Provisions of Public Law 89-10, Title III
OE Project No. 66-2682

Project: The Structure and Organization of a group activity devoted to the appreciation and recreational use of our Natural Resources

by

M. Ray Witham
Shoreline School District No. 412
King County
Seattle, Washington

1968
<table>
<thead>
<tr>
<th>Title</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>FOREWORD</td>
<td>i</td>
</tr>
<tr>
<td>INTRODUCTION</td>
<td>ii</td>
</tr>
<tr>
<td>ORGANIZATION</td>
<td>1</td>
</tr>
<tr>
<td>ACTIVITIES</td>
<td>5</td>
</tr>
<tr>
<td>ADVISOR'S RESPONSIBILITIES</td>
<td>7</td>
</tr>
<tr>
<td>DISCUSSIONS (CRAFTS &amp; SKILLS)</td>
<td>10</td>
</tr>
<tr>
<td>Footgear and Care</td>
<td>10</td>
</tr>
<tr>
<td>Clothing</td>
<td>11</td>
</tr>
<tr>
<td>Backpacking Equipment</td>
<td>12</td>
</tr>
<tr>
<td>Items to carry on your person</td>
<td>13</td>
</tr>
<tr>
<td>Carry in Pack</td>
<td>14</td>
</tr>
<tr>
<td>Cooking Gear</td>
<td>15</td>
</tr>
<tr>
<td>WHAT TO DO IF LOST</td>
<td>16</td>
</tr>
<tr>
<td>THE TEN ESSENTIALS</td>
<td>19</td>
</tr>
<tr>
<td>CLIMBING CODE</td>
<td>20</td>
</tr>
<tr>
<td>GOOD OUTDOOR MANNERS</td>
<td>21</td>
</tr>
<tr>
<td>FIRST AID</td>
<td>23</td>
</tr>
<tr>
<td>Prevention</td>
<td>23</td>
</tr>
<tr>
<td>Techniques of First Aid</td>
<td>24</td>
</tr>
<tr>
<td>Treatments</td>
<td>25</td>
</tr>
<tr>
<td>MAP AND COMPASS INSTRUCTION</td>
<td>41</td>
</tr>
<tr>
<td>GUIDE BOOKS</td>
<td>43</td>
</tr>
<tr>
<td>APPENDIX</td>
<td>44</td>
</tr>
</tbody>
</table>
FOREWORD

"Beauty is not an easy thing to measure. It does not show up in the gross national product, in a weekly pay check, or in profit or loss statements. But these things are not ends in themselves. They are a road to satisfaction and pleasure and the good life. Beauty makes its own direct contribution to these final ends. Therefore it is one of the most important components of our true national income, not to be left out simply because statisticians cannot calculate its worth."

- Lyndon Johnson

The child enters our world to be exposed to the pressures of our culture; such as, the family, schools, church, and community. These pressures today are much greater upon the individual than ever before. Because of these pressures, the child has not been given an opportunity to develop an appreciation of beauty.

The secondary student having reached the age of academic maturity in which he can understand many of the phenomena which make up our natural environment, should now have the opportunity to develop within himself an appreciation of beauty. This nucleus of appreciation can be a bridge between his academic, aesthetic, and spiritual worlds with the firm hope that it will develop into greater understanding and appreciation of man's relationship with his environment.

It is the goal of this program to stimulate and assist teachers in providing opportunities for secondary students to develop an understanding of beauty.
INTRODUCTION

With the increasing interest in the out-of-doors today, there seems to be a need for a place in public education where students can secure information and training in the proper use of our natural resources. Although this subject is sometimes discussed by teachers and students, it is usually a part of some other subject area and never given anymore than a mere acknowledgement. The curriculum seldom, if ever at the secondary level, is flexible enough or encompassing enough to treat our natural resources in the light of their recreational potential and use. This single area makes the study of natural resources most meaningful to the greatest number of students. Students need to have a proper learning environment and have a way to put to use the knowledge and skills they are taught or else these things are soon forgotten.

It is for the reasons given above that we offer this unit in hopes that some teacher or parent might be given a start in forming a group or club in their school. This unit is intended to serve as perhaps a foundation or a catalyst to new ideas and only represents one way a successful club could be organized. It is not a complete unit, but offers the reader methods of organization, activities to be carried out by the club, crafts and skills, and many other ways students can become involved with their environment. As your club grows, so will your ideas and it is hoped that you will share with us any observations or new activities you may have so that we can incorporate these into our own programs.

Please send all information to:

Mr. Menford R. Witham, Teacher, Shorecrest High School, 15343 - 25th Ave., N.E., Seattle, Wash., 98155

Mr. Edgar F. Neal, Project Leader, Title III, Outdoor Education, Shoreline Public Schools, N.E. 158th and 20th N. E., Seattle, Washington 98155
The interdisciplinary booklet on "Hiking" was coordinated and developed by the following:

<table>
<thead>
<tr>
<th>NAME</th>
<th>PRIMARY RESPONSIBILITY</th>
</tr>
</thead>
<tbody>
<tr>
<td>Menford R. Witham</td>
<td>Author</td>
</tr>
<tr>
<td>Edgar F. Neal</td>
<td>Project Leader</td>
</tr>
<tr>
<td>Mrs. Lee Broad</td>
<td>Production and Layout</td>
</tr>
<tr>
<td>Pauline M. Swaney</td>
<td>Production and Layout</td>
</tr>
</tbody>
</table>
ORGANIZATION

A. Getting Started

As an advisor to a club of this nature, you have to have adult help. Request support from other faculty members as well as parents. The P.T.A. will be glad to assist you. All of us enjoy an outing now and then, and also it is a good way to get involved with the students. Adult help is essential on hikes and overnights for supervision. It is comparatively easy to handle thirty students in a classroom, but try to keep tab on them climbing up trails.

Generate interest among the students. Use the bulletin, the school newspaper and the students themselves. Mention it in your classes. As soon as a few interested students understand the nature of the club, they will spread the word. You will be surprised at the type of student who is interested in the out-of-doors. Many will be former scouts or are currently in scouting. These make fine leaders. Some will be from families that have very limited experience in the out-of-doors. Many will have only limited experience with the out-of-doors from having been to camp or some other similar experience. Most of the students interested in a hiking club are basically good children and will present you with few problems. This seems to be the type of student the out-of-doors attracts.

Set up an introductory meeting. This should be done during school hours, preferably during homeroom or lunch. This is especially true if the majority of students are bussed to school. If your meetings are held after school, many interested students cannot attend. This also will accommodate those in after school sports and other activities.

In this first meeting the purposes and intentions of the club should be outlined. You should state your philosophy and what you hope to accomplish. Outline the structure of the club and how the students are to be involved. Show a film dealing with the out-of-doors. Be sure to get a list of membership. Save the rules and regulations until later as you want to encourage them now.

Film titles: See Appendix H
B. Structure

How your club is structured will depend upon your own individual abilities to organize and to handle students. It also depends heavily upon the nature of your activities. The one thing to keep in mind is not to allow the formation of offices and committees unless they have a meaningful task with some degree of responsibility. This of course is the job of the advisor, providing you are to act as a leader.

This club is organized for the students and should be run by the students. Your job as advisor is to keep things moving in a positive direction. A good president and vice president will express your desires to the members in a much more acceptable way to the students than you can.

The structure of your club might be as follows:

**ADVISORS:** Faculty members and parents

**PRESIDENT:** Student (boy or girl with leadership ability)

**VICE PRESIDENT:** Student (opposite sex of president, if possible)

**SECRETARY:** Two (One for Meetings; one for Transportation)

**COMMITTEES:** (To be appointed when necessary by president)

Decisions regarding the club are to be made by the representative council which consists of the advisors and other office holders mentioned, and/or their alternates.

Two committees should be formed at the beginning of the club's formation. One committee should be established for transportation, and one for publicity. The transportation committee should be led by the secretary in charge of transportation. The publicity committee will see that the activities are announced in the school's bulletin and paper. Also, gather information from organizations which would be pertinent to the club. Another idea is to have a centrally located bulletin board in the main hall describing your activities. If a display window is available, put on a display of outing equipment at the beginning of the season.

Of all the committees the most important is the transportation committee. Securing rides for students will be the single most difficult part of any activity. The committee must work constantly to obtain different sources of transportation. It is too bad to have to turn down students eager to participate because of inadequate transportation. (Transportation will be discussed in more detail under the activity of hiking.)
Be sure that your club is represented on the Student Council. Usually this is the job of the vice president. He should be responsible for seeing that the club adheres to school policy, and in seeing that the clubs' interests are fully represented concerning matters of budget, etc.

C. Legal Responsibilities

In any activity involving teachers and students the question of legal responsibility must certainly be reviewed. This single factor seems to be the biggest obstacle in preventing the formation of clubs and the carrying out of activities being described. It is very unfortunate when teachers and parents donate time and energies doing something "extra" for the students, and then must be prepared to risk a possible law suit. However, there are several ways risks may be minimized to the point where the teacher and parent are in a very good legal position if an unfortunate accident should occur.

1. Each student should always be required to have a permission form signed by a parent. This form should be submitted to the club advisor before the student can participate in any activity which requires him to leave school property. This may be in the form of a field trip permission form or similar to the attached permission letter. (See Appendix)

2. Each student must have school insurance or any other health insurance which would cover him in case of an accident.

3. Teachers belonging to W.E.A. are covered with $100,000 liability insurance covering any authorized school activity. (See Appendix)

4. Have adequate parent participation. Have them share in the responsibilities of the activity.

5. Make sure that each parent and student understands the risks involved in outdoor activities. This can be done by letter as a condition of membership or by the permission form.

6. Be well organized in your activity and well prepared for any emergency.

7. Discuss with your building principal or superintendent the question of legal responsibility to both teacher and district.
D. Meetings

The meeting is an essential part of any club. However, it must be kept in mind that a successful meeting is one where there is interest and something constructive presented. This is not always possible, and many times what may seem interesting to you is pretty dull to the club members. It is best to allow the council to determine the subject matter for the meeting.

