

*A Parent's Guide
to the
High Adventure
Program*



H
I
K
E

A
I
D

10

Offered by the
HIGH ADVENTURE TEAM
Greater Los Angeles Area Council
Boy Scouts of America

The High Adventure Team of the Greater Los Angeles Area Council-Boy Scouts of America is a volunteer group of Scouters which operates under the direction of GLAAC-Camping Services. Its mission is to develop and promote outdoor activities within the Council and by its many Units. It conducts training programs, sponsors High Adventure awards, publishes specialized literature such as Hike Aids and The Trail Head and promotes participation in summer camp, in High Adventure activities such as backpacking, peak climbing, and conservation, and in other Council programs.

Anyone who is interested in the GLAAC-HAT and its many activities is encouraged to direct an inquiry to the GLAAC-Camping Services or visit our web site at <http://glaac-hat.org/>. The GLAAC-HAT meets on the evening of the first Tuesday of each month at 7:30 pm in the Cushman Watt Scout Center, 2333 Scout Way, Los Angeles, CA 90026. These meetings are open to all Scouters.



REVISIONS

April 2016	Nominal changes and corrections.	Tom Thorpe Steve Dodson
January 2015	Maintenance release with minor updates.	Tom Thorpe
October 2005	Nominal changes and corrections. Some of the material is adopted from brochures used by Troop 276, Palos Verdes, and Troop 849, Manhattan Beach.	Lyle Whited
October 2001		Lyle Whited
Original	Prepared by Lyle Whited and composed by John Hainey	

Warning

A Scout Unit with an active High Adventure Program will often be exposed to the hazards of traveling in mountains, desert, and wilderness terrain, to accident or illness in locations without medical facilities, to forces of nature, and to travel by air, bus, or other conveyance. The health and safety of your son is, to a significant degree, dependent upon his having adequate clothing and equipment and being physically and emotionally capable of meeting the challenges of this program. This Hike Aid is intended to help you understand these needs. The other requirement is sufficient, trained, adult leadership. The GLAAC-HAT provides training programs in outdoors skills which are open to all registered adults at a nominal fee.

A Parents Guide to the High Adventure Program

Published by the
HIGH ADVENTURE TEAM
of the
Greater Los Angeles Area Council
Boy Scouts of America
2333 Scout Way
Los Angeles, CA 90026

Table of Contents

Introduction	1
Cost.....	2
Mountain Manners.....	2
Lost	3
Physical Fitness	4
Attitude	5
Pack Weight	6
Clothing	8
Equipment	9
Footwear	10
Corrective Eye Wear	12
Sources of Equipment and Clothing	12
Specialty Outdoor Stores.....	12
General Sporting Goods Stores.....	12
General Merchandise Stores	13
Manufacturers.....	13
Mail Order Suppliers	13
Equipment Repair	14
Boot Repair.....	14
Customer Service Phone Numbers.....	14
Ten Essentials.....	14
Backpack Trip Checklist.....	16
Packing the Backpack.....	18
Glossary.....	19
Basic References	23

“Climb the mountains and get their good tidings. Nature’s peace will flow into you as sunshine flows into the trees, The winds will blow their own freshness into you, and the storms their energy, while your cares will drop off like autumn leaves.”

John Muir

Introduction

Boys are introduced to the Scouting program with the following words of The Boy Scout Handbook. "Scouting promises you the great outdoors. As a Scout, you can learn how to camp and hike without leaving a trace and how to take care of the land. You'll study wildlife up close and learn about nature all around you." The BSA-National Council promotes participation in an outdoor program by having many of the requirements for advancement and twenty or so merit badges based on it. It operates several High Adventure bases, the most notable being Philmont Scout Ranch in Cimarron, New Mexico, and publishes an abundance of literature about "Outing in Scouting".

Among many of the Scout Councils in Southern California, a High Adventure Program is the vehicle to accomplish this. The Greater Los Angeles Area Council-High Adventure Team (GLAAC-HAT) provides training and encouragement to the Unit leadership and other volunteers in developing and extending the nature and quality of their outdoor programs. A High Adventure Program goes beyond attending the traditional summer camp and camporees and doing a few car camps and day hikes. It seeks to exploit the marvelously varied, rugged terrain of the local mountains, deserts, and seashore. These locations offer the opportunity to backpack, rock climb, ski, bicycle, canoe, and river raft - High Adventure.

However, the GLAAC-HAT can only do so much. The Unit leaders, volunteers such as yourself, are the ones who make it happen for your son. Your participation, to the nature and extent of your abilities, is vital. At least some of the time, you are the answer to the question "Why doesn't someone do something?"

As your son begins to participate, you will probably be requested to provide the following items:

- ◆ a consent to participate. This may be for each specific outing or a blanket consent to participate in all activities of the Unit. It is usually a requirement for participation.
- ◆ a consent to obtain medical treatment. This will allow the adult in charge of the outing to obtain emergency aid. You may decline to provide or modify it as consistent with your personal beliefs.
- ◆ a release of liability. This is your acknowledgement that a High Adventure activity involves some risk and that you release the Unit leaders and the Boy Scouts of America from liability. Practically all providers of equipment and instruction for such activities as rafting, skiing, rock climbing, etc., require such a release for each person. In their case, you either sign or don't get the service.
- ◆ a medical examination. BSA recommends that everyone who participates in a Scouting event have an annual medical evaluation by a certified and licensed health care provider. A medical exam is required for participation in events lasting longer than 72 hours. All BSA High Adventure Bases and many Scout Camps require all attendees to have had an exam within a year of attending.

All of these items are covered on the BSA Annual Health and Medical Record form. Having a fully filled out form on file with the Unit will help ensure that the minimum standards for participation in various activities are met.

So, this is how it starts. High Adventure can considerably aid your son's physical and emotional development and his enjoyment of Scouting. This Hike Aid is your guide to what it involves.



Cost

You are already aware that there is a cost for your son to be a Boy Scout. Participation in a High Adventure Program will increase the amount. However, the opportunity that he will have to develop an awareness and appreciation of wilderness, to understand the importance of conservation, and to grow physically and emotionally should make it cheap at any price.

These costs are of three types, 1) of clothing and equipment necessary to the nature of the program, 2) of taking the outings, and 3) of medical examinations. The costs of clothing and equipment are discussed in later sections on those subjects. The costs of individual trips are usually dependent upon their location and duration. The agencies that manage many of the public lands and campgrounds charge reservation or usage fees. Food, particularly that suitable for a backpack trip, can run 7-10 dollars per day (three meals). Careful menu planning and the use of supermarket items can help to keep the cost down. Some form of transportation is usually necessary to get from the Unit's assembly point for the outing to and from the location of the activity. Generally, this is by private vehicles, but the Unit may occasionally use commercial transportation or charter bus service. Expect to be asked to provide transportation every so often in your vehicle. An equal share of all of these costs will probably be charged to each participant. A typical outing in the local mountains can cost about 15-20 dollars per person for an overnight backpack or camping trip.

The other cost of High Adventure is a physical examination. It is for both your son's and the Unit's protection. Many medical clinics offer summer camp/sports exam specials in early June. Just be certain to take the BSA Annual Health and Medical Record form, available from the National BSA web site at <http://www.scouting.org/>, and have it prepared as a part of the fee.



Mountain Manners

Mountain manners and good behavior are vital to the safety of your son, the members of the Unit, and the other persons that he will meet while participating in a High Adventure Program. Most otherwise avoidable incidents of injury and becoming lost occur because of inappropriate behavior or horseplay. While Unit leadership may have some responsibility when something happens to a person because of misbehavior, that person still has a share of it. Self-control is almost always the best kind of control.

Mountain manners must be learned. Some behavior that may be acceptable/tolerated in an urban situation is unacceptable in the wilderness. The Unit leaders have an obligation to inform and instruct the members in good manners and behavior. Some go so far as to issue lists of rules and deny participation for willful violations. Not only do they have the authority to do this, they also have a responsibility to do it. Deliberate misbehavior can put the individual, the entire Unit, or other hikers at risk. Besides injury and getting lost, it can result in:

- ◆ Being ordered by a Forest or Park Service Ranger to immediately leave a location.
- ◆ Being cited by a Forest or Park Service Ranger for a violation of rules. Fines typically start at \$150 per incident - the Feds don't mess around.
- ◆ Being billed for search and rescue and/or evacuation. Helicopter service runs well over \$1,000 per hour.
- ◆ Being billed for repair or replacement of damaged or destroyed facilities.

