

# LOW- IMPACT CAMPING



BOY SCOUTS OF AMERICA

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## Plan and Method

### Why Low-Impact Camping?

The Boy Scouts of America probably puts more youth and adults into the out-of-doors than any other single organization. Since Scouting is such a heavy user of America's outdoor resources, it's important that leaders and youth members understand and appreciate the need to preserve and protect the environment.

Scouting groups occasionally are criticized for activities and behavior that are not in keeping with the best environmental practices. It can be argued that Scouting groups are no more guilty than others--they're just more visible. This may be true. But if Scouting is visible, it must set the best possible example for its own members and the general public.

Low-impact camping involves the skills, techniques, and attitudes that can give older Scouts and Explorers a true wilderness experience. The goal is to give little evidence of their presence while in the area and leave no trace upon their departure. As a matter of law, designated wilderness and primitive areas often have strict limits on their use. Scouting groups must understand and respect these limits. Backcountry areas, not officially designated as wilderness or primitive, also deserve protection and care in how they are used.

Low-impact camping often is different from the type of camping normally found in established long- and short-term camps. The leader has a greater responsibility in controlling the group and providing minimum-impact programs and activities. The youth members will need training in the skills and attitudes associated with a true wilderness experience.

Perhaps these training programs in low-impact camping will help the leader prepare older Scouts and Explorers for the thrill of a wilderness adventure.

### The Training Programs

This outline contains two training programs. The first, Introduction to Low-Impact Camping, explains the definition of wilderness and introduces the leader to some of the challenges in carrying out a Scouting program in keeping with the wilderness ethic. The second, Low-Impact Camping Workshop, includes the introduction and then moves into specific techniques of equipment, skills, training, and program. Both involve an audiovisual presentation developed with the active cooperation and support of the U.S. Forest Service, one of the principal agencies involved in managing our nation's designated wilderness areas.

### Conducting the Training

Introduction to Low-Impact Camping is a 90-minute program intended to be conducted in an evening in the home community, at summer camp, as a camporee feature, part of the showando, a session on the Institutes of Boy Scouting, or

a part of the Explorer program conference. It serves only as an introduction to the subject and leaders should be encouraged to learn more through participation in the more detailed workshop.

The Low-Impact Camping Workshop is designed to be conducted over a 4- to 6-hour period with actual experience in backcountry food preparation for the noon meal. The time can be varied with the length of the projects and discussion involved.

It's vital that the workshop be held in the out-of-doors, recognizing that an indoor location will be needed for the audiovisual presentation. The local Boy Scout camp is usually an ideal setting. An area is needed for a demonstration low impact campsite while patrol sites can be used for the cooking skills practice. A comfortable outdoor setting will be needed for the presentations, projects, and discussion periods.

While it is suggested that members of each low-impact camping team be from different units, if senior patrol leaders, post presidents, or other youth leaders are invited to participate, they should be paired with their own adult leadership. Involving youth leaders has proven helpful in developing a positive attitude on the part of other youth members toward the limits imposed on wilderness and backcountry camping.

The Low-Impact Camping Workshop can be conducted as an all-day Saturday event, adjusted to a series of 1- to 2-hour segments during the long-term camp period, and even run on a Sunday afternoon and evening for leaders for whom this would not conflict with their religious obligations. As a part of the long-term camp, leaders can give their Scouts an immediate experience with a low-impact outpost camp.

### Who Conducts the Training?

Persons who conduct either the Introduction to Low-Impact Camping or the Low-Impact Camping Workshop should be reasonably skilled trainers with experience in the out-of-doors and a clear understanding of the definition of wilderness and the wilderness ethic. Trainers can be drawn from the ranks of the district or council training committee, camping committee, unit commissioners, and unit leaders. In long-term camp, the program can be a part of the ecology/conservation or program commissioner activities. It is a good project for the Order of the Arrow.

It's vital that whoever conducts the training develops a positive attitude toward the need for wilderness, its values, and the reasons for the limitations and restrictions. Some complain that proponents of wilderness take an "elitist" attitude and seek to reserve wild areas for their own particular and private enjoyment. This may be true in some cases. Most, however, actively encourage others to seek the values and adventure that result from a wilderness experience as long as they preserve and protect the primitive environment.