There are many activities and subjects that will make for an interesting and profitable meeting. The following are suggestions for possible topics and reasons for holding meetings:

1. Pre-hike meetings. These should be held before every hike to outline the destination, necessary equipment, group assignments and any other pertinent information. For many students this will be their only introduction to the upcoming hike, and it will be your only opportunity to discuss the hike with them until you are on the trail.

2. Crafts and skills meetings. Through the year many interesting skills can be taught to the students through meetings. However, experience in the field is the best teacher. These skills taught in the classroom can be used later in the field. Further in this unit will be a more detailed section devoted to crafts and skills.

3. Resource meetings. Your community has many good programs which would be of interest and benefit to your club. Some of these are: resource speakers, Mountain Rescue Council, Red Cross, Mountaineers. It is always wise to talk to the person or persons giving the program to advise them of your groups' interests and how much time is available. Do not overlook members of the club or the advisors. Some of the best meetings have been when club members showed some of their best slides taken on previous activities.

Resource Speakers:

Mountain Rescue Council
Red Cross
Mountaineers
ACTIVITIES

HIKING

A. Introduction

The first hike of the season should be short, taken to some close-in area, and be well organized. It is the type of activity which will interest most of the students, and is one that can be carried out with the minimum of previous skills. However, a successful hike will require some careful pre-planning. This will save you many headaches and anxious moments. In the material that follows we have attempted to give a few insights into some problems which might arise and some hints to make the job of getting organized somewhat easier.

B. Organizing the hike

Hiking means many things to many people and their impressions are based upon previous experiences. You will get students who come from families who are mountaineers with lots of experience; some former boy and girl scouts who have had some experience with hiking; some who have been out on their own once or twice; some who equate hiking with a gentle stroll, and some with no experience at all. A varied group can cause you real trouble if you do not organize carefully. Make sure that everyone understands exactly what is meant by hiking. They must know the fundamentals and the dangers. They must understand the need for good footwear and the proper equipment. There is nothing more frustrating to a group than to have some of the members crippled with blisters or not prepared for a sudden downpour. Also, this places added responsibility on the advisors to make sure these people are cared for properly. They must know what to do in case of emergency; i.e., what to do in case they are lost or if someone gets hurt. It is important to cover all of these subjects before starting your hike. This can be done in one or two meetings at the beginning of the season.

After determining the number of students participating in the hike, it is best to divide them into groups according to their abilities or rate at which they hike. Each group should have a group leader, either an experienced and responsible student or an adult. It is up to the group leader to see that the group hikes together and stays together. This must be impressed upon the students for it is the only way you will have control when dealing with large groups. In this way the chance of losing someone is very remote and there is help available if emergencies arise.

Each group leader should have a card with each student's name on it with his address and phone number. These will be turned in when the hike is completed. It is a good way to keep a record of those who participated.
Some students will object to this kind of organization as they will find that the group they are with hikes too fast or more often too slowly. They will have a chance to change groups next hike. There does not seem to be a better way of conducting a hike when dealing with large groups of differing abilities. Almost all hiking organizations use this method with little variation.

C. Announcing the hike

It is important that each person participating in the hike have as much information as possible at his disposal. They should know the date and time of departure and an estimated time of arrival. They should have driving directions from the school to the start of the trail, and a description of the trail if possible. They should know what to expect in the way of scenery, any hazards they may encounter, and some idea as to how difficult the hike might be. You should make up a hike description sheet to distribute to the members at the pre-hike meetings. (See Appendix.) You can borrow information from many excellent guides available describing hikes in your local area, and these can be used as your format. Although these are very good guides which tell you what to watch for and how to locate the trails, they run a poor second to an actual experience. Make sure that each student carries a copy on the hike. If you do this, there is no excuse for students not knowing where they are going.

D. Transportation

Probably the greatest problem you will have is arranging transportation. Only by knowing how many rides are available will you be able to determine the number of students who can participate. The best form of transportation is by school bus; however, this is often very expensive and busses are limited in where they can go. The next best means is to enlist adult drivers. Most adults wishing to help you on the hike are also willing to carry a few passengers. It is best to place those who will be hiking as a group in the same car. Only as a last resort should you use student drivers, and then make sure that they have adequate insurance. Also, be sure that the individuals riding with them have their parents permission to ride with a student driver.

Usually the best way of sharing expenses is to have those who are riding with the driver pay for the gas that is used. This is usually left up to the driver's discretion. Another way is to have each student agree to pay 4¢ per mile. This seems to work successfully in some schools.
ADVISOR'S RESPONSIBILITIES

A. Selecting the hike

In our northwest there are many areas which are suitable for hiking offering a variety of things to do and to see. However, a hike that may be good for one or two persons may not be desirable for a large group. You must take several things into consideration in selecting the hike; i.e. How far must you drive to start of trail? What is the elevation gain? Is the trail maintained? Are there any unusual hazards to be avoided? How much time will be necessary to complete the round trip? For these reasons it is almost imperative that the advisor should have hiked the trail prior to taking a group. Students will often have many ideas for places to hike, but do not take the group before you have checked it out. What may be a "great hike" to a student might turn out to be a disaster for a large group of varying abilities. Keep in mind that the more information you have on the hike the less the chance something unexpected can happen.

B. Estimating time

It is desirable to have some idea when the group will return from the hike. The advisor should calculate how long the trip will take, and especially how long it will take to get back. This is difficult and often depends upon the degree of experience and training among members of the group. The best rule-of-thumb is to calculate time on the basis of the average hiker and then use an emergency factor and add a few minutes. It is better to get back a little earlier than you estimated than to have parents waiting and worrying about their children.

Trail trips usually take about 45 minutes per mile. This will be a safe estimate for you as you get started. Make adjustments as you discover the group average. A trail that gains 1000 feet per mile will be hard going at first, and you should figure about an hour for each 1000 feet of altitude gained.

On the downhills, a mile can be covered in 20 minutes by running. Not everyone wants to run and this can be dangerous to hikers who are tired and not too sure of their footing. It is best to figure 30 minutes per mile. When you set a time, adhere to it if at all possible. Allow some leeway especially in the fall when the nights come early. If you are delayed for any reason, at least you can be assured of hiking during daylight.

C. Equipment

Members of the group should at all times be encouraged to carry their own equipment and not to depend upon anyone for their well being but themselves. However, occasionally, someone overlooks an essential piece of gear
such as a poncho, or a canteen, and must borrow or share from other members of the group. For this reason it is a good idea for the advisor to have some extra equipment along to be distributed just in case. It is always best to remind the group to check their equipment just before you begin heading up the trail.

Listed below are various pieces of equipment which should be included in your pack or divided between you and another advisor:

1. First-aid Kit
2. 120 feet of nylon rope
3. Axe or hatchet
4. Snake-bite kit
5. Knife
6. Portable litter
7. Extra water and food
8. Extra rain gear
9. 2-way radio

D. Accidents

What to do! There is always the possibility of accidents happening, but with good organization and well informed hikers, accidents can be cut to a minimum. You should have the confidence of knowing what to do in the event one does occur.

Most accidents will be of a minor nature and simply require some first aid. (See first-aid section.) Sometimes one will twist an ankle, usually due to improper foot wear, and require some assistance. If you have the equipment listed above and adequate help, a sling can be rigged from poles and coats, or rope, and the injured person carried out.
In the case of a more serious accident where a major injury is apparent, it is best not to move the person or attempt to get them out. In this case the Mountain Rescue Council should be contacted. (See Appendix.) Make the injured person as comfortable as possible. Send some responsible person down the trail and to the nearest phone to get help. Give them necessary information from your emergency notebook. Above all, do not leave the injured person alone. If there is no one to go for help, stay where you are. Someone will eventually find you. If you have the 10 essentials, you will survive.
FOOTGEAR & CARE

The most important item for the hiker will be shoes. They should be durable and comfortable. Any comfortable walking shoe will be satisfactory, but for serious hiking and climbing shoes must be chosen with care. They must fit correctly and be well broken in before hiking any distance. They should have ample room to the front for your toes to spread out, and should hug the arch and heel snugly for support and to prevent friction. For most hiking regular low shoes are adequate, but in rough country, ankle-high shoes or hiking boots are preferred. Your shoelaces should be pulled tight enough to give support, but should not cause your shoes to bind your feet. When tying the bows, make double knots to prevent the laces from slipping.

Most experienced hikers prefer boots with six or eight inch tops. These are high enough to support the ankle, yet low enough to prevent interfering with the calf muscles. When climbing, especially over snow, the leather must be heavy enough to hold shoe grease. Thin leather soon allows moisture to come through. A day on the snow with wet feet is very uncomfortable.

More climbers and hikers are recommending the lug-type sole (Vibram-Motagna) for general wear. It is good for snow, rock, general trail work, and is warmer on snow. Smooth rubber, rope, or composition soles, are usually restricted to trails or dry weather climbs. A wedge-type composition sole is good for most hiking, but is extremely dangerous on snow and should be avoided at all times.

Shoes should be kept oiled. Use heavy shoe grease which keeps them soft. Shoe and ski wax which hardens should be avoided on hiking shoes.

Foot Care

Hiking can be fun providing you take proper care of footwear. Socks should fit perfectly. If they are too long, they will wrinkle and rub; if they are too short, they will bind your toes. Holes in socks will develop sores on your feet. On a long hike carry an extra pair of socks with you and change them at midday. Use the tops of the soiled socks to wipe the moisture from between your toes. Socks made of cotton and stretch nylon or wool and stretch nylon are especially good for hiking. Some hikers like to wear a pair of thin nylon or rayon socks inside their stockings.
Your feet should be washed at least once a day, use a foot powder to control athlete's foot or prevent its occurrence, and trim your toenails straight across. Athlete's foot is a fungus that thrives in the dirt and dampness between your toes. Your feet itch and burn, cracks develop in the skin and is slow to heal. The other problem is ingrown toenails. This is caused by improper trimming of the toenail. If you round off the corners of a toenail, it may grow into the skin and be very painful.

If your feet become swollen, loosen the laces until your feet are comfortable again. But do not remove your shoes. You may have trouble getting them on again.