- ◆ Being billed for putting out a fire and for restoring the environment (or, there goes the money for college).

These are not the kind of things that you want to have happen.

You can help your son be viewed by his fellow Scouts and others as a responsible outdoorsman (if they think that is being "goody two shoes", consider finding another Unit). While these are matters on which the Unit's leaders should be providing instruction, you can reinforce their importance.

- ◆ Show respect for your fellow Scouts and others that you meet - Courtesy is the fifth Scout Law.
- ◆ Enjoy, yet respect, the wilderness by following the 7 principles of Leave No Trace.
- ◆ No loud talk or yelling.
- ◆ Hike on the trail; never take a shortcut.
- ◆ Keep your personal gear stowed away when not in use.
- ◆ Carry out your own trash and garbage - that's why a garbage bag is on the equipment checklist.
- ◆ Carry out your used toilet paper - that's why re-sealable plastic bags are on the checklist.
- ◆ Dispose of body wastes as directed by Unit Leaders.
- ◆ Do not throw rocks or other objects, any place, any time, for any reason.
- ◆ Keep away from the animals, they are all wild and this is their home.
- ◆ No horseplay.
- ◆ Yield the trail to other hikers and equestrians.
- ◆ Do not put or throw anything into streams or lakes.
- ◆ Do not wash your hands, clothing, or equipment in streams or lakes.
- ◆ Never start a fire, except in a backpack stove when directed to do so by a Unit leader.
- ◆ Never deface, cut, etc., trees, rocks, structures.
- ◆ Be friendly and a friend to everyone - it's the fourth Scout Law.

The Unit leaders may have other rules for personal and Unit behavior. The objective is not to reduce your son's enjoyment of the wilderness, but to assure that everyone can share in it.

Mountain manners don't just happen, and you can be a big help in your son's developing and practicing them. Persons who practice mountain manner are universally recognized and respected as experienced, responsible outdoorsmen/women.



Lost

A Unit avoids becoming lost by doing thorough planning and preparation and by careful execution for each outing. Lost is a rare occurrence, and one that you have a right to expect not happening with your son's Unit. Individual Scouts become separated and lost somewhat more frequently, often with more serious consequences. However, a Scout becoming lost on a High Adventure outing is usually avoidable and should not happen.

The responsibility for preventing a person becoming lost rests partly with the Unit leaders and partly with him. He must understand that being out in the woods is not the place to wander off and do his own thing. An individual can become separated or lost when:

- ◆ he goes off on his own, often from a campsite (goes exploring).
- ◆ the Unit becomes spread out or separated into several groups that are out of sight of one another while hiking.

- ◆ the person leaves the trail, often to take a shortcut.
- ◆ the Unit leaves a person in camp or on the trail because the leadership is unaware of his absence when it is ready to hike.
- ◆ the person is playing a game in an unfamiliar location.
- ◆ the Unit leaves a person who is having a problem, with the understanding that he is to catch up or that the Unit will return for him later.

Half of these reasons represent poor hiking practices and a lack of trail discipline on the part of the Unit leadership; the balance are inappropriate actions by the individual.

Your son should be instructed in the importance of remaining within sight and sound of the rest of the Unit at all times. When he wishes to leave the Unit, he should always get permission from an adult and report back when he returns. Leaving a trail, to take a shortcut, is never acceptable hiking practice, not only because the person may get lost, but also because of the risk of injury. A little self-discipline and control will not significantly reduce the amount of fun that he will have, but it will go a long way to keep him from becoming lost.

Instruct your son to do the following things, should he become separated from the Unit:

- ◆ Stay put; let the Unit find him, rather than trying to find it. The “Hug-a-Tree” concept is a good one.
- ◆ Use the police whistle that he is carrying in his pocket. Three loud blasts every few minutes are far more effective and less tiring than screaming and shouting.
- ◆ Do everything possible to stay dry. He can’t keep warm when his clothes are wet.
- ◆ Use all of the equipment and clothing that he is carrying to keep safe and warm and to aid in his being found.
- ◆ Remain calm - at least try.

By doing these things, he should be found quickly and little the worse for wear.

Should you have any concern about how the Unit leaders control the boys on a trip, go along on one. Have a private discussion with the adult in charge about any practices that you don’t understand or that you believe might put your son or other boys at risk. Different people do things differently and often without ever having any problem. However, it is important that you and your son are comfortable with how the Unit conducts its High Adventure Program.



Physical Fitness

Hiking and backpacking, even in the local mountains, are strenuous activities. Your son’s Unit should be selecting outings of a type, and to locations, that consider the physical abilities and limitations of all of its members. This does not mean that every person will always be able to go on every trip; rather, there should be a sufficient variety so that all members can participate in a meaningful number, as they develop physically.

One of the most overlooked news stories is the generally poor physical condition of most people in this country. The Los Angeles Times, 20 December 1997, reported that the average 12 year-old is 11.4 pounds heavier than in 1972. Since then, the National Institute of Health (NIH) has issued recommendations for Body Mass Index (BMI).

<u>Age</u>	<u>11</u>	<u>12</u>	<u>13</u>	<u>14</u>	<u>15</u>	<u>16</u>	<u>17</u>	<u>18</u>
<u>BMI</u>	15-21	15-22	15-23	16-24	17-24	18-24	18-25	18-26

The recommended range for adult males is 21-24 and for adult females is 23-26. The BMI is a measure of the body's fat content, calculated using this formula:

BMI equals (weight in pounds x 703) divided by (height in inches squared)

If your son's BMI is at or above the recommended maximum, he probably should not be going on the Unit's longer, more strenuous outings until his height catches up with his weight or he sheds some pounds. Of course, being trim is not enough. Successful, enjoyable participation, with minimal health risk, requires that he engage in aerobic exercise at least three or four times a week. There should be many opportunities for your son to do this, from riding a bike to school to participating in some level of organized sport. Taking a backpack or day hike once or twice a month is not sufficient to develop needed stamina and lung capacity.

When your son is not feeling well, or still recovering from an illness, do not let him go on an outing. This is for his and the Unit's welfare. The stress of it on his young body may cause a relapse or other problem. He is unlikely to have an enjoyable time, even if he doesn't become a burden on the Unit.

Do not be surprised if your Unit leaders request an annual physical examination using the BSA Annual Health and Medical Record form. All of the BSA High Adventure Bases require it and the GLAAC-HAT strongly recommends it for everyone who actively participates in a High Adventure Program. It also recommends that participants be current as to a tetanus shot.



Attitude

Good mental and emotional condition are almost as important as physical fitness. They are certainly the difference between having fun and being miserable. Your son should want to go on a High Adventure outing. If he doesn't want to be there, he may have difficulty and probably won't enjoy himself. Not every Scout will want to participate in every Unit activity. Just as long as the Unit provides a varied outdoor program in which your son can participate as he chooses, he should have an enjoyable Scouting experience.

Laughter is good medicine in any situation. Encourage your son to converse with others while hiking; ask questions, look for things that are interesting or unusual. A High Adventure outing should be both fun and a learning experience. Make sure that he understands that he has a responsibility to help make this happen. He can't just sit back and wait to be entertained.

Emotional toughness gets a person over the little (and not so little) irritations that happen on a wilderness outing. Dirt, itching, chapped lips, sunburn, insects, dust, wet feet, sweaty clothes are not terminal problems, but they are not fun. Discuss these matters with your son. Proper clothing and equipment help to alleviate them; a positive attitude will do the rest. Remind him that when he is feeling discomfort, others probably are, too. However, when a problem begins to affect his ability to hike, he must tell the Unit leader and do something about it. A failure to act promptly is to risk unnecessary discomfort and injury.

With a proper attitude, just about any Scout can accomplish just about anything that he sets out to do. In the words of a song made popular by Frank Sinatra, "Oops, there goes another rubber tree plant".