### The Trainer's Attitude

Training in low-impact camping must always be positive. Since limits and

## Introduction to Low-Impact Camping - 90 Minutes

**Learning Objectives** At the end of this session, each participant should be able to:

- o Explain the Boy Scouts of America's concept of levels of outdoor program and where his Scouting unit likely fits in this scheme.
  - o Explain the legal definition of "wilderness" and "primitive areas" as described in the Wilderness Act, Public Law 88-577, and list some of the restrictions imposed on visitors to these areas.
  - o List and demonstrate low-impact camping techniques and practices related to pretrip plans, travel, campsite, fires, sanitation, horses, and courtesy.
  - o Develop troop or post programs and activities that can be carried out within the limitations of low-impact camping in wilderness or primitive areas.
  - o Train a group of older Scouts or Explorers in the techniques and practices of low-impact camping.
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**Materials** Low Impact Camping audiovisual, slides, and cassette  
Slide projector, cassette player, screen, extension cord, spare lamp  
Low-Impact Camping Quiz, one per participant, from appendix  
Answers to Low-Impact Camping Quiz, one per participant, from appendix  
Fieldbook (new edition when available)  
Levels of Scouting's Outdoor Program, one per participant (see appendix)  
Wilderness Use Policy, one per participant (see appendix)  
Samples of equipment suitable for low-impact camping (tents, clothing, packs, stoves)  
Chalkboard, chalk, eraser; or easel pad, easel, felt pens  
Wilderness Commitment, one per participant, from appendix

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**Introduction** Introduce the session by asking each participant to give a definition of a "wilderness" or "primitive" area. Accept each definition and note it on the chalkboard or easel pad without comment.

Explain that many people feel a wilderness area is some place where they can't drive the family camper. On the other hand, some feel that wilderness should be reserved for mystic enlightenment and contemplation. Both are correct, but neither view includes the full scope of wilderness experiences.

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**Definitions** Explain that wilderness and primitive areas are public lands designated as such by federal or state government. They are managed to "...promote, perpetuate, and where

necessary, restore the wilderness character of the land and its specific values of solitude, physical and mental challenge, scientific study, inspiration, and primitive recreation." Thus, designated wilderness and primitive areas have specific limitations on their use defined by federal or state law. Some areas, while not designated as wilderness, deserve the same protection. For our purposes, we shall refer to these as backcountry areas.

Many traditional Scout camping activities are not appropriate for wilderness, primitive, or backcountry areas. Through lack of information and training, some Scouts and leaders have been guilty of violating the law--or the spirit of the law--regarding wilderness or backcountry areas.

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Levels of Program

Distribute a copy of Levels of Scouting's Outdoor Program to each participant. Explain that the outdoor program starts with Tiger Cubs and their partners and move upward with increasing levels of skill and leadership required. Activities appropriate at one level may not be appropriate at a higher level. Low-impact camping skills are recommended at the council and national high-adventure level but are required for wilderness and backcountry camping.

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Low-Impact Camping Quiz

Explain that each participant will now have a chance to find out how much he or she knows about low-impact camping as applied in wilderness or backcountry areas.

Distribute a copy of Low-Impact Camping Quiz to each participant. Point out that the quiz will not be collected and each person will check his own results later in the session.

Allow about 10 minutes for the quiz.

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Low Impact Camping  
Audiovisual

Explain that many wilderness areas are administered by the U.S. Forest Service. Through the cooperation of the Forest Service, an audiovisual has been prepared to outline some of the steps of camping with minimum impact. Point out that many of the answers to the quiz will be found in the audiovisual presentation.

Dim the lights and show the audiovisual.

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Recap of Low Impact Camping  
Audiovisual

Invite the participants to recall the key elements in each portion of the Low Impact Camping audiovisual. When appropriate, demonstrate the types of equipment mentioned. Note the key points for each segment on a separate easel pad

sheet, removing and posting it. Aim for the following:

1. Pretrip plans

- o Take gear that blends into the environment.
- o Package food in burnable or pack-out containers.
- o Take trash bags and use them.
- o Plan for a party of 12 or fewer people.
- o Select an area few people visit.