**First Aid for the Feet**

You must not ignore a sore spot caused by a shoe that rubs. It is not going to get any better. Take time to stop and remove the boot to see what is causing the trouble. If a blister has developed, it is best to wash the area (if possible), and with a sterile needle prick the blister to drain it. Then cover the sore area with a protective pad. If enough padding is placed between the sore area and the shoe, soon the soreness will leave and the foot will be comfortable again. Serious blisters can become infected and should be examined by a doctor.

**CLOTHING**

Another important aspect in getting ready for a hike is proper clothing. Whatever the season, there are some basic items which should be carried on each trip. However, most of a hiker's clothing is selected according to the type of weather he expects to encounter. Here in the northwest you must always expect rain. Also, the higher you go the colder it gets. What might be comfortable at sea level can be inadequate at higher elevations.

In hot weather shorts and a "T"-shirt can be worn, but always carry a pair of light weight trousers and a sweater just in case it turns cool. If you plan to stay overnight, these items are a must as winter temperatures come shortly after sundown in the northwest. Sun glasses or a sunshade (hat) is necessary to protect the eyes and face from exposure to the sun.

During cool weather the type of clothing and the way it is arranged is very important if one is to keep an even temperature. Wool should always be selected over cotton because wool will stay warm even when it is wet. Because wool irritates some people, it is best to wear cotton next to the body with wool clothing over it. Wool shirts and trousers are a must especially if snow is to be encountered.
A water repellent parka is useful for a windbreaker and is essential for travel over snow. The layer system should be practiced. Several medium weight sweaters and shirts that can be taken off and on as needed are more satisfactory than one heavy and one light weight garment. Remember, a sweater acts like thermo-underwear when worn under a shirt and its loose weave makes it much warmer.

Two pair of wool or wool combination socks should always be carried. Some hikers prefer a pair of light inner socks covered with a pair of heavy wool socks.

A hike is not much fun if your hands are cold. Mittens are necessary in winter weather. Water repellent overmittens are very helpful in extreme cold. Unlined gloves of animal skin are not recommended. A wool scarf is always useful.

During rainy weather the problem of temperature control becomes much more difficult. As soon as a rain suit is put on, it upsets the temperature balance. Rainsuits (cloth lined with rubber) not only keep the perspiration in but sometimes create the effect of being placed in a steam room fully clothed. Unless your rainsuit has maximum ventilation, it should be avoided on a hike. A better method is to have a waterproof parka of nylon and a nylon or vinyl poncho. This combination not only sheds the rain, but allows you to control the temperature as well.

A rucksack may be necessary to carry the essential items for comfort and safety. Only a limited amount of gear can be carried in pockets or tied around the waist. Rucksacks are inexpensive and can save you much lost gear and discomfort from bulging pockets.

BACKPACKING EQUIPMENT

In no area of hiking is lightness and compactness more essential than in taking an overnight hike. You will have to carry everything you will need during the entire trip so even ounces are important. The load for each person should not be more than one-fifth of his weight. A hiker weighing 150 pounds should carry about 30 pounds in his pack. When group gear is added to personal gear you will find serious overweight problems unless careful attention has been paid to the weight and importance of individual items.

A list of essential items has been compiled. These are the items you will need for a successful overnight.
A. INDIVIDUAL ITEMS TO CARRY ON YOUR PERSON

**Essential**

- Matches, waterproof safe
- Knife, pocket or sheath
- Compass, cased
- Survival kit (Make one)
- Nylon cord, 200-lb. test, 20 ft.
- Handkerchief, large bandanna
- Money, identification, fishing permit in plastic, sealed.
- Pencil, notebook, pocket-size
- Toilet paper in waterproof bag
- Fire starters
- Maps, topo, or Forest Service
- Sunglasses, case safety loop

**Optional**

- Watch, waterproof
- Camera and film
- Binoculars
- Headnet or insect netting
- First aid kit, personal
- Flashlight, small; extra batteries
- Extra eyeglasses
- Travel kit to carry items needed en route

B. CLOTHING (Keep emergency or often used items in pack pockets or near the top of the pack if not worn.)

- Boots, hiking, ankle high, broken in but not broken down
- Socks, medium wool
- Trousers
- Shirt
- Belt
- Poncho, lightweight with hood
- Windbreaker, hooded, water repellent
- Cap, visored

ITEMS TO CARRY IN PACK

- Wool shirt or sweater
- T-shirts (2)
- Socks, medium wool (2-4 pr.)
- Handkerchiefs (2)
- Camp shoes, sneakers or moccasins
C. CARRY IN PACK

Sleeping gear

- Sleeping bag (down preferred) in stuffing bag or wrap in plastic
- Ground cloth, light nylon or medium plastic
- Pajamas, sweat suit, or long underwear (choose for lowest temperature)

Eating gear

- Plate, plastic
- Cup, plastic
- Fork, tablespoon, water container, plastic
- Knife

Toilet articles

- Soap, floating, plastic bag
- Towel, small, plastic bag
- Toothbrush, in case
- Toothpaste
- Shaving gear, plastic bag
- Toilet paper, plastic bag
- Sunburn lotion and lip salve
- Insect repellent

Optional gear

- Fishing gear, very compact kit, telescoping rod
- Air mattress, 48 in.
- Moccasins or sneakers for camp
- Saw

D. GROUP GEAR FOR BACKPACKING

- Shelter - lightweight, nylon tarp or improvised from 10x12' plastic sheeting rigged as "A" tent or lean-to. Two men to shelter plus one extra for dining fly.
Cooking gear

- Pots, 4 qt., lightweight (6)
- Frypans, 8 in. (2)
- Reflector ovens
- Spoon, large
- Can opener, small roll-type
- Spatula, small
- Scouring pads, stainless
- Soap, liquid in plastic bottle
- Cooking sheet, plastic, 4x4'

Camp Tools

- Saw, folding
- File, 5 in. ignition
- Shovel or large trowel
- Repair kit: cutting pliers, sewing kit, wire, nylon cord, adhesive, straps, etc.

Emergency and Miscellaneous Gear

- First aid kit plus clinical oral thermometer, 3'' elastic bandages (2), tweezers
- Flashlight with spare batteries
- Spare flashlight bulb
- Tote litter bag with plastic liner

Optional

- Tongs, hot pot
- Cooking gloves
- Axe, pack with sheath
- LP pack stove and fuel for areas without fuel supply
- Snakebite kit
- Special gear for mountaineering, conservation, etc.
WHAT TO DO IF LOST

A. Introduction

No one has ever entered the forest with the idea that they will surely get lost. The group has confidence in their leader and the leader most certainly has confidence in his own abilities. In spite of the rigors of the hike, the weather and other adversities, everyone is certain that they will return safely. That is the way it should be. However, it can happen and has happened to individuals and groups both amateur and even to the most experienced hikers. A wrong turn, a sudden storm, or an outdated map and you are lost.

Very often it is those who are lost who have had little or no training in survival. You can survive and find your way if you are prepared--prepared physically, mentally, and morally. If you know the techniques, the odds are in your favor. Oh, most of us have heard these things before from the time we were able to crawl to even now, when we leave the house to go to school, or out on a date. These are warnings and advice and are not to be looked upon as a challenge to your daring or self esteem. This is sober advice from those who probably have had more experience than you. One survival school has a mock tombstone with these words: "On many graves the headstones glisten of those who heard but wouldn't listen." There are many headstones just waiting for names; don't let yours occupy one of them.

Following are some suggestions on how to prevent getting lost. Read and remember these things as they could save your life:

1. Carry a current map, a compass, a watch, and know how to use them.

2. Orient your map with your compass. Do this before you leave and frequently on the trip.

3. On a map of the area, notice the main features especially the direction of the main rivers and streams, the mountain ranges or hills, and other prominent landmarks.

4. If the area is new to you, try to go over the details of your trip with someone who has been there. Have him point out any particular characteristics which might help you.

5. Remember to look back and notice landmarks as you go in. These will be a big help when you come out.
6. Do not try to travel across country at night or in a heavy fog. It is much safer to establish an emergency camp and wait for conditions to improve.

7. Take a slow pace with frequent short rests. After twenty minutes of hiking, two minute rests are about right. Long rests, especially if the weather is cold, tend to stiffen the muscles and make traveling more difficult.

8. Limit the distance you plan to go in any day trip; gauge it by the least experienced member of your party. Under no circumstances go farther than you will be able to return in daylight.

9. Take plenty of wool clothing, a first aid kit, flashlight, waterproofed matches and a light polyethylene tarp. In case of an accident or delay you can then make yourself reasonably comfortable.

10. Acquaint yourself with signals and practice them.

11. Always carry emergency food. Light, pocket size survival kits are available and should be carried.

In spite of how well you plan and prepare yourself for any emergency you can still find yourself in a desperate situation you could not have prevented with any amount of preparation. It is not your fault, it just happened. Now it is your responsibility to survive. You have the proper equipment and now all you need are the techniques:

1. Do not lose your head! Keep calm! Relax and try to fight off any feelings of panic. Try to make a realistic approach of the situation.

2. Shout, call or shoot into the air at intervals, three successive times. Wait a few minutes and then signal again. Carry a whistle as it saves your voice. Three signals of any kind, either audible or visible, is the nationwide SOS call in the mountains. Signal with three regulated puffs of smoke, or three flashes from a mirror. When the sign is recognized it will be answered by two signals. Use this signal only when actually in need of help.

3. If there is no reply, sit down and form some definite plan to follow.
4. Try to remember the circumstances that caused you to get lost. Retrace your steps following your tracks back if possible.

5. Make a base camp near water if possible. Pile up rocks, sticks or branches, making a base from which to operate as you try to find your way.

6. To find your position climb to a place where you can see the surrounding country. Use your map and compass to locate your position.

7. When you reach a road, trail or telephone line, follow it. Do not walk aimlessly. Only as a last resort follow a stream downhill.

8. If you have your food, ration it. Make it last as long as possible and look for edible plants.

9. Before being caught by darkness, select a sheltered spot to spend the night. It is important to have a supply of firewood and a shelter from the weather. Remember, keep warm and conserve your energy.