Pack Weight

Your son is expected to carry his own equipment and clothing, plus a share of common equipment and food. Careful selection of just his personal items for a weekend backpack is going to result in a pack that weighs 18-20 pounds. The chart on the next page was prepared in 1965 by the Trails and Awards Committee. The recommendations for pack weights still apply. Just bear in mind that some boys may be able to carry more and some less. As the recommendation is that maximum pack weight at the start of a trip be in the range of 20-25 percent of body weight, 18-20 pounds is about all that a boy weighing 80-100 pounds can be expected to carry. Every effort must be made to keep pack weight for younger boys and for those new to backpacking at the lower end of the 20-25 percent range. However, common equipment and food must be carried and, at some point, your son will be required to carry a share. Many boys are able to carry more, particularly as they mature and gain experience. Starting out with easy weekend trips helps to build confidence and demonstrate physical ability.

Equity in pack weight means that all participants are sharing the same level of discomfort. Mature, experienced hikers have to carry a heavier pack. Equity is not served by distributing common equipment and food of equal weight to each person. If that happens, you have a right to complain.

Have your son use a checklist when packing for each trip. He is responsible for keeping the weight of his personal gear as low as possible. Unit leaders are not sympathetic to complaints about a heavy pack, once they discover that it is full of unnecessary "toys". Electronic gadgets, books, oversized flashlights, folding chairs, etc., fit that description. Also, extra clothing and food, beyond those carried as "ten essentials" and as needed for the outing must not be taken - even by older boys or adults. Not only do some of these items detract from the wilderness experience, they develop bad habits and can be a burden to a Unit that has a problem.

However, do not let your son attempt to reduce pack weight by not taking those items of the "ten essentials" that the Unit leaders require of everyone. Also, be certain that he has the type and quantity of clothing appropriate to the likely conditions of the trip. These are all necessary to personal comfort and safety. With this in mind, there may be some backpack trips that your son will be unable to take until he is older and/or can handle a heavier pack. The outing leader must make this decision, as the Unit's safety may be at stake when on the trail. It is for good reason, and from years of experience, that the Philmont Scout Ranch does not allow boys on a trek (5-10 days on the trail) until they are fourteen - absolutely no exceptions.



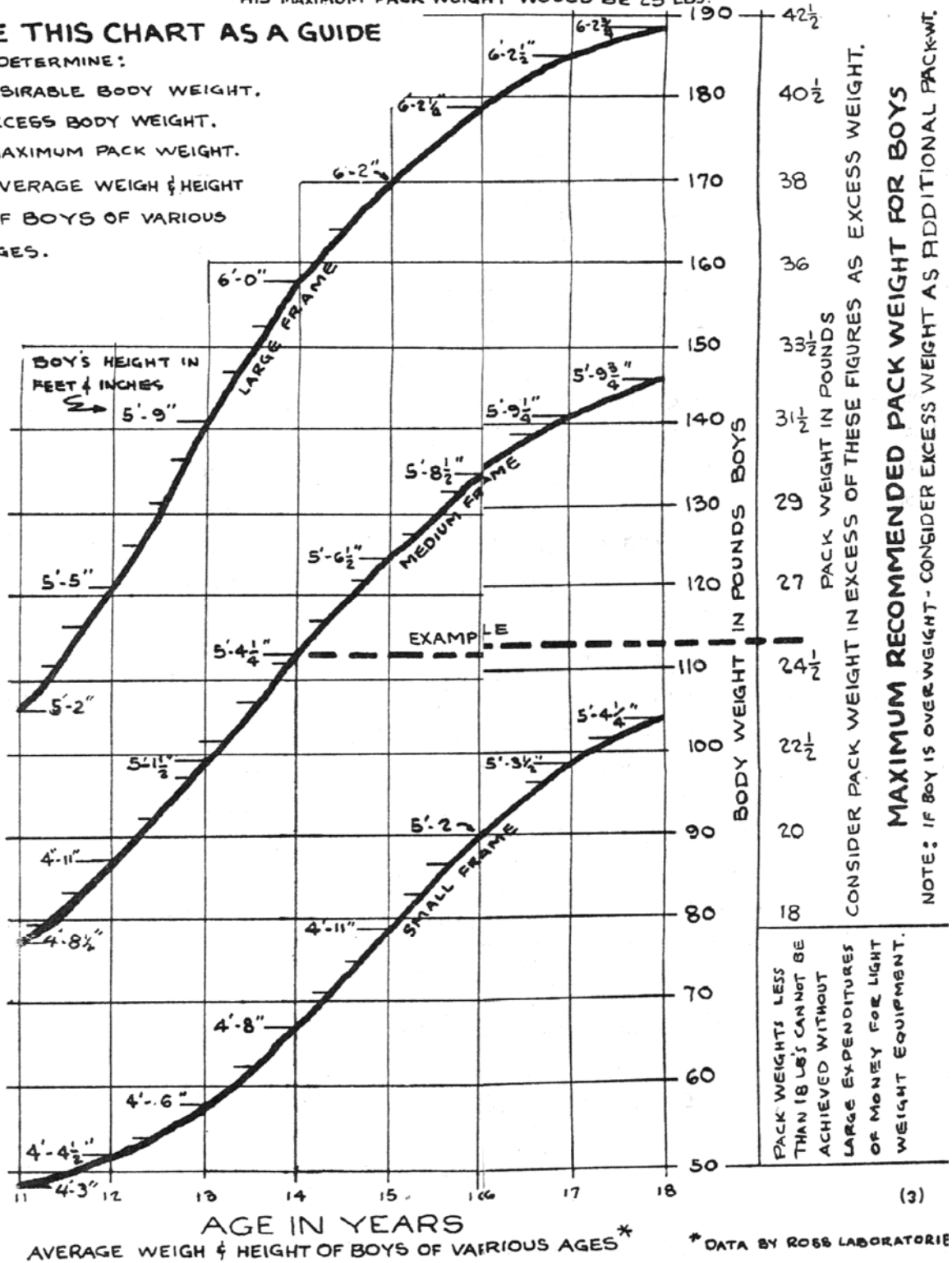
Maximum Recommended Pack Weights for Boys

HOW TO USE THIS CHART: DETERMINE BOY'S BODY STRUCTURE (SMALL MEDIUM OR LARGE) FIND HIS HEIGHT ON THE PROPER FRAME-CURVE. READ HORIZONTALLY ACROSS CHART FOR HIS PACK WEIGHT. EXAMPLE: A BOY HAS A MEDIUM FRAME & IS 5 FT 4 1/4 IN. TALL HIS MAXIMUM PACK WEIGHT WOULD BE 25 LBS.

USE THIS CHART AS A GUIDE

- TO DETERMINE:
- (1) DESIRABLE BODY WEIGHT.
 - (2) EXCESS BODY WEIGHT.
 - (3) MAXIMUM PACK WEIGHT.
 - (4) AVERAGE WEIGH & HEIGHT OF BOYS OF VARIOUS AGES.

H. MCCRAY 1965
PACK WEIGH DATA BY TRAILS COMMITTEE LOS ANGELES AREA COUNCIL BSA
PACK WEIGHT BASED ON 22 1/2%
OF BODY WEIGHT



PACK WEIGHTS LESS THAN 18 LBS CAN NOT BE ACHIEVED WITHOUT LARGE EXPENDITURES OF MONEY FOR LIGHT WEIGHT EQUIPMENT.

MAXIMUM RECOMMENDED PACK WEIGHT FOR BOYS

NOTE: IF BOY IS OVERWEIGHT - CONSIDER EXCESS WEIGHT AS ADDITIONAL PACKWT.

AVERAGE WEIGH & HEIGHT OF BOYS OF VARIOUS AGES * * DATA BY ROSS LABORATORIE

Clothing

You should, with a little care, be able to satisfy the need for clothing to be worn and taken on a High Adventure outing either from your son's current wardrobe, or at a fairly nominal cost. (Footwear is covered on page 10.) However, it must have the following characteristics.