2. Travel

- o Stay on the trail.
- o Avoid cutting across switchbacks.
- o Let muddy trails dry out.
- o Select hard ground for cross-country travel.

3. Campsites

- o Select a spot free from delicate plants.
- o Camp out of sight of trails, streams, and lakes.
- o Avoid tent ditching.
- o Limit stay in one place to 4 days.

4. Fires

- o Use a lightweight backpacking stove.
- o Use an old fire circle in heavily used areas.
- o Burn small wood gathered from the ground.
- o Make sure your fire is out.
- o In little used areas, cover fire scars with twigs.

5. Sanitation

- o Wash away from streams and lakes.
- o Pour wash and dishwater in a hole.
- o Dig latrines 6 to 8 inches deep and 200 or more feet from camp and water.
- o Cover wash-water holes and latrines.
- o Pack out nonburnable trash.

6. Horses

- o Keep number to a minimum.
- o Tie to sturdy trees for brief periods or rope hitch rail for longer periods of time.
- o Hobble or picket in dry areas.
- o Scatter manure.

7. Courtesy

- o Hikers step off lower side of trail when horses pass.
- o Control pets.
- o Leave wild flowers.
- o Avoid making loud noise.

Correct the Quiz

Distribute a copy of Answers to Low-Impact Camping Quiz to each participant. Ask each person to check his or her answers.

Some of the answers may cause questions or discussion. Deal with these as appropriate.

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Wilderness and the Law

Point out that restrictions placed on the use of designated wilderness or primitive areas are a matter of law. Federal wilderness falls under an Act of Congress known as "The Wilderness Act," Public Law 88-577. Read the following definition from the act:

"A wilderness, in contrast with those areas where man and his own works dominate the landscape, is hereby recognized as an area where the earth and its community of life are untrammelled by man, where man himself is a visitor who does not remain."

Point out that federal wilderness areas are managed either by the U.S. Forest Service, National Park Service, or Bureau of Land Management. Many states have designated wilderness or natural areas and these are managed by the appropriate state conservation agency. It's important to note that specific standards and rules apply for the use of wilderness and primitive areas and these have the force of law with stiff penalties for violaters. Park and forest rangers are naturally reluctant to issue citations to Scouting groups, but have done so in the past. Much will depend on the attitudes shown by the Scouts and leaders.

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Historic Sites

Explain that wilderness and backcountry areas often contain historic and archaeological sites. These must be preserved for proper study by qualified persons. "Pot hunting" and disturbing these areas is not only unethical but often against federal or state laws.

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Respect for Wilderness and Backcountry

As one of the nation's leading outdoor organizations, the Boy Scouts of America must take a leadership position in the protection and preservation of America's wilderness resources. Scouting units must carefully observe the standards and limitations in wilderness and backcountry camping, not only because it's the law, but also because these are wise environmental practices.

Distribute a copy of Wilderness Use Policy of the Boy Scouts of America to each participant. Briefly review the key points, noting that these closely parallel those made in the audiovisual presentation. These are the standards to be followed by all Boy Scouts of America units engaging in wilderness or backcountry camping.

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Low-Impact  
Programs

In the typical Boy Scout long-term camp, much of the program involves troop-size activities, splitting wood, building fires, pioneering projects, wide games, campfire programs, song fests, and lots of healthy noise and activity. These are quite appropriate for this type of camping at this level of Scouting's outdoor program. They are not appropriate, however, in wilderness and backcountry areas--they will probably be against the rules.

The leader may well ask, "But what do we do in wilderness or backcountry camping? Scouts aren't likely to sit around in silent contemplation of nature!" It's a good question and it deserves some careful planning to arrive at a thoughtful answer.

The typical Boy Scout troop should probably not consider a wilderness experience for all of its members, but it could be appropriate for older more proficient campers. Scouts attend a long-term camp for vigorous, active, and often noisy activities. Scouts must be carefully prepared for a wilderness experience involving quiet, thoughtful, and subdued activities aimed toward blending with and developing a respect for the wilderness environment. Thus, an approach to wilderness and backcountry camping is a matter of attitude on the part of the Scouts or Explorers and their leaders. Both adult and youth leaders must do some careful and innovative planning to develop programs that will take advantage of this wilderness and backcountry experience. If a troop and its leadership is unwilling to accept the limitations, or exploit the opportunities, of wilderness or backcountry camping, it should consider a more appropriate level of outdoor program.