10. If you are injured and alone, keep calm. Stay where you are. Clear an area down to mineral soil and build a signal fire with green boughs in it. Someone will find you.

The most important point is to let people know where you are going. The sooner someone knows you are lost the sooner you will be rescued. Check in and out with the Forest Service wherever trail cards are available, and make sure they are filled out properly.
THE TEN ESSENTIALS

A. Introduction.

From years of experience, some of it tragic, the Mountaineers of Seattle have developed a list of items that should be carried by every person on any trip more than a short stroll into the wilderness. These items will provide for the minimum conditions of survival when an accident or loss of route or sudden storm make the trip longer or more severe than expected. Every person should carry these "Ten Essentials" either in the pockets or in the rucksack.

With boots, warm clothing, rucksack and the "Ten Essentials" the hiker is basically equipped for a day's walk.

B. Ten Essentials

1. Extra clothing. (Hike in shorts and T-shirt if desired, but be sure to have pants and shirt in rucksack and on high trips a sweater and perhaps a parka.)

2. Extra food. (The test: Is there something left over at the end of the trip?)

3. Sunglasses. (In sunlight even a short snow crossing can be uncomfortably bright. Extended snow travel without eye protection can do temporary or even permanent damage.)

4. Knife. (A simple pocket variety suffices; the main emergency uses are for first aid and splintering kindling for a fire.)

5. Matches. (Waterproof or in a waterproof container.)

6. Firestarter. (Solid chemicals fuels, easy burning, for starting an emergency fire with wet wood.)

7. First aid kit. (Not only for serious injuries but for other possible emergencies such as blisters and heat cramps.)

8. Flashlight. (Should be in good working condition with fresh batteries and bulbs. Reverse the batteries to insure that a failure will not take place when storing.)

9. Map. (Know how to read it.)

10. Compass. (Know how to use it.)
CLIMBING CODE

Over a number of years a set of rules has been adopted by the Mountaineers which apply not only to rock climbing but to hiking as well. These have been developed by Harvy Manning and are developed further in his book entitled, "The Freedom of the Hills".

CODE

1. A climbing party of three is the minimum, unless adequate prearranged support is available. On crevassed glaciers, two rope teams are recommended.

2. Carry at all times the clothing, food, and equipment necessary.

3. Rope up on all exposed places and for all glacier travel.

4. Keep the party together, and obey the leader or majority rule.

5. Never climb beyond your ability and knowledge.

6. Never let judgment be swayed by desire when choosing the route or turning back.

7. Leave the trip schedule with a responsible person.


9. Behave at all times in a manner that will not reflect unfavorably upon our club or upon mountaineering.
9. Washrooms, tables, fireplaces, shelters, exhibits, trail signs, and other conveniences are established for your use. Treat them as if they were really yours and take the best possible care of them. Report anyone you see destroying or defacing signs or other improvements.

10. Live up to the spirit and observe fish and game laws. If you need a license, get one. Observe seasons and limits strictly. Don't take more fish or game than you need or can use.

11. In case of rain don't "ditch" around your tent. This destroys the ground cover and besides there are better ways to keep dry.

12. Do not cut green timber for tent stakes or poles for a "bough mattress". Aluminum poles and plastic air mattresses are inexpensive and light.
FIRST AID

A. Introduction

You need to know basic first aid so you can care for yourself and others when accidents happen. Wouldn't it be wonderful if you never had to use it? Most accidents do not happen—they are caused. How many times have you cut yourself, tripped, or burned your finger? Didn't you really cause the accident to happen? It wasn't just bad luck.

B. Prevention

1. Take it easy. Slow down. Most accidents are caused by haste and because you forgot the basic precautions.

2. Stay calm and don't get angry. People who are upset are accident prone.

3. Don't drink from strange wells or springs, except in an emergency and then purify the water with iodine tablets or by boiling it.

4. On rough or unfamiliar trails, hike in parties of at least three so that two can help a disabled hiker.

5. On the trail stick together but not so close as to be hit by branches that snap back.

6. Avoid railroads, construction projects and excavation areas. Observe all signs and barricades.

7. Do not disturb bee hives or hornets nests.

8. In snake country wear high-topped shoes or boots.

9. Never place your hands over or behind an object that you cannot see the surface your hands will touch.

10. If you meet a stray dog or wild animal, stay still or out of sight until the animal moves. NEVER RUN!!!

11. Test roots, branches, and stones carefully before relying on their strength when climbing. Wherever possible, distribute your weight between your hands and feet so there will be support even if you slip or if an object gives way.
12. Before cutting wood be sure cutting tools are sharp. Make sure that all surrounding brush and branches are cleared away and that no one is standing close by before you start using an ax. Be sure, too, that the ax handle is dry and not slippery and that the head is tight.

13. At camp shake out shoes and clothing before dressing to avoid insect bites.

14. In lightning storms remember that lightning takes the course of least resistance and tends to strike isolated objects on high ground or above the ground. Lightning is also attracted by metal. Put your equipment away from you. If no shelter is available, sit in a low crouch with your feet close together. Keep away from cliffs and caves.

C. Techniques of First Aid

It is recommended that advisors and students take the American Red Cross course or the Washington State Labor and Industries First Aid class. If it is not possible to take the classes, it would be advisable to have copies of their manuals available for the students to study.

It is good to know that you can take care of others as well as yourself in case of injury.

FIRST STEPS TO FIRST AID

Check and evaluate life-endangering conditions

1. Non-breathing
2. Heart Stoppage
3. Severe Bleeding
4. Poisons
5. Shock

Action taken

1. Care of life-endangering conditions
2. Send for professional help
3. Keep victim off his feet and quiet
4. Care for shock
5. Immobilize all injured parts
6. Prepare victim for transportation

D. Treatments


The chief duties of a first-aid man in caring for an open wound are to check hemorrhage and to prevent germs from getting into it. If germs do not enter there will be no infection, and the parts will heal quickly. Keep in mind tetanus occurs most often in puncture wounds.

Rip or cut the clothing so that the injury may be seen. If loose foreign particles are in or around the wound, wipe them away with sterile gauze. Always wipe away from the wound, not toward it. Do not attempt to remove a foreign object embedded into the wound unless it removes easily with cleaning. Leave that to the doctor, as it may aid him in determining the extent of the injury and the involvement of deeper parts.

If bleeding is severe, the primary objective is to control the loss of blood; if not severe, it should be treated as follows:

a. Wash your hands thoroughly with clean water and soap.

b. Cleanse wound and surrounding area thoroughly, using plain soap and boiled water cooled to room temperature or clean running tap water and soap, applying the soap and water with a sterile dressing. Irrigate wound with clean water.

Do not touch the wound with your hand, clothing or anything that is not sterile, and do not pour any drug into or on it. Place a sterile bandage compress or sterile gauze over the wound, and tie it in place.

Take care to make all sterile dressings wide enough to cover completely the wound and an area on each side of it.
Unless otherwise specified, tie the knots of the sterile bandage compress or other bandage over the wound on top of the pad of the compress to assist in checking the bleeding.

Where there is severe bleeding from an artery, always check it by digital pressure and then by the use of a tourniquet when necessary.

Usually considerable shock follows wounds, especially if much blood is lost. Give shock care promptly.

**Bandaging**

Bandage wounds securely, but never too tight. A tight bandage may interfere with the blood supply and thereby cause serious results. In bandaging the arms or the legs, leave the tips of the fingers or toes uncovered where possible, so that they may be seen. This permits easy examination to determine if bandages are too tight. Always place the part to be bandaged in the position in which it is to be left. Remember that swelling frequently follows an injury and that a tight bandage may cause serious interference with circulation to the part. On the other hand, do not apply a bandage too loose, as it may slip off and expose the wound. If the patient complains that the bandage is too tight, loosen it, and make it comfortable but snug. Never apply a wet bandage, except where a cover bandage is used in treating burns; apply these dressings loosely.

**Bleeding from an Artery**

When blood spurts from a wound, an artery has been cut. The blood in the arteries comes direct from the heart and has the pulsating effect of the heart, which is forcing the blood throughout the body. Spurting may not be apparent where a deep artery has been cut.

**Bleeding from a Vein**

When blood flows from a wound in a steady stream, a vein has been cut.

**Bleeding from Capillaries**

When blood just oozes from a wound capillaries have been cut. There is no cause for alarm, as the amount of blood that can be lost is small.
Methods of Controlling Bleeding

(Direct Pressure or Pressure Bandage) A sterile compress or a bandage compress placed directly over the wound with pressure will control most bleeding.

DIGITAL PRESSURE: To control bleeding when an artery has been cut, apply pressure at the nearest available pressure point between the wound and the heart. These pressure points are situated throughout the body along trunk arteries. The points where these arteries come close enough to the surface to be reached and are adjacent to bony structures so that pressure can be exerted on the arteries against the bones are the pressure points. The arteries are tubes comparable to rubber tubing, and if pressure is made upon them against a hard structure the walls may be compressed so that the flow of fluid through them can be retarded or cut off, just as pressure on rubber tubing against a hard surface would lessen or stop the flow of water through such tubing.

ELEVATION: To help control bleeding from extremities elevate the injured extremity to retard the flow of blood to the area and to assist the drainage from the area.

COLD APPLICATIONS: For internal injuries, apply cold applications to the body in the region of the injury. This application will restrict the blood vessels and retard the flow of blood.

TOURNIQUET: A tourniquet is used only where bleeding from arms or legs cannot be controlled by any other means or in case of mass injured where there is a major disaster.

A tourniquet may be made from a cravat bandage or other suitable material and should be approximately two inches wide. (Do not use material that will cut into the flesh, i.e. wire, cord, etc.) It is placed around the limb between the wound and the heart; tighten until the bleeding stops.