- ◆ The material must not be cotton. "Cotton kills" is a High Adventure mantra. It holds water, takes forever to dry, and, not only provides no warmth when wet, accentuates the cold. OK, so your son can get by with cotton underwear in warm weather and other cotton garments when there is no possibility of rain. However, a far better practice (hence, must) is to make minimal or no use of cotton clothing at any time.
- ◆ Wool, synthetics, and blends are the materials of choice. Wool wicks moisture away from the skin and provides some warmth when wet. The light gauges are surprisingly satisfactory for hot weather wear - the peoples of the Sahara, for centuries, wore dark robes made of wool. Synthetics are lightweight, dry quickly, and provide some warmth when wet.
- ◆ The garments should be loose fitting. Absolutely no tight jeans or Levis (which are cotton) or form-fitting shirts. In the outdoors, a primary role of clothing is to trap a layer of warm air next to the skin, when it's cold, and to allow circulation of that air, when it's hot. Neither happens with clothing that fits snugly.
- ◆ The clothing should facilitate layering. That means that each item should be easy to get on and off, and fit over one another.
- ◆ Snaps, buttons, and zippers should be easy to work, especially when mittens are worn. Well, maybe that doesn't sound like his wardrobe. Take him to a thrift shop for a pair of long wool pants and, maybe, some of the other items. Forget those high fashion photographs that appear in outdoor magazines; nobody cares what your clothing looks like when you are in the backcountry. It's strictly function that matters. The reason that the specialty stores feature lots of new clothing is that it is high profit margin. So, shop elsewhere, except, possibly, for a down vest or parka.

Long pants are preferable to short ones, any time of the year. They protect the legs from:

- ◆ thorns, weeds, and branches.
- ◆ the sun, preventing sunburn and dehydration.
- ◆ ticks, fleas, flies, mosquitoes - the whole range of noxious insects.

Yes, the author has hiked all over the place in shorts, but they are not the better garment.

Shorts only seem cooler than long pants. Reality is that the sun is burning up your skin and making it harder to keep you cool. Long pants should be lightweight and light colored for warm weather and a heavier weight and darker color when it's cold. Because many summer mornings and evenings are quite cold at higher elevations, a medium weight pair of wool, long pants are satisfactory for year-round backpacking wear.

Long sleeved shirts, lightweight and light colors for warm weather; a heavier weight and dark colors for cold. Carry both items all of the time and layer them as the temperature changes. Long sleeved shirts provide the same kinds of protection as long pants. Avoid flamboyant, colorful shirts as they are more likely to attract insects than lighter colored ones. Same comments as for pants, regarding short sleeved shirts only feeling cooler than long.

From this discussion, the Scout uniform would not seem to be very satisfactory for wearing on a High Adventure outing. It's fine (and appropriate) for wearing when traveling to and from the trailhead, but not very good on the trail. For one thing, it is made of a cotton blend. It's also expensive and not as rugged as what you would like to be wearing. However, the Unit leadership may override the author's opinion.

When you get to the section, Trip, you will find a specific listing of what is needed for the typical outing. Your son's Fieldbook also has ideas about characteristics and types of clothing, as do other outdoor books and suppliers catalog. Refer to them if you really want to get into clothing selection. You could spend as little as a \$100, or as much as you choose for a High Adventure wardrobe. Just remember, its function, not fashion, that must come first.



Equipment

You'll probably have to acquire most of the items that your son will need to participate as an active member in a High Adventure Program. The Backpack Trip Checklist is typical, but his Unit leaders may have some different ideas. In addition to these personal items, he may be expected to provide other pieces of equipment, such as a tent or backpack stove. However, as to the characteristics and quality, you and he will probably be pretty much on your own. So, before you buy, visit a specialty outdoor store, look around, and talk to the employees about what is "best" for your son's program. Get several mail order catalogs. Besides listing prices, they are very informative. Use them, along with the Fieldbook, to educate yourself; then, go shopping.

Some specifics to keep in mind when doing so:

- ◆ Lighter is better, and usually more expensive. For a weekend outing, a few ounces here and there don't matter. However, a long-term trek is a different matter.
- ◆ No down filled sleeping bag. While a down bag is lighter, it is generally not suitable for most Scout programs: when wet, it provides no warmth; it takes forever to dry and fluff out; cleaning is difficult and usually expensive. Your son will keep just as warm in a good synthetic filled bag, and it will be easier for him to use and maintain.
- ◆ Check several backpacks for a proper fit. One that cannot be adjusted to a reasonably good fit is miserable to carry. A standard, external frame with a padded waist band is generally the choice when beginning. The internal and hybrid frames are more expensive and not that much better for the kind of backpacking that your son will be doing.
- ◆ Any item that is to provide protection from rain and snow must be waterproof, not just water resistant or repellant.
- ◆ "Three season" equipment should be adequate. Most Scout Units should not be taking trips that require "four-season" gear, e.g., backpacking in the Sierras in January. Anything less than three-season is usually suitable only for summer car camping. Have an employee at an outdoor specialty store explain and show you the differences.

Most of the remaining sections provide more coverage of what and where to buy. Shop around, you may find some very suitable items at surprising places. Just keep in mind function, quality, and weight. When an item meets these three tests, and the price is right, buy. Until then, try to rent the more expensive ones from a specialty store. This lets you wait for a sale and for your son to decide what he likes. Even with careful shopping, buying the basic required equipment will cost several hundred dollars.

After each use, he should strip down all of the equipment and clothes, and clean and repair them. This will keep them fresh and ready to use for the next trip. Never leave a sleeping bag in its stuff bag between outings. After airing it out, store it in a large laundry bag, or hang it, as you often see in stores.



Footwear

The most common medical problems on a High Adventure outing involve the feet - wet and cold, hot spots and blisters, stubbed toes and twisted ankles. They all can be prevented, or their severity reduced, with proper footwear. The consequences of these problems can range from painful to disabling. They certainly reduce the enjoyment of the wilderness experience.

For the typical outdoor program, your son will need the following items of footwear: hiking boots; camp shoes or slippers; heavy socks; light socks; gaiters. Their nature and quality should match the nature and difficulty of the Unit's outdoor program. The really high-end items probably are of a quality that is beyond its requirements, particularly when your son is just starting. In addition, they will be more expensive and probably heavier than what he can use.

The hiking boots must be sturdy, and provide ankle-high support, with padded sides and tongue. The outer sole should be stiff, with a non-slip tread design. The inner sole must be sufficiently thick to cushion the foot, to protect from bruising on rocks, and to provide insulation from the hot or cold ground. These are the necessary features, but the most important consideration in selecting boots is proper fit. Improper fitting boots are uncomfortable and a hazard. They will cause, or contribute to, foot problems, not protect against them.

For your first venture in buying hiking boots, visit a specialty outdoor store. This is probably the only place where you will find a salesperson who understands backpacking, can help select boots that fit properly, and match your son's needs. Use this experience to learn about boots, then decide whether to buy what is offered or to shop around. Teenage boys' feet usually grow very fast, so do not buy more boots than he needs for the next 6-12 months. Also, don't overlook buying used ones. Some Troops have clothing and boot exchanges. These are the types of things that sometimes wind up in thrift shops. Just be certain that, whatever you buy fits, has the features mentioned earlier and, if used, is in good condition. Have your son wear his hiking socks (to be discussed later) when trying on boots - they affect the fit.

All boots require some amount of break-in, before they fit properly. Until that point is reached, the feet are susceptible to hot spots and blisters. Proper, properly fitting socks help delay these problems and the prompt application of moleskin or other protective pads ease them. Heavy duty, all leather boots are said to require 50 miles of wear to achieve break-in. Lighter weight or used ones require less. Encourage your son to wear them as much as possible around the neighborhood - but it won't be an easy sale. However, the good news is that incompletely broken-in boots won't cause that much of a problem on day hikes and easy weekend backpacks (that's one reason why the Unit should schedule them). But no experienced trek leader will permit a person to participate in a long-term backpack if his/her boots are not reasonably broken-in or are of inadequate quality. A person wearing such boots will have foot problems and could put the Unit at risk.

For some day hikes, and even easy backpacks, your son could get by wearing good sport shoes. However, these are exactly the kind of outings where you wear boots to break them in. Furthermore, "tennis shoes" are not waterproof, do not support the feet as well, do not keep out dirt and gravel, and do not provide protection from thorns, snags, rocks, and snakes. Save the sport shoes for sport.

Camp shoes or boots are what your son will be wearing while at the campsite. They provide

three benefits, versus the continual wearing of hiking boots:

1. The change is good for his feet. They give the feet a rest, particularly when the hiking boots are not fully broken-in. He can dry his feet and put on dry socks with the camp shoes.
2. They are good for the hiking boots. Airing and drying them extends their life.
3. They are good for the environment. Camp shoes with non-tread soles are less destructive to plants and less likely to contribute to soil erosion. Their use is strongly recommended by land management agencies and is a part of Leave No Trace (a public awareness and conservation program).