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Not Only for  
Wilderness

Explain that using low-impact camping skills should not be confined only to wilderness or backcountry areas. They are valid in all camping situations, even the most heavily used long-term camp.

An example is the use of low-impact camping at Philmont and other high-adventure bases. Here the plan is to confine heavy use to limited areas that have been "sacrificed" for that purpose with the goal of leaving no trace of your party's presence. At the same time, low-impact practices are being used to stabilize and even reclaim a number of areas. The results have been excellent.

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Low-Impact  
Camping  
Skills

Point out that low-impact camping may require some new skills to be mastered by both youth and leaders. Lead a discussion on the types of skills needed and aim for the following:

- o Learning the rules for the area chosen
- o Low-impact fire building if fires are permitted
- o Safe and proper use of backpacking stoves
- o Use of dehydrated and trail foods

- o Low-impact campsite selection
- o Low-impact sanitation standards
- o Map and compass skills--wilderness areas are frequently without established trails
- o Emergency procedures--help is seldom readily available
- o Advanced backpacking skills--there is no source of resupply
- o An understanding of nature that will help the Scouts or Explorers interpret and appreciate their wilderness experience

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**The Wilderness Ethic**

There are few places remaining today where a person may see the land as it was before it was modified by the works of man. Wilderness, primitive, and backcountry areas give us this rare opportunity. We must train youth to enter these areas with respect--to observe and to enjoy, but at the same time to preserve and to protect. An understanding and appreciation of wilderness can add a new dimension to an older Scout or Explorer's outdoor experience. Low-impact camping techniques can help ensure that future generations have the opportunity to experience pristine wilderness areas. This includes the opportunity to be a visitor who does not remain in an area where the earth and its community of life are untrammelled by man.

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**Wilderness Commitment**

To conclude the course, distribute a copy of the folded Wilderness Commitment to each participant. Read with them the Outdoor Code and then the Wilderness Pledge. Point out that the seven key points to consider in low-impact camping are listed as a check list and reminder.

Ask each participant to make a personal commitment to observe the highest standards of environmentally sound hiking and camping in wilderness, primitive, and backcountry areas.

When each participant has signed the commitment, congratulate them on completing the training program and offer best wishes for a future of outdoor adventures:

"Scouting is an organization that believes in principles and values. We are charged to share these values with future generations through our work with today's youth.

"We care about people, our own members as well as the general public. We reach out to others and give of ourselves.

"We care about the land and its resources. Our task is to protect the wild spaces for present and future generations.

"We commit ourselves to positive action. If we believe in our mission to serve youth, it follows that nothing good and worthy is an impossible task."

## Low-Impact Camping Workshop

**Note:** This workshop is designed to be conducted over a 4-6 hour period. Its length will depend on the amount of time devoted to demonstrations and projects. The program involves the preparation of a noon meal.

### Learning Objectives

At the end of this session, each participant should be able to:

- o Explain the Boy Scouts of America's concept of levels of outdoor program and where his Scouting unit likely fits in this scheme.
- o Explain the legal definition of "wilderness" and "primitive" areas as described in the Wilderness Act, Public Law 88-577, and list some of the restrictions imposed on visitors to these areas.
- o List and demonstrate low-impact camping techniques and practices related to pretrip plans, travel, campsites, fires, sanitation, horses, and courtesy.
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- o Train a group of older Scouts or Explorers in the techniques and practices of low-impact camping.