After bleeding has been stopped by tourniquet, pressure dressings should be applied to the injury. After 15 or 20 minutes, the tourniquet may be slowly and completely loosened. If bleeding has been controlled by pressure dressings, the tourniquet may be left loosely in place. If bleeding has not been controlled, the tourniquet should be re-tightened.
The use of a tourniquet is seldom required and should be used only for severe life-threatening hemorrhage. A properly applied tourniquet cuts off all circulation to the limb; and, if left tightened too long, the tissues of the part may die and the limb may be lost. In addition, the loosening and re-tightening of a tourniquet may cause the victim to lose blood and if he already has lost a considerable amount, any additional loss may be fatal.

If the victim can be transported to a hospital within twenty minutes, the first aider’s services may be no longer needed. However, if the first aider’s services are further required, the two conditions mentioned in the preceding paragraph must be cared for in the following manner: If it is to be left tight, it should be placed as close to the injury as possible so no more limb than necessary may be lost. If bleeding can be controlled at point of injury so the tourniquet can be loosened, it may be placed high on the extremity to be out of the way of bandages and splints.

APPLICATION OF TOURNIQUETS: In compound or open fractures of the extremities, a tourniquet should be put in place but not tightened. This is a precautionary measure in case severe bleeding occurs during transportation. The first aider must be sure not to cover a tourniquet with splints or bandages so it can be loosened or tightened if necessary. When care of the victim is transferred to another person, he should be advised of the tourniquet if one is in place.

Place the center of a cravat bandage over the artery. Hold it in place by passing the bandage around the limb and tying it with a single knot. Then tie a reef (square) knot with the tails of the cravat bandage to form a loop between the single and reef knots. Insert a stick or similar object in the loop, and twist until bleeding stops. Anchor the stick to prevent twisting after the tourniquet has been applied.

When no stick is available with which to tighten tourniquet, a tourniquet may be improvised as follows: The cravat bandage is wrapped twice around extremity and a square knot. Reverse square knot to make slip knot and tighten to control bleeding.
2. **Artificial Respiration** (Quoted from Industrial First Aid Manual State of Washington, Labor & Industries pp 50-51)

There are several methods of giving artificial respiration, as well as a combination of methods, all effective, but in some methods more air is exchanged than others; moreover some methods are more difficult to teach and more tiring to the operator.

If the person administering First Aid has the knowledge of the various methods, he is in a better position to make proper application.

MOUTH-TO-MOUTH RESUSCITATION (Adult): If there is foreign matter visible in the mouth, or if the victim vomits, roll him on his side, prop him up with your knee behind his shoulders, turn the head slightly downward and wipe the mouth out quickly with your fingers or a cloth wrapped around them.

- a. Tilt the head back so chin is pointing upward. If this does not open airway, pull the jaw into a jutting-out position. These maneuvers should relieve obstruction of the airway by moving the base of the tongue away from the back of the throat.

- b. Open your mouth wide and place it tightly over the victim's mouth. At the same time pinch the victim's nostrils shut or close the nostrils with your cheek. Or close the victim's mouth and place your mouth over the nose. Blow into the victim's mouth or nose. (Air may be blown through the victim's teeth, even though they may be clenched.)

The first blowing efforts should determine whether or not obstruction exists.

- c. Remove your mouth, turn your head to the side, and listen for the return rush of air that indicates air exchange. Repeat the blowing effort.

For an adult, blow vigorously at the rate of about 12 breaths per minute.
d. If you are not getting air exchange, recheck the head and jaw position. If you still do not get air exchange, quickly turn the victim on his side and administer 1 or 2 sharp blows between the shoulder blades in the hope of dislodging foreign matter.

Again sweep your fingers through the victim's mouth to remove foreign matter.

Those who do not wish to come in contact with the person may place a cloth over the victim's mouth or nose and breathe through it. The cloth does not greatly affect the exchange of air. If the aider has false teeth, they should be removed for obvious reasons.

DO'S AND DON'T'S ARTIFICIAL RESPIRATION
(Taken from Industrial First Aid Manual, State of Washington, Labor & Industries p. 64)

DO

a. Start artificial respiration as quickly as possible.
b. Use method best suited in each particular case.
c. Maintain airway in all cases. (Clean out air passages and tip head back.)
d. Give respiration--apply 12 to 15 times per minute for adults and 17 to 20 times per minute for children.
e. Treat for shock.
f. Loosen tight clothing.
g. Administer oxygen if available.
h. After victim starts breathing, stand by in case needed.

DO NOT

a. Move victim unless necessary to remove from danger.
b. Give liquids by mouth until victim is fully conscious.
c. Wait or look for help.

d. DO NOT GIVE UP!!

3. Shock

Every accident is accompanied by shock, a sudden lowering of the vitality caused by pain and fear and loss of blood. A shock victim is very weak. His face gets pale, his skin cold and clammy, his breathing shallow. He shivers from chills, may even vomit. He seems dazed, does not know what is happening around him. In serious cases he may lose consciousness entirely. Shock may come immediately with the accident or soon after.

SYMPTOMS (Quoted from Industrial First Aid Manual State of Washington, Labor & Industries pp 74, 75, 76, and 77)

Face pale, with anxious or dull expression. Skin is cold and covered with a clammy sweat, particularly the hands and forehead. Pulse is weak and rapid, if it can be felt. Breathing is shallow and may be irregular. Patient feels cold and may have a chill; temperature subnormal. Eyelids droop if open; eyes are dull and pupils large. Patient is stupid and takes little interest in things about him. He may answer questions slowly or apparently fail to understand. Patient may be partly or totally unconscious. If internal bleeding is present, patient will be restless; if conscious, he complains of clouded vision, dizziness, and thirst.

Nausea and vomiting often occur.

Some of the things known to take place within the body in cases of shock bear directly on the symptoms presented. The most important thing that occurs in shock is a decided drop in blood pressure, believed to be caused by the loss of control by the sympathetic nervous system over the circulatory system. The blood vessels in the interior of the body, particularly in the abdominal cavity, dilate and become engorged with blood. This removal of blood from general circulation causes the blood pressure to fall and decreases the volume of blood passing through the heart and lungs.
As a large amount of blood goes to fill the dilated vessels within the body, the circulation near the surface is decreased, causing the skin to become pale, cold, and clammy. Likewise, many organs of the body suffer from decrease in the normal blood supply; in the eyes, for example, this causes drooping lids and dullness.

With fall of the blood pressure and the unusual amount of blood drawn from the circulation to fill the dilated and engorged blood vessels within the body, less blood returns to the heart for recirculation. In an effort to overcome the decreased volume and yet send blood to all parts of the body, the heart speeds its action, running faster but with a much lowered quantity, and the pulse is rapid and weak.

Likewise, the decreased amount of blood passing through the lungs requires less air to oxygenate a smaller amount of blood; hence, the respiration becomes shallow and feeble.

The brain, as well as other organs, suffers from decreased blood supply and does not function normally; the patient's powers of reasoning, thinking, and expression are dulled.

Nausea and vomiting are relieved to be caused by congestion and engorgement of the blood vessels within the abdominal cavity.

FIRST AID PROCEDURE

Shock is a dangerous condition that should be given prompt attention; medical aid should be obtained as soon as possible.

Place the patient in a comfortable position, lying down. Be sure that his head is on a level with the body if he is on the ground. If there is a moderate slope of the ground where the patient is lying, place his head downgrade. Where the patient is on a stretcher or body splint, elevate the feet end of the stretcher or body splint at least 6 inches. Exceptions: Fracture of the skull, apoplexy, unchecked severe hemorrhage from the head, keep the head raised.

Remove all foreign bodies from the patient's mouth, such as false teeth, tobacco, gum, and like material, and cleanse the mouth of mucus or phlegm. Maintain open airway.
Loosen tight clothing from neck, chest, and waist.

If the patient is nauseated and vomits, turn his head and body to one side so that vomited matter will flow from his mouth. Keep his mouth and face wiped clean.

Permit the patient to have plenty of fresh air.

Inhalation of oxygen if available often is helpful in shock.

Wrap the patient in blankets, clothing, or other available material as early as possible. Cover the entire body except the head, but take care not to contaminate injuries. Place blankets and other covering materials under the patient as well as over him to prevent loss of heat to the ground or floor.

Keep the patient only warm enough to be comfortable, preferably on the cool side rather than on the warm side. There is a decided relationship between body temperature and blood pressure, heart action, and respiration. As body temperature returns to normal, the sympathetic nervous system regains its control over the vital functions, restoring circulation and improving heart action by decreasing the heart speed and increasing the heart volume; respiration becomes deeper and more regular.

Next to re-establishing normal body temperature by warmth, the position of the patient plays an important part in caring for shock. If the patient is lying down and his head is on a level with or lower than the feet, the flow of blood to and from the overworked heart is greatly aided. By taking advantage of gravity, the blood in the dilated and engorged blood vessels in the abdominal cavity tends to drain back to the heart, not only increasing the amount of blood reaching the heart but relieving part of the strain on the heart due to its attempt to supply all parts of the body with the required amount of blood. Never permit a patient in a state of shock to sit up, as the additional strain on the circulation and heart will greatly increase the state of shock.

Give the patient liquids by mouth if he is conscious, unless there is unchecked severe bleeding, internal injury, fracture of the skull, or immediate surgery appears evident. In first aid the liquids recommended for use by mouth if the patient is conscious are hot coffee, hot tea, or hot water. Give hot coffee, tea, or water, as warm as the patient can drink it, in small quantities, not to exceed 1 cup in one-half hour. Too much liquid may cause the patient to vomit. If patient is unconscious, give him nothing by mouth, as he may not be able to swallow and the substance may pass into the windpipe and choke him.
Where hemorrhage accompanies shock, special care is required to determine the seriousness of the bleeding. The lowered blood pressure and feeble heart action present in shock keep a wound from bleeding freely; but, as the effects of shock wear off, normal blood pressure and heart action return, and if the bleeding has not been checked properly it may become serious. Recheck sources of hemorrhage in shock cases at frequent intervals.

As long as evidence of shock is present, continue shock treatment. Patients in a state of shock tend to relapse, even after their condition has greatly improved. Watch for a relapse, and combat it by renewed shock treatment. After the patient has recovered from shock of even short duration, keep him lying down and quiet, so that as little strain as possible is placed on his circulation and heart action.