The two characteristics to consider in selecting a camp shoe are weight and foot protection. The reason for weight is obvious, your son has to carry them. However, they must adequately protect the feet from rocks and gravel, pine needles and other sharp objects, and the hot or cold environment. Therefore, sandals, "go-a-heads", and similar opened-toed items are not acceptable. A moccasin or deck shoe will probably satisfy the need; just so that the sole is sufficiently tough to provide the needed protection.

For winter camping on snow, snow booties work great. Moon boots and apres ski boots are very good, especially when the campsite is relatively free of snow and he is mostly walking on gravel or rock. The problem with them is that they are a bit heavier and certainly bulkier than snow booties.

Heavy socks that are wool and are designed for wear with hiking boots are a necessity. Several pair, in good repair and that fit, are to be taken on every backpack trip. On a long-term, the trek leader will encourage your son to wash them every day or so, rather than take additional ones. These socks are worn next to the boots, to protect the feet from friction and heat, and to keep them dry by wicking water and sweat away. They can also be worn on the hands in an emergency, if mittens get wet or are forgotten.

Lightweight socks, worn next to the feet, offer a second surface to eliminate friction from the boots. They may be any material other than cotton. Cotton holds moisture in place and takes forever to dry. Silk or any synthetic is fine, just so the socks fit and are in good repair. Several pair, of any color, are carried.

Gaiters are a desirable item, year-round. You will almost always see them listed as needed for a snow trip, but seldom for the rest of the year. Their regular use as a part your son's footwear provides several benefits:

- ◆ Keep rain and snow out of the boots; feet stay drier
- ◆ Ditto, dirt, gravel, and weeds.
- ◆ Protect the ankles from insects.
- ◆ Seal off the legs from cold air.

To be most effective, they should be waterproof and reach to at least mid-calf.

While not an item of footwear, your son should carry one or two elastic roller bandages, if he is susceptible to ankle or knee injuries. The Unit first aid kit should contain several, but they are for emergencies, not for treating known conditions.

Careful shopping should keep down the price of adequate footwear, just do not shortcut the quality. If you do, he will certainly pay the price on the trail. Expect to go through several sets (excepting gaiters) during his time in Scouting.



Corrective Eye Wear

High Adventure activities are hard on persons who wear glasses or contact lenses. Heat, cold, wind, dust, pollen, and physical exertion are likely conditions on any outing. Wearers of contacts must be extra diligent in the use of cleaners and wetting agents. Carrying a backup set or glasses is all but mandatory, as they are easily lost. For these reasons, the GLAAC-HAT recommends that contact lenses not be worn when on a High Adventure trip. Your son is much less likely to experience eye discomfort, while avoiding the tedious rituals of cleaning, applying eye drops, etc.

Have him carry a case in which to put his glasses, when going to sleep. This will help to protect them from scratches and being banged up. The author puts his glasses in his hat, which he places in the corner of the tent, beside his head.



Sources of Equipment and Clothing

The following discussion of sources of equipment and clothing and the identification of stores and other suppliers does not represent or imply any recommendation or endorsement by the BSA or the GLAAC-HAT.

Specialty Outdoor Stores

These stores generally have broad selections and knowledgeable employees who can explain different items and their merit. The merchandise is usually in the adequate to outstanding class. Several offer rental service, so that you can try equipment before buying. Check several of these first, then price shop at other types of stores. You may find items that are very satisfactory to your Unit's program at a considerably lower price. It is the rare Unit that does winter expeditions in the Sierras, so that there is no need for equipment or clothing of that quality. Watch for sales, and for sales of rental equipment.

- ◆ Adventure 16 (A-16).....www.adventure16.com
 - 4620 Alvarado Canyon Road, San Diego, CA (store & home office)619-283-2374
 - 11161 W. Pico Blvd., Los Angeles, CA.....310-473-4574
 - 5425 Reseda Blvd., Tarzana, CA.....818-345-4266
 - 143 S. Cedros, Solana Beach, CA.....858-755-7662
- ◆ North Face
 - 3333 Bear Street, Costa Mesa, CA.....714-549-2107
- ◆ Recreational Equipment, Inc. (REI).....www.rei.com
 - 1800 Rosecrans Ave., Manhattan Beach, CA.....310-727-0728
 - 214 N. Santa Anita Ave., Arcadia, CA.....626-447-1062
 - 402 Santa Monica Blvd, Santa Monica, CA310-458-4370
 - 18605 Devonshire Street, Northridge, CA.....818-831-5555
 - 6220 Topanga Canyon Blvd., Woodland Hills, CA.....818-703-5300

Check your telephone directory for other local locations.
- ◆ Scout Shop, Cushman Watt Scout Center
 - 2333 Scout Way, Los Angeles, CA.....213-413-0575

General Sporting Goods Stores

These stores generally have some camping, hiking, cycling, etc., items that are suitable for a High Adventure Program. Quality can, however, range from very good to mediocre; you have

to know what you need when shopping here. Also, don't expect much knowledge or help from the typical salesperson. Prices should be less than what you would pay at one of the specialty stores. If you haven't seen one in your neighborhood, check the Yellow Pages under "Camping Supplies".

A sub-set of this category is the "surplus/survival" store. The quality and price of some of their merchandise are often satisfactory. Just check the item very carefully before buying. Most are listed in the Yellow Pages under "Camping Supplies".

General Merchandise Stores

These stores generally offer limited selections of outdoor equipment. Quality, also, can range from adequate to mediocre, but prices can be very good. Stores such as Sears Roebuck, Walmart, and Costco have numerous locations in Southern California. Costco also sells food, some of which is very satisfactory, when re-packaged, for backpack trips.

Manufacturers

The makers of outdoor equipment range in size from huge to small. Some of the smaller ones offer factory sales. Most sell only through dealers, but will send you a catalog. If you are interested in who makes what equipment and clothing, the annual March issue of Backpacker magazine is your source for information. This is its equipment guide, listing all of the products of all of the manufacturers, their addresses, etc. It also recommends "best buys" for the various classes of equipment.

Mail Order Suppliers

You've shopped around, know what you want, and what it costs. Mail order can be very competitive, when the order is large enough to offset any shipping and handling charges. Do not expect to avoid California sales tax by buying out of state. Call or send for a catalog; they are a good source of information and a handy reference.

- ◆ Black Diamond.....801-278-5533
2084 E. 3900 South, Salt Lake City, UT 84124 blackdiamondequipment.com
- ◆ BSA-National Supply Group800-323-0736
P.O. Box 7143, Charlotte, NC 28241-7143..... www.scoutstuff.org
- ◆ Campmor800-226-7667
400 Corporate Drive, PO Box 680, Mahwah, NJ 07430..... www.campmor.com
- ◆ L.L. Bean800-441-5713
15 Casco Street, Freeport, ME 04032 www.llbean.com
- ◆ Mountain Gear800-829-2009
6021 E. Mansfield, Spokane, WA 99212 www.mgear.com
- ◆ Mountain Tools800-510-2514
P.O. Box 222295, Carmel, CA 93922 www.mtntools.com
- ◆ Recreational Equipment, Inc. (REI).....800-426-4860
P.O. Box 1938, Sumner, WA 98390 www.rei.com
- ◆ RU Outside809-279-7123
11859 Lakeshore North, Auburn, CA 95602 www.ruoutside.com
- ◆ Sierra Trading Post..... 800-713-4534/307-775-8000
5025 Campstool Road, Cheyenne, WY 82007 www.sierratradingpost.com
- ◆ Tent and Trails.....800-237-1760
21 Park Place, New York, NY 10007 www.tenttrails.com

Equipment Repair

Several of the specialty outdoor stores sell replacement parts and make repairs for their merchandise. Some manufacturers will make certain repairs for their stuff. There are also a number of businesses that specialize in all types of repairs. The most prominent are listed in the March issue of Backpacker.