### Materials:

Low Impact Camping audiovisual (slides and cassette)  
Slide projector, cassette player, screen, extension cord, spare lamp  
Low-Impact Camping quiz, one per participant, (see appendix)  
Answers to Low-Impact Camping Quiz, one per participant, from appendix Fieldbook (new edition when available)  
Levels of Scouting's Outdoor Program, one per participant, from appendix  
Wilderness Use Policy, one per participant, (see appendix)  
Samples of equipment suitable for low-impact camping (tents, clothing, packs, stoves, etc.)  
Chalkboard, chalk, eraser; or easel pad, easel, felt pens  
One Coleman Peak I stove for each team of four participants  
One Sigg fuel bottle (or equivalent) for each team  
Coleman stove and lantern fuel as needed (one gallon will fuel 8-10 stoves)  
Filter funnel and pouring spout, one per team  
Sample selection of dehydrated and freeze-dried foods available in the typical supermarket  
Backpacking merit badge pamphlet, No. 3323  
Camping merit badge pamphlet, No. 3256  
Lightweight garden trowel  
Selection of trail food supper packs to serve 4 (Rich Moor available from Supply Division is suggested)  
One nesting pot set or collection of 1- and 2-lb. No. 10 coffee cans for each team for food preparation  
Sturdy plastic plate, Sierra Club-type cup, Vitt'L kit, and pocket knife (provided by participants)  
Pocket notebook and pencil, provided by participants  
Wilderness Commitment, one per participant (see appendix)

## **Introduction to Low-Impact Camping - 60 Minutes**

**Preparation** An area with comfortable seating will be needed for the general presentations. A demonstration low-impact campsite set up in advance of the session is an important feature. Outdoor areas will be needed for preparation of the noon meal.

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**Preopening** As the participants gather, ask them to get acquainted with each other and form into teams of four persons. Ask the participants to see that no members of the team are from the same Scouting unit--teams of formerly unacquainted individuals are desirable. If youth are involved, however, be sure they are teamed with their own leadership.

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**Introduction** Introduce the session by asking each participant to give a definition of a "wilderness" or "primitive" area. Accept each definition and note it on the chalkboard or easel pad without comment.

Explain that many people feel a wilderness area is some place where they can't drive the family camper. On the other hand, some feel that wilderness should be reserved for mystic enlightenment and contemplation. Both are correct, but neither view includes the full scope of wilderness experiences.

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**Definitions** Explain that wilderness and primitive areas are public lands designated as such by federal or state government. They are managed to "...promote, perpetuate, and, where necessary, restore the wilderness character of the land and its specific values of solitude, physical and mental challenge, scientific study, inspiration, and primitive recreation." Thus, designated wilderness and primitive areas have specific limitations on their use defined by federal or state law. Some areas, while not designated as wilderness, deserve the same protection. For our purposes, we shall refer to these as backcountry areas.

Many traditional Scout camping activities are not appropriate for wilderness, primitive, or backcountry areas. Through lack of information and training, some Scouts and leaders have been guilty of violating the law--or the spirit of the law--regarding wilderness or backcountry areas.

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**Levels of Program** Distribute a copy of Levels of Scouting's Outdoor Program to each participant. Explain that the outdoor program starts with Tiger Cubs and their partners and move upward with increasing levels of skill and leadership required. Activities appropriate at one level may not be appropriate

at a higher level. Low-impact camping skills are recommended at the council and national high-adventure level but are required for wilderness and backcountry camping.

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Low-Impact  
Camping Quiz

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Allow about 10 minutes for the quiz.

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Low Impact  
Camping  
Audiovisual

Explain that many wilderness areas are administered by the U.S. Forest Service. Through the cooperation of the Forest Service, an audiovisual has been prepared to outline some of the steps of camping with minimum impact. Point out that many of the answers to the quiz will be found in the audiovisual presentation.

Dim the lights and show the audiovisual.

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Recap of  
Low Impact  
Camping  
Audiovisual

Invite the participants to recall the key elements in each portion of the Low Impact Camping audiovisual. When appropriate, demonstrate the types of equipment mentioned. Note the key points for each segment on a separate easel pad sheet, removing and posting it. Aim for the following:

1. Pretrip plans

- o Take gear that blends into the environment.
- o Package food in burnable or pack-out containers.
- o Take trash bags and use them.
- o Plan for a party of 12 or fewer people.
- o Select an area few people visit.

2. Travel

- o Stay on the trail.
- o Avoid cutting across switchbacks.
- o Let muddy trails dry out.
- o Select hard ground for cross-country travel.

3. Campsites

- o Select a spot free from delicate plants.
- o Limit stay in one place to 4 days.
- o Avoid tent ditching.
- o Camp out of sight of trails, streams, and lakes.