**DO'S AND DON'T'S SHOCK**

**DO**

a. Eliminate or control cause of shock.

b. Keep victim lying down and quiet, feet raised unless victim has head injury, etc.

c. Maintain body temperature.

d. Give victim warm fluids unless reason for not doing so.

e. Maintain airway. Give oxygen if available.

f. Reassure victim.

**DO NOT**

a. Allow victim to become too cold or too hot.

b. Give alcoholic drinks.

c. Give any fluids if abdominal injury.

d. Do not give fluid if victim is in deep shock.
4. **Fainting**  (Quoted from Industrial First Aid Manual  
State of Washington, Labor & Industries pp 78, 79, 80)

**CAUSES**

Fainting is temporary loss of consciousness caused by an inadequate supply of blood to the brain and is a mild form of physical shock. Fainting may be caused by an injury, the sight of blood, exhaustion, weakness, heat, lack of air, and the emotions, such as fright or joy. Some persons faint much more readily than others.

**SYMPTOMS**

The patient feels weak and becomes dizzy, black spots appear before his eyes, his face becomes pale and lips blue, and his forehead is covered with perspiration. He then sinks back in his seat or falls to the ground unconscious. The pulse is rapid and weak, and the breathing is shallow. The above symptoms usually occur in a few seconds.

Fainting is one of the more frequent occurrences that require first aid. A patient lying down seldom faints; therefore, in first aid it is always best to have the patient in the lying position. It is much easier to make an examination and to dress most injuries, and in many instances it will ward off fainting. An injured person being examined in a sitting or standing position may faint suddenly and fall, either aggravating his original injuries or causing additional ones. Where early symptoms of fainting are noted, unconsciousness may be prevented by lowering the patient's head immediately. If a person is sitting, bend the body at the waist, and bring the head down between the knees. Better still, if space is available, lay the person down with the head low.

**FIRST AID PROCEDURE**

See that the patient is lying down with head low. Cleanse his mouth. Loosen tight clothing at neck, chest, and waist. Allow the patient to have plenty of fresh air. If the body surface feels cold, cover to retain heat. When a patient recovers consciousness after fainting, do not permit him to rise immediately, but keep him lying down and quiet at least one-half hour. If unconsciousness is prolonged, apply the full treatment for physical shock, and call a physician.
APOPLEXY

A sudden paralysis with total or partial loss of consciousness and sensation caused by the breaking or obstruction of a blood vessel in the brain referred to as a "stroke".

It is a condition generally caused by one of three occurrences:

a. Cerebral Thrombosis, generally results from the formation of a clot in a blood vessel of the brain thereby interrupting the flow of blood to a section of the brain.

b. Cerebral hemorrhage is the rupture of a blood vessel in the head causing hemorrhage in or around the brain resulting in pressure on the brain.

c. Cerebral Embolism is the blocking of a vessel by an embolus breaking loose in another part of the body and lodging in the brain.

The patient becomes unconscious gradually or suddenly. Unconsciousness may be preceded by a sense of pressure and pain within the head. When a hemorrhage occurs, blood from the ruptured blood vessel accumulates in the part of the brain near the rupture; as the accumulation increases, there is pressure on the substance matter of the brain, usually leading to paralysis of the part of the body controlled by the section of the brain where the pressure is exerted.

Symptoms

The patient usually is unconscious. The face is flushed and warm but sometimes may appear ashen gray. Respiration is slow and snoring in type, the lips and cheeks puffing out at each expiration. The pupils of the eyes are unequal in size, and often one eyelid droops. Frequently the mouth is drawn to one side, and if the patient tries to talk he mumbles out of one side of the mouth. Usually only one side of the body is paralyzed.
FIRST AID PROCEDURE

Have the patient lying down with head well raised by a pillow or large pad under the shoulders and head.

Keep airway open, allow plenty fresh air, give oxygen if available and keep patient warm with covers. Position head to prevent strangulation if patient vomits or if secretions are flowing from the mouth. Apply cold applications or ice bags to the head.

Give no stimulants.

Keep patient absolutely quiet and do not move him for at least one-half hour unless necessary. Obtain medical care soon as possible.

EPILEPSY

Epilepsy is a disorder of the nervous system characterized by more or less distinctive disturbances in the rhythm of electrical discharges from the brain. It is often associated with sudden and recurring episodes of unconsciousness. It affects approximately 1 out of every 200 people to some degree. The cause of all epilepsy has never been clearly determined. However, it can be controlled to a great extent.

There are several different types of seizures. In the "grand mal" or major seizure, the person loses consciousness, falls to the floor and experiences convulsions. He may froth at the mouth, stop breathing and turn a bluish color, but he will normally recover in a few minutes.

A person having a seizure is not dangerous to others; he is unconscious and never in any pain. The main duty of the First Aider is to keep the victim from injuring himself during the attack:

a. Place pencil or small stick wrapped in handkerchief in patient's mouth for him to bite on if it can be done easily - do not force.

b. Place padding under him, particularly his head. Move things he might strike against out of the way.
c. Do not try to hold patient down.

d. Do not give anything to drink during seizure.

e. After seizure, encourage person to rest as long as possible.

5. **HEAT EXHAUSTION** (Quoted from Industrial First Aid Manual State of Washington, Dept. of Labor & Indust

Heat exhaustion is collapse from the effect of heat—from the sun or any other source. It occurs more frequently when the humidity is high. Heat exhaustion is a serious condition, and proper treatment should be given at once.

**SYMPTOMS**

The patient is seldom unconscious but may complain of feeling very weak. His face is pale and anxious looking and covered with cold perspiration. Frequently he vomits. He may complain of feeling chilly. His pulse is rapid and weak and his breathing is shallow, with little chest expansion.

**FIRST AID PROCEDURE**

The treatment for heat exhaustion is the same as that for physical shock. In addition:

Give salt (a good-size pinch or a salt tablet to each glass of water.)

**SYMPTOMS - HEAT CRAMPS**

Heat cramps are painful spasms of muscles, especially those of the abdomen and limbs, after prolonged exposure to high temperatures while engaged in strenuous labor. The spasmodic cramps experienced may be simply a slight cramp in the abdomen or muscles of an extremity or so severe as to cause convulsions. Attacks may be brief or may last 12 to 24 hours; after being relieved, the spasms may be renewed by exposure to a cold draft or exertion.

Nature attempts to relieve a person working in high temperatures by sweating and evaporation of the seat. Profuse sweating not only removes moisture from the body but a considerable amount of the salt content of the body fluids as well. Loss of the body's salt content from the body fluids excites irritation of the muscles, causing the spasmodic cramps.
In first aid, prevention of heat cramps is much more important than treatment, which is mainly medical. Men at hard work in high temperatures should drink adequate amounts of cool water (10 to 15 glasses a day) to replace the fluid lost in perspiration and at the same time replace salt also lost by adding to each glass of water a good-size pinch of salt or a salt tablet, such as is supplied by a dispensing cabinet near drinking fountains in many large plants. They should limit their diet to light, easily digested food, avoid fatty food, and avoid constipation. Working clothes should be light and porous to promote evaporation of perspiration.

FIRST AID PROCEDURE

The treatment for mild heat cramps is increased salt intake, warm baths, and rest. If the cramps are severe and persistent, medical care is necessary.

6. Sunstroke (Quoted from Industrial First Aid Manual State of Washington, Labor & Industries pp 97, 98)

Sunstroke is a sudden attack of illness from prolonged exposure to the direct rays of the sun or to other high temperatures without exposure to the sun. Those engaged in hard labor in confined quarters are particularly likely to be affected.

SYMPTOMS

The attack is sudden, and the patient becomes unconscious rapidly. Unconsciousness may be preceded by intense headache and dizziness. The face is red and flushed. The skin is hot and dry, with no perspiration. The pulse is strong and rapid or even may be bounding in character. Breathing is labored and of a snoring type. The pupils of the eyes are enlarged but of equal size.

FIRST AID PROCEDURE

Because the body temperature is excessively high, treatment centers around reducing it as quickly as possible. Remove the patient to a cool place, and lay him down with the head raised by placing a pad under the shoulders and head to reduce the flow of blood to the brain.

Take off as much clothing as necessary, and apply cold applications to the head. The patient may be wrapped in a sheet kept wet with cool water or placed in a cool bath. If ice is available, place an icecap on his head.
Continue cool applications until consciousness returns or until body temperature returns to normal. Watch for signs of physical shock as the temperature drops. If physical shock occurs, treat accordingly.

When the patient is conscious, give him all the cool water he desires.

GIVE NO STIMULANT.

If the skin becomes hot and dry again, renew cold applications.

Sunstroke is a very dangerous condition; obtain medical care as soon as possible.
MAP AND COMPASS INSTRUCTION

It has been stated previously that knowing how to use a map and compass is an essential part of outdoor training. There are many good books which describe various techniques and methods on the compasses use and training. However, the book entitled BE AN EXPERT WITH MAP AND COMPASS by Bjorn Kjellstrom is the most suitable for the novice in that it is easy to understand and its activities are written with the teenager in mind. If possible each member should have a copy and a compass of the type described in the book. If this is not possible the book is written so that it can be shared by a small group although it loses some of its effectiveness this way.

The books consist of three basic parts: map orientation, compass orientation, and map and compass used together. Each section consists of a description of the material, how it is used and a series of tests to check your mastery of the skills involved. Also, each book has a practice map and compass which is to be used in the development of the activities.

In addition to the book and other training materials an excellent film "By Map and Compass" has been made which will complement the instruction. This is available through most county or city libraries.

For further information write to: Silva Inc., 704, Ridgeway Street, La Porte, Indiana

Maps can be obtained by contacting the following agencies:

Forest Service maps are given free at Ranger Stations or by writing Forest Supervisors.