- ◆ North Face Warranty Department.....855-500-8639
2321 N. Loop Road, Alameda, CA 94502
- ◆ Wilson’s Eastside Sports760-873-7520
224 N. Main Street, Bishop, CA 93514 eastsidesports.com

Boot Repair

Quality boots are worth repairing and re-soleing. The several shops that are considered better than your local cobbler are:

- ◆ Mazzola Bros. Shoe Repair818-345-7180
19306 Van Owen, Reseda, CA



Customer Service Phone Numbers

Addidas	800-982-9337	Merrell.....	888-288-3124
Camp Trails.....	800-572-8822	MSR.....	800-531-9531
Caribou.....	800-824-4153	Nike.....	503-671-6453
Cascade Therm-a-Rest.....	206-531-9531	The North Face.....	888-863-1968
Casio	201-361-5400	Outdoor Products.....	800-438-3353
Coleman/Peak 1.....	800-835-3278	Patagonia.....	800-638-6464
Columbia	800-622-6953	Sevylor.....	800-821-4645
Eddie Bauer	800-426-8020	Sierra Designs	800-736-8592
Eureka.....	800-572-8822	Slumberjack	800-233-6283
W.L. Gore & Associate.....	800-431-4673	Timberland.....	888-802-9947
Gregory	877-477-4292	Timex.....	800-448-4639
Hi-Tec.....	800-521-1698	Vasque.....	800-224-4453
Jansport	855-818-5966	Wenzel.....	800-325-8368
L.L. Bean.....	800-441-5713	Woolrich.....	800-966-5372
Lowe.....	303-466-3706		



Ten Essentials - Plus

This short list of items to be taken on every outing was developed many years back by The Mountaineers, a hiking club in the Seattle area. Its purpose is to designate a minimum number of things that are essential to survival in the event of a delay or accident while in the backcountry. The idea has been adopted by most outdoor groups, including the Boy Scouts, although often in an amended form, not by this name, and without any acknowledgement to The Mountaineers.

Many leaders require that each person have every item. Others require everyone to have the personal items, with the leaders having such things as the map(s), compass, knife, fire starter, and matches. Either way works, as all members of a Scout Unit are expected to remain

together at all times, thereby being able to share some of them. However, your son's Unit leaders will determine which practice to follow. It goes without saying that the GLAAC-HAT urges Units to carry these items on all outings.

The typical list of ten essentials:

- ◆ Emergency clothing: This is in addition to what a person would expect to wear while on the outing. For a day hike, it could be a rain coat, watch cap or stocking cap, and heavy wool shirt or sweater. On a backpack trip, it could be a pair of long underwear and a down vest or extra wool sweater. These should provide protection against an unexpected change in weather or an emergency, overnight bivouac.
- ◆ Sunglasses: They must be wrap-around and provide total protection from ultra-violet (UV) rays. Reflected light is a problem when hiking, whether from exposed rock, water, or snow.
- ◆ First aid kit: These are the personal items that your son will use for minor problems, plus prescribed drugs. His kit should contain moleskin or foot pads, small adhesive bandages, e.g., Band-aids, insect repellent, sunscreen or sun block, lip balm, and personal medications. These medications may be nothing more than something to take for a headache, or may include prescription drugs. Tell the Unit leaders what medications your son has and when they are to be taken. The Unit should carry a kit with supplies for dealing with major injuries.
- ◆ Emergency food: Something to get by for a day or overnight, should the Unit be delayed. Several high carbohydrate/fat content items, individually wrapped, such as breakfast bars, Power Bars, etc., are fine. Just so that they are extra, not something that your child will eat the first time that he is a little bit hungry.
- ◆ Flashlight: Small dependable, two AA battery (fresh) type. This is in addition to a similar flashlight that is carried on backpack trips for camping and hiking use.
- ◆ Knife: Small, sharp, good quality. No sheath or survival knives; nothing with a blade longer than two inches. The large, multi-blade ones are heavy, costly, and, basically, useless. The smallest Swiss Army style is sufficient.
- ◆ Map(s): Must provide current, detailed coverage for the location of the outing. When each person is to carry one, the Unit leader often provides it.
- ◆ Matches: Water-proof, wind proof matches are a good idea. They are to be carried in a waterproof case. Actually, an inexpensive cigarette lighter is better (explain to your son that this is not a toy).
- ◆ Compass: The simplest Silva-type is enough; get the cheapest one at the Scout Shop. All compasses point to magnetic north; everything else is up to the user.
- ◆ Fire starter: This can be a small vortex candle or a candle stub, several fuel tablets, or homemade of rolled newspaper, dipped in melted wax. Carry in a small, re-sealable plastic bag.

The GLAAC-HAT recommends that each person also carry the following essentials on every outing.

- ◆ Extra water: A second quart water bottle, full or empty when starting to hike, as determined by the Unit leaders.
- ◆ Ground insulation (in winter): A fanny pad, or a 12x18x3/8 inch, closed cell, insulation pad. On a backpack trip, your son will have a sleeping pad. However, this smaller pad should also be carried and will protect from the cold when sitting down.
- ◆ Trash bags: Two large, heavy duty ones. One can be worn as protection against rain and to conserve body heat, just so that it does not cover the face.
- ◆ Nylon parachute cord: 50 feet. You and your son can discuss its many uses in an emergency.

- ◆ Police whistle: Plastic. A lightweight, emergency signaling device, to be carried in a pants pocket at all times.
- ◆ Emergency blanket: A lightweight sheet of aluminum-coated Mylar (Space Blanket). Use as a blanket to prevent heat loss; rig as a shelter; use as a signaling device.
- ◆ Small mirror: A lightweight, emergency signaling device.

The heaviest item is the full water bottle, at two pounds. The entire set of essentials-plus weights 5-7 pounds. Put them in a day pack, excepting the couple that go in a pants pocket. Carry a day pack on every outing. On a backpack trip, put it in your pack. Remove the day pack and carry the ten essential in it on every side excursion and summit climb. The sunglasses will be worn, although an extra pair in the day pack is a good idea. Several of the first aid items, such as insect repellent and lip balm, should be in a pants pocket, for ease of use, along with the police whistle.



Backpack Trip Checklist

Until your child gains experience, he should be using a checklist when packing for a backpack trip. It's good practice to continue to use one, as it is easy to forget an essential item (the author knows from experience). Units with an on-going High Adventure Program generally have developed their own list of personal clothing and equipment for their members to use. Most instructional books on backpacking contain one.

The following list is provided to give you an idea of what your son will likely be required to take on all backpack trips. The clothing is in addition to what will be worn when beginning to hike.

Personal Equipment

- ◆ Backpack frame with pack, waist band, and lashing straps.
- ◆ Sleeping bag.
- ◆ Sleeping bag stuff bag: waterproof.
- ◆ Insulated sleeping pad.
- ◆ Backpack cover: waterproof.
- ◆ Day pack containing the ten essentials-plus.
- ◆ Sierra cup or equivalent (a second is very useful).
- ◆ Ground cloth: a 4-mil plastic sheet, 5x7 feet.
- ◆ Flashlight: small, dependable, two AA battery type, for camp and hiking use (this is in addition to the one carried as a ten essentials).
- ◆ Spoon.
- ◆ Bowl or plate: small (substitute a second cup).
- ◆ Water bottle: quart/liter, wide mouth (always full of water at start of hike - no drink mixes).
- ◆ Tooth brush.
- ◆ Tooth paste: small travel tube.
- ◆ Liquid soap in a 2 or 3 ounce, plastic bottle.
- ◆ Hand towel: small.
- ◆ Safety pins: large - 6
- ◆ Toilet paper: partial roll in a re-sealable plastic bag.
- ◆ Re-sealable plastic bags: two, small (for carrying out used toilet paper).
- ◆ Garbage bag with tie: small (for personal trash and garbage).
- ◆ Stuff bag: medium size, waterproof (put clothing in it and use as a pillow).

Some Units require participants to provide their own tent, food for one or more meals, backpack stove, etc. Others obtain and provide them as "Unit equipment". The Unit Committee usually decides which practice the Unit will follow.

Personal Food

- ◆ One or more meals, as determined by Unit Leadership.
- ◆ Trail snacks - not to be confused with emergency food.