#### 4. Fires

- o Use a lightweight backpacking stove.
- o Use an old fire circle in heavily used areas.
- o Burn small wood gathered from the ground.
- o Make sure your fire is out.
- o In little used areas, cover fire scars with twigs.

#### 5. Sanitation

- o Wash away from streams and lakes.
- o Pour wash and dish water in a hole.
- o Dig latrines 6 to 8 inches deep 200 feet or more from camp and water.
- o Cover wash water holes and latrines.
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#### 6. Horses

- o Keep number to a minimum.
- o Tie to sturdy trees for brief periods or rope hitch rail for longer periods of time.
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#### 7. Courtesy

- o Hikers, step off lower side trail when horses pass.
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Correct the Quiz

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Some of the answers may cause questions or discussion. Deal with these as appropriate.

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Wilderness and the Law

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appropriate state conservation agency. It's important to note that specific standards and rules apply for the use of wilderness and primitive areas and these have the force of law with stiff penalties for violaters. Park and forest rangers are naturally reluctant to issue citations to Scouting groups, but have done so in the past. Much will depend on the attitudes shown by the Scouts and leaders.

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#### Historic Sites

Explain that wilderness and backcountry areas often contain historic and archaeological sites. These must be preserved for proper study by qualified persons. "Pot hunting" and disturbing these areas is not only unethical but often against federal or state laws.

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#### Respect for Wilderness and Backcountry

As one of the nation's leading outdoor organizations, the Boy Scouts of America must take a leadership position in the protection and preservation of America's wilderness resources. Scouting units must carefully observe the standards and limitations in wilderness and backcountry camping, not only because it's the law, but also because these are wise environmental practices.

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#### Not Only for Wilderness

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### ***Low-impact Camping Equipment - 45 Minutes***

#### Introduction

Lead the group to the demonstration low-impact campsite for this presentation. Point out that the location has been chosen to cause the least damage to the environment and is located well away from trails, lakeshore, or streams.

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#### Tents

Point out that a wide variety of backpacking tents are available. All present some sort of compromise between roominess, weight, and ease of packing. Note that the tents are a color that blends into the environment. In snow, white may be best.

The tents are located with a consideration for prevailing winds and are not ditched. If builder's plastic is used as a ground cloth, it will be carefully packed out.

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## Bedding

Point out that sleeping bags have been selected for the type of weather to be encountered. Foam pads are warmer, lighter, and more practical than air mattresses. Stuff sacks are a more practical way to carry a sleeping bag than rolling it, although the bag must be fluffed up well before retiring. Again, if plastic is used as a ground cloth, it must be packed out.

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## Backpacking Stoves

Many wilderness areas prohibit open fires. Where fires are permitted, wood may be scarce or unavailable in popular campsites and above timberline. A backpacking stove is suggested for true low-impact camping.

If you ask the question, "Which is the best backpacking stove?" you'll get a difference of opinion from everyone within earshot. Stoves fueled with alcohol, liquified petroleum gas, kerosene, and gasoline all have their advocates. A "best" backpacking stove is largely in the opinion of its owner. It also depends on how and where the stove will be used and who will operate it. Like all outdoor equipment the stove presents a compromise between weight, size, availability of fuel, ease of operation, and the relationship between the amount of usable heat produced and the size and weight of the stove and its fuel. Some stoves are more efficient than others at high elevations and in cold temperatures.

Explain that most professional outfitters, including the Boy Scouts of America, have concluded that the Coleman Peak I stove is a good compromise of factors in a backpacking stove. So, explain that we will not debate the relative merits of stoves, but we'll demonstrate the Peak I.

The Coleman stove uses a gasoline-type fuel. We recommend a fuel designed specifically for stoves and lanterns--unleaded automotive fuel can cause problems. The most practical fuel bottles are those made of spun aluminum--the one quart bottle is most popular. A filter funnel and pouring spout will avoid spillage and help assure clean fuel.

Demonstrate how the Peak I stove is filled, the fuel bottle capped and placed at arm's length, and the steps to lighting the stove and bringing it to full heat. Point out that instructions for lighting and operating the stove are printed on the fuel tank and should be followed exactly. A similar procedure is used for filling and lighting the Coleman Peak I backpaker's lantern.