BAKER NATIONAL FOREST
write: Forest Supervisor
U.S. Forest Service
Bellingham, Wash. 98225
1. Seattle, Darrington, and Monte Cristo Ranger Districts

WENATCHEE NATIONAL FOREST
write: Forest Supervisor
U.S. Forest Service
P. O. Box 811
Wenatchee, Washington
1. Leavenworth, Cashmere Ranger Districts
2. Entiat, Chelan RD's
3. Lake Wenatchee RD.
4. Cle Elum RD
5. Ellensburg RD
GIFFORD PINCHOT NATIONAL FOREST
write: Forest Supervisor
U.S. Forest Service
P. O. Box 449
Vancouver, Wash. (98660)
1. Spirit Lake, Randle, Packwood, and Mt. Adams Ranger Districts
2. Lewis River, Canyon Creek, Wind River, and Willard RD's.
4. Goat Rocks Recreation Guide

SNOQUALMIE NATIONAL FOREST
write: Forest Supervisor
U.S. Forest Service
905 Second Avenue Building
Seattle, Washington 98104
1. White River Ranger District
2. North Bend, Skykomish RD's.
3. Mineral Ranger District
4. Naches, Tieton Ranger Districts

OKANOGAN NATIONAL FOREST
write: Forest Supervisor
U.S. Forest Service
P. O. Box 432
Winthrop, Washington
1. Winthrop Ranger District
2. Pasayten Ranger District

OLYMPIC NATIONAL FOREST
write: Forest Supervisor
U.S. Forest Service
P. O. Box 187
Olympia, Washington 98840

Topographic maps can be obtained at local map stores and stores specializing in hiking and climbing equipment.
The following is a list of books and other materials which will provide useful information to those interested in the out-of-doors. This list represents only a few of the many books published on the subject of mountaineering, but are generally those which we felt contained the most useful information to a group leader and to members of an outdoor organization at the high school level.

All of these books may be obtained from local book stores:

**GUIDE BOOKS**

Climbers Guide to the Cascade and Olympic Mountains, Fred Beckey & AAC

100 Hikes in Western Washington, Louise Marshall

Exploiting the Olympic Peninsula, Ruth Kirk

Olympic Seashore, Ruth Kirk

Roads and Trails of Olympic National Park, Frederick Leissier

Routes and Rocks, Crowder and Tabor

**INSTRUCTIONAL BOOKS**

Mountaineering, Freedom of the Hills, Harvey Manning

Medicine for Mountaineering, James A. Wilkerson, M.D.

Outdoor Handbook, Martin and Pargeter

Fieldbook, Boy Scouts of America

Scoutmasters Handbook, Boy Scouts of America

Be Expert with Map and Compass, Bjor Kjellstrom

Map, Compass and Campfire, Ratiff

Food in the Wilderness, George Martin
<table>
<thead>
<tr>
<th></th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>Permission Form</td>
</tr>
<tr>
<td>B</td>
<td>WEA Insurance Form</td>
</tr>
<tr>
<td>C</td>
<td>Pemco Insurance Form</td>
</tr>
<tr>
<td>D</td>
<td>Sample Copy of Hiking Form</td>
</tr>
<tr>
<td>E</td>
<td>Sample Copy of Hiking Form</td>
</tr>
<tr>
<td>F</td>
<td>Sample Copy of Hiking Form</td>
</tr>
<tr>
<td>G</td>
<td>Mountain Rescue Council</td>
</tr>
<tr>
<td>H</td>
<td>Film Title List</td>
</tr>
</tbody>
</table>
APPENDIX A

PERMISSION FORM

SHORELINE PUBLIC SCHOOLS

N.E. 158th and 20th N.E.

SEATTLE, WASHINGTON 98155

________________________________________
Name of Student

__________________________
I understand that every effort will be made to insure pupil safety, but that Shoreline Public Schools will not be held responsible for any accidents occurring during the excursion.

The Shorecrest Outing Club is a group composed of students, faculty members and other interested adults which has been organized to share a mutual interest in the outdoors. Throughout the school year, the club will sponsor various outings such as hiking, camping out, visiting areas of historical interest as well as other activities concerned with the outdoors.

It is obvious that in spite of the degree of planning and organization of any activity that there are certain risks involved. This is particularly true of outdoor activities where the responsibility for the students welfare rests primarily with the student and whether or not they use good judgement. It must be understood by both parents and students that they attend these activities AT THEIR OWN RISK and that neither the club advisors, participating adults, or Shoreline School District will be held responsible in the case of accident.

Please note allergy or special health problems: ____________________________

________________________________________
Signed (Parent or Guardian)

__________________________
Date

NOTE: A signed permission slip must be in the possession of the club advisor before you can participate in the activity.
WEA - $100,000 Teacher Liability Policy

Limit of Liability --- $100,000 plus court costs and attorney fees

Effective date ------ Upon the first day of school for those who have been having WEA membership continuous deductions on APA; upon the first day that cash membership dues are received for others.

All WEA members are insured or protected while supervising students either in the classroom or out of classroom, whether it be on the school grounds or not, or on any day, whether it be a regular school day or not, as long as it is a school-sponsored activity.
WASHINGTON EDUCATOR'S PERSONAL LIABILITY POLICY
NON-ASSESSABLE

PUBLIC EMPLOYEES MUTUAL CASUALTY COMPANY
325 EASTLAKE AVE. E. SEATTLE, WASH. 98111
Mutual 2-4400

DECLARATIONS

NAME OF INSURED

ADDRESS

POLICY PERIOD:

Effective at 12:01 A.M. Standard Time on September 1, 1967.

Expires September 1, 1968 at 12:01 A.M. Standard Time at the address of the named insured as stated herein.

The limit of the company's liability against each coverage shall be as stated herein, subject to all the terms of this policy having reference thereto.

<table>
<thead>
<tr>
<th>Coverages</th>
<th>Limits of Liability</th>
<th>Annual Premium</th>
</tr>
</thead>
</table>

PUBLIC EMPLOYEES MUTUAL CASUALTY COMPANY

(A Mutual Insurance Company, hereinafter called the Company)

HEREBY INSURES the individual whose name and address are shown above, while such individual is a member of Washington Education Association for the year 1967-68 (hereafter the individual is also referred to as the Insured), against liability imposed by law upon the Insured for bodily injuries to others, including but not limited to death at any time resulting therefrom, caused by an occurrence which is essentially within the scope of his employment or duties as assigned by the school administrator or the person authorized by the school administrator to assign duties.

1. Liability Coverage. To pay on behalf of the Insured all sums which the Insured shall become legally obligated to pay as damages because of bodily injuries, including death at any time resulting therefrom, sustained by any such student.

2. Defense, Settlement, Supplementary Payments. As respects the insurance afforded by the other terms of this policy the Company shall:

(a) Defend in his name and behalf any suit against the Insured alleging such injury and seeking damages on account thereof, even if such suit is groundless, false or fraudulent; but the Company may make such investigation, negotiation and settlement of any claim or suit as it deems expedient;

(b) Pay all premiums on bonds, or release attachments, for an amount not in excess of the applicable limit of liability of this policy, all premiums on appeal bonds required in any such suit, but without any obligation to apply for or furnish any such bonds;

(c) Pay all expenses incurred by the Company, all costs taxed against the Insured in any such suit, all interest accruing after entry of judgment until the Company has paid, tendered or deposited in court such part of such judgment as does not exceed the limit of the Company's liability thereon;

(d) Pay expenses incurred by the Insured (but not including loss of time), in the event of an accident causing bodily injury, for such medical and surgical relief to such student as shall be necessary at the time of the accident.

(SEE REVERSE SIDE FOR EXCLUSIONS AND CONDITIONS)

APPENDIX C
(2 pages)
This policy does not apply:

(a) With respect to: (1) Automobiles, buses, trucks or other motor vehicles while away from the school premises; (2) watercraft 20 feet or more in length; (3) boats of less than 20 horse power; (4) aircraft; (5) the loading or unloading of any of the foregoing; (6) any automobile or occurrence involving an insured not covered by liability insurance (other than under this policy) for at least $10,000 as to injury to any one person, and to such subject limit as to any one person, for at least $20,000 for injuries to all persons injured in the same accident, and this policy shall apply only as excess coverage after the coverage of such other liability insurance has been exhausted;

(b) To injury or death caused intentionally by or at the direction of the Insured, except as to corporal punishment not in violation of sections 9.11.040 and 28.81.140 of the Revised Code of Washington and the regulations of the State Board of Education of a public school student;

(c) To bodily injury or death of the Insured's spouse, child, parent, brother, sister, employee, or to any member of Insured's household;

(d) To liability assumed by the Insured under any contract or agreement;

(e) To injury to or destruction of property;

(f) To bodily injury or death of (1) any person while engaged in his employment, if benefits therefor are payable under any worker's compensation law or (2) any person regularly employed on the school premises, or on the school premises because of his employment, or injured by an accident arising out of such employment;

(g) To any bodily injury liability arising out of the rendering of any dental, medical or surgical services, or the omission there of.

CONDITIONS

1. Limits of Liability. The inclusion herein of more than one Insured shall not operate to increase the limits of the Company's liability.

2. Notice of Accident. When an accident takes place written notice shall be given by or on behalf of the Insured to the Company or any of its authorized representatives as soon as practicable. Such notice shall contain particulars sufficient to identify the Insured and all reasonably obtainable information respecting the time, place and circumstances of the accident, the name and addresses of the injured parties and of available witnesses.

3. Notice of Claim or Suit. If claim is made or suit is brought against the Insured, the Insured shall immediately forward to the Company every demand, notice, summons or other process received by him or his representatives.

4. Assistance and Cooperation of the Insured. The Insured shall cooperate with the Company and, upon the Company's request, shall attend hearings and trials and shall assist in effecting settlements, securing and giving evidence, obtaining the attendance of witnesses and in the conduct of suits. The Insured shall not, except at his own cost, voluntarily make any payment, assume any obligation or incur any expense other than for such immediate medical and surgical relief to others as shall be imperative at the time of the accident.

5. Action Against Company. No action shall lie against the Company unless, as a condition precedent thereto, the Insured shall have fully complied with all the terms of this policy, nor until the amount of the Insured's obligation to pay shall have been finally determined either by judgment against the Insured after actual trial or by written agreement of the Insured, the claimant and the Company.