Clothing

- ◆ Socks: wool, heavy duty.
- ◆ Socks: synthetic, lightweight.
- ◆ Undershirt: synthetic material preferred.
- ◆ Underpants: synthetic material preferred.
- ◆ Long sleeved shirt or sweater: wool.
- ◆ Windbreaker: synthetic, lightweight.
- ◆ Watch cap or stocking cap: wool.
- ◆ Gloves or mittens: wool.
- ◆ Rain gear: waterproof - coat, suit, poncho.
- ◆ Long pants: wool or wool blend (if hiking in shorts).
- ◆ Bandana: large.
- ◆ Camp shoes: lightweight deck shoes or moccasins; nothing open-toed.
- ◆ Gaiters

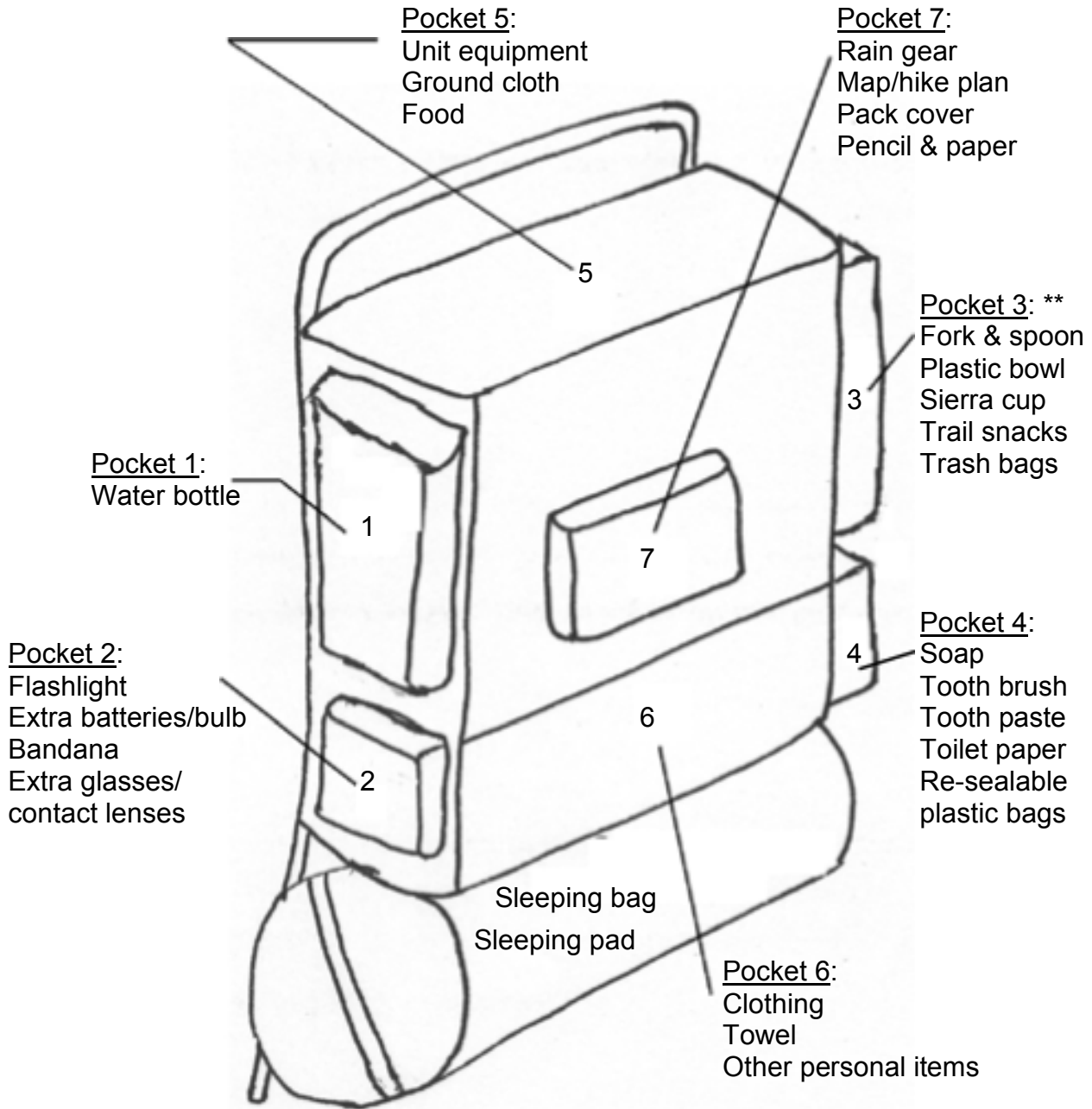
Carrying two or more sets of underwear and socks is desirable on a long-term backpack trip. The need for additional outer wear will be determined by the weather conditions that are expected during the trip, and by the time of year.

When beginning to hike, your son will be wearing two pair of socks and underwear of the same nature as above, boots, pants, shirt - as appropriate to the conditions, and a hat with a brim (baseball caps don't cut it). If not wearing them, the sunglasses should be in a convenient pocket. A handkerchief, insect repellent, lip balm, and police whistle should be in pants pockets. If long pants are worn, instead of shorts, they should be lightweight wool or a wool blend.

Besides a list of required items, most Units have a list of things that are never to be taken on a High Adventure outing. This typically contains such things as electronic gadgets of any type, comic books or magazines, and other items not appropriate to the Scouting program. Besides detracting from the wilderness experience, they take up space and add unnecessary weight to an already heavy backpack.



Packing the Backpack



** Carry second water bottle here, when needed; put these items in Pocket 6.

Using a standard pattern for packing the backpack makes packing simpler and finding an item easier. The heaviest items, such as Unit equipment, food, and water bottles, belong in the top pockets for proper weight distribution. Bulky items, such as tents, ensolite pads, and day pack with the ten essentials, may be carried across the top of the pack, secured by lashing straps that are attached to the top bar. Never use rope, cord, or bungee cords for this; they just don't do the job.



Glossary

These definitions represent usage of the terms in a High Adventure Program.

accessory cord: a lightweight nylon cord, 1-6 mm in diameter. Used for rock climbing and mountaineering. Also, Prusik cord.

Adventure Pass: a permit sold by the USFS and its agents which allows a vehicle to be parked in the local National Forests. Good for a month or 12 calendar months from the date of purchase. A parked vehicle not displaying it will be cited for violating a federal law.

alpine: the ecosystem typically found above the timberline.

altitude sickness: a generic term for illnesses caused by high altitude. A condition typified by nausea, a headache, weakness, and a loss of appetite.

anaphylactic shock: an acute, allergic reaction of the body to the introduction of a foreign protein, whether by insect or jellyfish sting, animal bite, inoculation, or a particular food, e.g., shell fish, peanuts. A medical emergency which requires immediate attention.

balaclava: a knitted cap which covers the entire head, having openings for the eyes, nostrils, and mouth.

bear bagging: the process of securing food and personal items that have an odor to keep a bear from getting them. There are several methods, the classic one being to put everything in a bag and hang it from a tree branch.

belay: a safety system that lessens the severity, or the distance, of a fall.

bushwhack: to hike through brush where there is no trail. Not recommended for Scout Units. Also, cross-country.

campground: an established camping location that is accessible to motor vehicles. Wood and charcoal fires are permitted in stoves and fire rings, subject to seasonal fire restrictions. A Fire Permit is not required. A fee is charged to use many of them. Each site within a campground is usually limited to a maximum of two vehicles and eight people.

carabineer: a metal link used to connect items, such as climbing ropes and harnesses. For technical rock climbing and mountaineering. Also, "biner".

chaparral: the dense thicket of grasses, bushes, and small trees, especially buckthorn and manzanita, found locally at up to 7,000 feet. Stay out of it.

Class 1-5: one of the rating systems that grades the difficulty of hiking and climbing conditions. Class 1, the easiest, is representative of hiking on a dirt road. Class 5, the most difficult, involves climbing involving rope, belaying, and other protection hardware for safety. All climbing activities of a Unit must be in compliance with the BSA publication, Climb on Safely.

clevis pin: a metal fastener for attaching shoulder straps, a waistband, etc., to a pack frame. Held in place by a wire ring through a hole in the tip.

contour line: a line which joins points of equal elevation on a topographical map. A line is continuous, until it joins itself, as in a representation of a summit.