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## Stove and Lantern Safety

The Boy Scouts of America has a firm policy regarding the use of chemical fueled stoves and lanterns. Their use is encouraged where appropriate, but the stove or lantern must be used under the supervision of a qualified adult leader.



Like most pieces of equipment, the stove or lantern itself is not dangerous--fires, explosions, and burns are almost always the result of careless user. Most stove and lantern accidents involve the following:

- o Spilled fuel--allow any spilled fuel to evaporate and move the stove to a new location before lighting
- o Opening the filler cap while the stove or lantern still contains flame--open the filler cap only when the top of the stove or lantern is cool enough to be touched.
- o Stove fuel which may cause the safety device to blow.
- o Loose fittings--stoves are sold with a special wrench and the instructions for keeping the fittings tight should be followed carefully
- o Gasoline used to start fires--never under any circumstances use any type of liquid fuel as a fire starter while involved in a Scouting activity. Scouts simply don't know the difference between commercial charcoal lighting fluid and highly explosive gasoline.
- o Stoves and lanterns must be filled and lighted out-of-doors. Neither should be used inside a tent.
- o Open fuel container too near the stove.

Review the twelve points for stove and lantern safety found in the Backpacking and Camping merit badge pamphlets.

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#### Cooking Gear

Point out that there are a variety of nesting pot sets on the market and all have their advantages and disadvantages. A set of various sized tin "billy cans" can do the job just as well and can be thrown away when the trip is over. Besides, they are free!

Most trail foods require a minimum of cooking utensils and one or two large spoons will be all that's needed. The Scout Vitt'l kit, a Sierra Club-type cup, Scout measuring cup, and a sturdy plastic plate is all an individual camper will need. A pair of inexpensive pliers and pot lifters is a must. The bandana handkerchief has an all purpose use in camp. A red one is used in the kitchen while a blue one is used to blow your nose. Woe to the camper who uses a blue bandana in the camp kitchen!

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#### Packs

A discussion of the "best" backpack may produce an even livelier discussion than stoves. Again, the pack is a compromise between cost, size, weight, and how it will be used. A pack basket is at home in the bottom of a canoe, but would hardly be practical on a steep mountain trail. So, the pack must be matched to the job it is to do.

The BSA Supply Division packs are a good compromise between cost and practicality. They may not have the glamour of a noted brand name nor all of the attractive (but little used) fittings, but they are made for rugged use. Packs are a matter of preference.

Point out that the weight distribution of the pack depends on the type of terrain to be covered. On a smooth trail, heavy items are kept high so that the weight comes straight down and is balanced over the hips. If the trail is rough or the hiker will be stepping over logs or moving up steep inclines, heavier gear is lowered to the center of the pack.

A high load would tend to pull the body sideways when leaning or making sudden movements. When one is jumping from boulder to boulder, crossing steep snow slopes, or on skis, weight should be lower in the pack to lower the center of gravity and make balancing and maneuvering easier. No matter where the weight is placed, heavier items should be close to the back. This conserves energy and aids balance.

It is equally important to have the pack balanced from side to side. If a water bottle is in one side pocket, it must be balanced with an equal weight on the other side.

Demonstrate how a heavy duty garbage bag can be used to rainproof or drownproof a pack or sleeping bag. The garbage bag goes into the pack and the gear goes into the garbage bag. Air is pressed out, the bag is twisted shut, and the end is secured with a rubber band for protection against a rainstorm, a fall in crossing a creek, or a swamped canoe.

A "bear bag" is a must in many parts of the country. Every smellable and eatable item is placed in a pack which is hung at least 15 feet in the air between two trees. If the bear bag is hung near a limb, a smart and hungry bear may simply climb the tree and haul up the goodies.

---

#### Shoes and Foot Gear

Point out that novice backpackers often assume that if shoes are good, heavier shoes are better. Not true! One additional pound of shoes uses as much energy as five more pounds in the pack. So, hiking shoes should be as light-weight as possible and still properly protect the feet.

Most Scout hikers are "overshod." A good brand-name work shoe with 8-inch uppers and composition sole will do a fine job in any but the most extreme conditions. Most Scouts outgrow their boots long before they show significant wear.

Boots are best worn with wool or wool blend socks. Be sure to wear the socks when buying the boots. Boots must be well broken in before hitting the trail. Feet are the only means of transport and blisters can cripple a hiker.