Any person or organization of the legal representative thereof who has secured such judgment or written agreement shall thereafter be entitled to recover under this policy to the extent of the insurance afforded by this policy. Nothing contained in this policy shall give any person or organization any right to join the Company as a co-plaintiff in any action against the Insured to determine the Insured's liability.

Bankruptcy or insolvency of the Insured or of the Insured's estate shall not relieve the Company of any of its obligations hereunder.

6. Other Insurance. This policy shall not apply if there is other valid and collectible liability insurance, either primary or excess, available to the Insured.

7. Subrogation. In the event of any payment under this policy, the Company shall be subrogated to all the Insured's rights of recovery therefor against any person or organization and the Insured shall effect and deliver instruments and papers and do whatever else is necessary to secure such rights. The Insured shall do nothing after loss to prejudice such rights.

8. Changes. Notice to any agent or knowledge possessed by any agent or by any other person shall not affect a waiver or a change in any part of this policy or except the Company from asserting any right under the terms of this policy; nor shall the terms of this policy be waived or changed, except by endorsement issued to form a part of this policy, signed by the President and Secretary of the Company, and countersigned by an authorized representative of the Company.

9. Cancellation. This policy may be cancelled by the Insured by mailing to the Company written notice stating when thereafter such cancellation shall be effective. This policy may be cancelled by the Company by mailing to the Insured at the address shown in this policy written notice stating when not less than ten days thereafter such cancellation shall be effective. The mailing of notice as aforesaid shall be sufficient proof of notice and the effective date of cancellation stated in the notice shall become the end of the policy period. Delivery of such written notice either by the Insured or by the Company shall be equivalent to mailing.

If the Insured cancels, earned premiums shall be computed in accordance with the customary short rate table and procedure. If the Company cancels, earned premiums shall be computed as if the policy were in force at the time of cancellation.

The holder of this policy, the Company, and any of its agents or representatives shall be entitled to an offset of all amounts due from the Insured under this policy or other policies on account of the Insured.

10. Entire Contract. By acceptance of this policy the Insured agrees that this policy embodies all agreements existing between him and the Company or any of its agents relating to this insurance.

MUTUAL POLICY CONDITIONS

This policy is issued by a mutual company having special regulations applicable to its organization, membership, policies of contracts of insurance, of which the following shall apply to and form a part of the policy.

The holder is hereby notified that by virtue of this policy, he is a member of the Public Employees Mutual Casualty Company and that the annual meetings of the Company are held at its home office on the third Wednesday of January at 1:00 P.M. in the auditorium of the State Capitol Building of the State of Washington.

The holder of this policy shall participate in the earnings of the Company in such manner and to such extent as may be determined by the Board of Directors.

This policy is Nonassessable. The holder of this policy is not subject to any contingent liability, nor liable to assessment.

IN WITNESS WHEREOF, the Company has cause this policy to be signed by its president, which constitutes execution of the insurance contract on behalf of the Company.

Rob. J. Handy
HIKE TO TIGER MOUNTAIN

Sponsored by the Shorecrest Outing Club

DATE: April 15, 1967

DEPARTURE: Shorecrest High School 8:00 a.m.

RETURN: Shorecrest High School 5 to 5:30 p.m.

DIRECTIONS: Drive south on freeway to the Dearborn street (US 10) off ramp. Continue East over the Old Flating Bridge to Issaquah. About 5.8 miles from the stoplight in Issaquah turn right on S.E. 82 Street. Park near second road to the left. Road starts here.

Description:

This hike is on a long easy road which services a forest lookout station. The road has a locked gate and is only used when the lookout is in operation. There has been extensive logging in the area as evidenced by the many side roads and second growth timber. At about 2 1/2 miles the road forks. Keep to the right. If the weather is nice, fine views of the Olympics, Mt. Rainier and the Cascades can be enjoyed from the lookout.

What to bring:

Rain gear   Sweater
Good hiking shoes   Camera
Lunch and Canteen   Walking Stick

Note: All students must have a permission slip from home.

"Certainly no one would hazard a national definition of beauty. But we do know that nature is nearly always beautiful."

-Lyndon Johnson

Rating: Easy, but long
Round Trip: 12 miles
High Point: 3004 feet
Elevation Gain: 2400 feet
HIKE TO MOUNT SI

Sponsored by the Shorecrest Outing Club

DATE: May 20, 1967 (Saturday)

DEPARTURE: Shorecrest High School 8:00 a.m.

RETURN: Shorecrest High School 5 - 5:30 p.m.

DIRECTIONS: Drive on US 10 east from North Bend, take the second left turn (432 nd SE) (Stilson Road) and cross the west bound lane of US 10. Then cross the Middle Fork of the Snoqualmie, keeping right beyond the bridge, and go about 1 1/2 miles to a much used parking area on the left where the trail begins.

DESCRIPTION: Mount Si is the most climbed mountain in the state. The condition of the trails seem to confirm this. The mountain is mostly covered with second growth timber and there is an occasional trickle of water. However, it is essential to carry water to drink. The mountain should be treated with respect. There are no signs anywhere to indicate how to find the trail or to stay on it. Signs have been put up several times, but are torn down shortly. Many shortcuts have been made on the trail and can lead to some confusion. At the top lies Haystack Basin with the haystack rising above it. The Haystack is a rocky pinnacle which is potentially very dangerous. It is wise to stay off this, as the view is just as good from the basin.

WHAT TO BRING:

Rain gear
Good hiking shoes
Lunch and canteen

Sweater
Camera
Walking stick or ice axe

NOTE: ALL STUDENTS ARE REQUIRED TO HAVE A SIGNED PERMISSION SLIP!!!

"Beauty is not an easy thing to measure. It does not show up in the gross national product, in a weekly pay check, or in profit or loss statements. But these things are not ends in themselves. They are a road to satisfaction and pleasure and the good life. Beauty makes its own direct contribution to these final ends. Therefore, it is one of the most important components of our true national income, not to be left out simply because statisticians cannot calculate its worth."

- Lyndon Johnson

RATING: Challenging
ROUND TRIP: 10 miles
HIGH POINT: 4190 feet
ELEVATION GAIN: 3690 feet
DATE:  March 11, 1967 (Saturday)

DEPARTURE:  Shorecrest High School  8:00 a.m.

RETURN:  Shorecrest High School  5 - 5:30 p.m.

DIRECTIONS:  Drive east on US 2 to just inside the town of Goldbar. Turn left on the western most through street at the sign indicating Wallace Lake. Cross a bridge and turn right at the sign for Camp Huston. Proceed until a Y is reached in the road. Here turn left and drive to Camp Huston. Road begins to the left or trail to Wallace Falls begins at road fork. In wet weather best to take the road. It is longer, but a lot drier.

DESCRIPTION:  Wallace Falls is a prominent waterfall which is visible to the north of US 2 as one approaches Goldbar from the west. It is easily 250 feet in height and is quite spectacular. It has been proposed as a future State Park. The road winds up the hillside which is heavily wooded with second growth and deciduous trees. Follow the road for about 2 1/2 miles to the first major fork which leads off to the right. Follow this road for a few hundred feet until you reach a clearing. You will pick up the trail from Camp Huston here. The trail leads off to the left. Follow this trail until you reach a well used camp site just above the north fork of the Wallace River. To the right there is an obscure trail leading down to the river where the river may be crossed on a foot bridge. Across the bridge a very steep hill is encountered. However, when you reach the top you can hear the roar of the falls which is only a few hundred feet further.

WHAT TO BRING:

Rain gear
Good hiking shoes (remember it is wet!)
Lunch and canteen
Walking stick or ice axe
Sweater
Camera

NOTE!  ALL STUDENTS MUST HAVE A SIGNED PERMISSION SLIP!!!!

"In the woods we return to reason and faith"
- Emerson

Rating:  Moderate
Round Trip:  8 miles
High Point:  1120 feet
Elevation gain:  880 feet
The Mountain Rescue Council issues a pocket sized card listing emergency information helpful to have in the event a rescue is needed:

THINK over the whole situation. Take time to get yourself in command of all the facts. Then if outside help is required:

MAKE LIST

1. Extent of injuries.
2. Exact location of accident.
3. Time of accident.
4. Manpower, food, and equipment on scene.
5. Name, address and phone of victim.
6. Names of other party members, address, phone.

SEND FOR HELP! Two people, if possible. Always leave someone with the injured person.

MARK ROUTE on the way out. Be careful!!!

TELEPHONE

Notify these agencies:

1. State Patrol.
3. District Ranger of forest or park that you are in.

TELL THEM

1. Information listed above.
2. Distance by road, trail and off the trail.
3. Type of terrain.
4. Probable time to reach the accident.
5. Equipment and manpower required.
6. Where you will meet the rescue party.
REMEMBER! Stay on the phone until assured by responsible mountaineers that help is on the way. Wait for rescue party and guide them to the scene, if possible.

MOUNTAIN RESCUE COUNCIL TELEPHONE COMMITTEE:

Mrs. Ome Daiber
Mrs. Paul Williams
Mrs. Dorrell Looff
Mrs. Arnie Campbell
Washington State Patrol

HU 6-3643
LI 2-4498
AD 2-0763
WE 5-8013
AT 2-0890
Outing club films:

1. Mountains Don't Care
   King County Film Library
2. Mount Rainier National Park
   King County Film Library
3. By Map and Compass
   King County Film Library
4. Hunting Safety
   Dept. of Game, Olympia, Wash.
5. Whistling Wings
   Dept. of Game, Olympia, Wash.
6. The Forest
   Forest Service, P.O. Box 3623
   Portland, Oregon
7. Patterns of the Wild
   Forest Service, P.O. Box 3623
   Portland, Oregon

Sources for obtaining film catalogs:

1. University of Washington Film Center
3. Mountain Rescue Council, P.O. Box 67, Seattle, Washington
4. National Park Service
5. U.S. Army Film Service, Fort Lewis, Washington
6. The Wilderness Society
7. The Sierra Club, San Francisco, California
8. Seattle Public Library Film Service