Cordura: a trade name of DuPont for a nylon fabric that is extremely tough and resistant to abrasion.

crampons: metal cleats that can be attached to hiking boots. Used when hiking on ice or frozen snow.

crew: a self-contained hiking group. For a Scout unit, it must contain at least two adult leaders and three Scouts. When a Unit makes a trip as two or more crews, because of size or permit restrictions, each crew must have at least two adults and three Scouts.

cross-country: a hiking route to a destination that is not on an established or maintained trail. Not recommended for Scout Units.

deadfall: a mass of fallen timber and tangled brush; a fallen tree or large branch.

DEET: Dimethyl Metatoluamite; the active ingredient in most insect repellent, the higher the concentration, the "better". However, extremely high (over 50 percent) ones are not recommended because of the potential health risks. Some persons may experience an allergic reaction, particularly when use with sunscreen or tanning lotion. Persons with known sensitivities, or who are taking prescription drugs, should check with their physicians before using a repellent containing it.

dispersed site camp: any camping location, other than a Campground or Trail Camp, where camping is permitted. A site must be at least 100 feet from all trails and water sources, and one mile from any road. Use of backpack stoves is permitted, subject to seasonal fire restrictions. A Fire Permit is always required. Locations suitable for dispersed site camping are not shown on National Forest or topographical maps. Accessible to backpackers, equestrians, and cyclists.

down: the soft inner feathers of most birds. Those from ducks and geese are used as insulating material in sleeping bags and clothing.

due diligence: taking all appropriate actions and precautions that a reasonable person would take in preparing for, or dealing with, an activity or situation. To the Scout leader, it means conducting a High Adventure Program according to the policies, procedures, and requirements of the BSA, and at all times ensuring the health and safety of the participants. Failure to exercise due diligence may be considered negligent behavior.

face: a steep side of a mountain, cliff, or mesa.

feral: wild.

giardia: an uncomfortable intestinal condition that is caused by the organism, giardiasis lamblia. Usually contracted from contaminated groundwater that has not been purified or filtered. Not a medical emergency, but treatment should be sought.

GPS: Global Positioning System; a system of satellites which transmit a signal and ground-based receivers which use it to calculate map coordinates.

hot spot: a portion of the foot that has been irritated by the boot; if untreated, a blister will develop.

hypothermia: a drop in body temperature that, if not treated immediately, will result in death.

layering: the practice of adding or removing clothing as the temperature and/or level of exertion change. The objective is to minimize sweating and to prevent chill or over-heating.

Leave No Trace: a program of the Federal government, adopted by the BSA-National Council, to improve the behavior of persons who travel and camp on public lands, through education and awareness.

loft: a measure of the insulating quality of materials; the greater the loft, or height of insulation, provided as a ratio to the weight of the material, the better. Eider goose down is currently the most effective (and expensive) insulating material.

mountaineering: the climbing of mountains for sport, generally with the use of technical equipment.

peak bagging: climbing a mountain and signing the register in the summit box; to “bag” a peak.

post hole: to break through the surface of snow and sink in, from ankle to hip depth. Travel over snow of this condition is best done on snowshoes; otherwise, it is very hazardous.

rappel: a controlled descent on a climbing rope.

reasonable and prudent leadership: behavior that ensures a healthy, safe, and enjoyable experience for each and every participant in the Unit’s outdoor program. It includes thorough and complete planning and preparation and careful execution of each activity. It recognizes that risk must be considered in each one, and appropriate provisions made for dealing with known conditions and potential occurrences.

ripstop: a type of weave in a nylon fabric that reduces raveling.

rock hop: to hike in a stream bed, wet or dry, where there is no trail or where it has been washed away. Difficult and often dangerous.

scheduled hour of backpacking: the time required by the typical Unit that is hiking on a trail (Class 2) and carrying full backpacks to travel two miles; the time required to gain 1000 feet of elevation while carrying full backpack, independent of and in addition to the distance traveled. Also, standard backpack hour. Excludes day hike distance and elevation gain.

scree: small rock debris; a slope of gravel or small rock at the base of a steep incline or cliff.

seam sealing: the coating of seams in a waterproof garment or shelter to prevent the entry of moisture.

shells: garments made of a lightweight synthetic fabric with a very tight weave and hard finish. Worn as outer clothing to shed the wind.

shortcut: to hike off a trail, from one point to another; typically done near a switchback. Do not do it.

slope: the relationship between elevation gained or lost for the horizontal distance traveled. For example, a trail that gains 40 feet of elevation in 500 feet of distance has an eight percent slope. A trail that gains 1000 feet in a mile (19 percent slope) is tough. Also, trail gradient, grade, rate of inclination.

SPF: Sun Protection Factor; a system for measuring the effectiveness of sunscreens and sun block, the higher the number, the “better”. However, the use of products with a rating higher than 30 is not recommended. The better practice is to wear loose fitting, long clothing and minimize skin exposure.

summit: the high point on a mountain or ridge.

summit box: a metal container generally found on the summits of mountains throughout California. Used to hold a register of hikers; sign and return it to the box.

switchback: a reversal in direction of the trail, often on the side of a steep ridge; used to reduce the slope of the trail.

three-season: characterizes the suitability of equipment and clothing for a year-round, High Adventure Program, provided that winter outings are below 6000 feet and not subject to extreme weather. Items rated as four-season are usually needed for outings to higher elevations or under very cold, snowy conditions. Equipment that is less than three-season is usually suitable only for fair weather car camping.

timberline: the elevation beyond which trees no longer grow. Also, tree line.

topographical map: the graphic, two dimensional representation of the exact physical configuration of a place or region. Contour lines show elevation and shape of the terrain; other lines and symbols show trails, roads, streams, buildings, etc. Also, "topo" map.

Trail Camp: an established camping location that is accessible to backpackers, equestrians, and bicyclists. Wood and charcoal fires are generally permitted in any provided stoves and fire rings, subject to seasonal fire restrictions. A Fire Permit for wood fires and backpack stoves is required. These locations are shown on National Forest maps.

trailhead: point of access to a trail; the start and/or end point of a backpack or day hike.

trail profile: a graphic representation of the changes in elevation, up and down, for the horizontal distance traveled on a route. An essential part of the planning for each outing.

traverse: to travel across. Generally refers to crossing along a steep ridge, rock face, or ice pack.

tread: the surface of the trail on which you walk.

trek: a High Adventure backpack, usually of more than three days.

UV: ultraviolet; that portion of sunlight that causes sunburn, snow blindness, and skin cancer. All sun glasses used in a High Adventure Program must provide full UV protection.

vector: an organism that carries disease from one animal to another. In the local mountains, this includes ticks and fleas.

Vibram: a patented material and tread design for the soles of hiking boots and shoes.

waterproof: prevents the passage of water. Waterproof fabric typically has either a polyurethane coating applied to it or has a layer of special material, such as GoreTex, which keeps moisture from passing through it. All shelters and rain gear for a High Adventure Program must be waterproof.

water repellent: sheds water. Water repellent fabric generally has been treated with a chemical agent, e.g., Scotch-gard. Such fabrics will eventually fail in driving rain and are not satisfactory for most High Adventure Programs. Also, water resistant.

wick: to draw moisture away by capillary action. A property of wool and some synthetic fabrics which helps keep the skin dry.

wind chill: the cooling effect of wind on a person or other warm object, through convection.
Each mile per hour of wind has the cooling effect that is equivalent to about one less degree in air temperature.

wind resistant: the ability of a garment or shelter to shed the wind. A function of the tightness of the weave of the fabric, the use of waterproofing material, and the design of the item. An important consideration in the selection of clothing and equipment for a High Adventure Program.



Basic References

- ◆ Fieldbook, Boy Scouts of America, Irving, TX.
- ◆ Backpacker (magazine), P.O. Box 118, Emmaus, PA 18099-0118.
- ◆ The Trail Head (newsletter), published by GLAAC-HAT.

*“The forests of America, however slighted by man,
must have been a great delight to God; for they
were the best He ever planted.”*

John Muir



A few of the many High Adventure awards that are available.

Cushman Watt Scout Center

2333 Scout Way
Los Angeles, CA 90026
Phone: 213-413-4400
FAX: 213-413-7954

Smiser Scout Center

3450 East Sierra Madre Blvd.
Pasadena, CA 91107
Phone: 626-351-8815
FAX: 626-351-9149