Ask the participants to feel the insole of a comfortable pair of shoes. They'll find that the insole has formed a little nest for each toe. To speed breaking in a pair of boots, fill the boots with warm water, pour out the water and wear the boots until they are dry--all day if possible. Then lightly oil the leather.

"Waffle  
Stompers"

Shoes with heavy lug soles are a genuine threat to fragile environments and are needed only in the most rugged and rocky terrain. They can do real damage to fragile ecosystems. Some call them "waffle stompers" for the pattern of the lugs pressed into the soil. Their use in alpine tundra, around campsites, and near lake shores is strongly discouraged by skilled and concerned outdoorsmen.

Whether wearing simple work shoes or "waffle stompers," it's a good idea to carry a pair of sneakers for use around camp. They're a relief to the feet as well as the environment. Avoid sandals and never go barefooted. Rocks and small stumps seem to seek out bare toes!

---

Sanitation

Explain that the Bible has lots of good outdoor information--even how to make a cathole latrine:

"Thou shalt have a place also without the camp, whither thou shalt go forth abroad; and thou shalt have a paddle among thy weapons; and it shall be, when thou wilt ease thyself abroad, thou shalt dig therewith, and turn back and cover that which cometh from thee:"

Deuteronomy 23:12-13

Display the 6 inch lightweight garden trowel that should be a part of each low-impact camper's equipment. This is used to dig a 6-8 inch hole in the top layer of decomposing matter at least 200 feet from water source, camp, stream, or lakeshore. Avoid sandy or gravel areas--biologically active soil will decompose the wastes more quickly. Regular toilet tissue should be buried completely--it's manufactured to be biodegradable. Paper towels, facial tissue, or sanitary napkins should be burned. If fires are not permitted, seal them in a plastic bag and pack them out.

There's a division of opinion on dishwater disposal. In little used sites "fling it" well away from your campsite. In more popular campsites pour it into a 6-inch deep cathole. "Flinging" may draw flies, so we'll opt for burial.

---

Summary

Summarize this session by pointing out that there is a wide difference of opinion on the "best" equipment for low-impact camping. Whatever equipment is used, it should blend with the landscape, produce minimum impact on the environment, and do the job for which it's intended.

---

***Low-Impact Cooking Skills - 45 Minutes***

Preparation

The purpose of this session is to demonstrate the types of trail foods for use in low-impact camping. It will also demonstrate how to prepare these foods with a backpacking stove and minimum cooking equipment.

---

Fire Pits Point out that sometimes wood fires are appropriate in low-impact camping. If a fire ring is in an established site, it should be used. Otherwise, a low-impact fire pit should be dug.

Distribute copies of the Low-Impact Fire Pit reproduced from the appendix. If practical, demonstrate how this pit is dug, used, and the site restored. If fire rings have been left in a primitive site by other campers, these should be scattered and the site restored to a natural condition.

---

Supermarket Sources Display a variety of dehydrated or freeze-dried foods (suitable for use on the trail) and obtainable from any well stocked supermarket. Point out that these are just as good, and a great deal less expensive, than commercially prepared trail foods. Be sure to read the label, however, as some are "fake foods" with little or no nutritional value. Some instant soups are an example.

---

Prepackaging Food Most foods for use on the trail should be repackaged from the store container to plastic bags. Package each complete meal in a large bag so everything will be together when cooking time arrives. This will reduce the weight and volume and there will be no empty containers to pack out. Be sure to mark the meal and contents on each package with a waterproof felt tip pen. More than one fisherman has dipped his trout in what he thought was white corn meal only to discover it was powdered laundry soap!

---

Commercial Trail Foods Display a sample of commercial trail foods packaged for a party of four. Explain that each team will have a chance to try one of the dinner menus for its noon meal. Point out that dehydrated and freeze dried foods have come a long way in the past few years, but one caution still applies: "Only this I vainly plead: when all else fails, the instructions read!" So, following the instructions exactly will produce the best results. Note, however, that cooking times will need to be increased at higher elevations.

---

Spices and Condiments Some trail foods are a bit bland and a selection of spices and condiments can make a meal more tasty. In addition to salt, small packets of pepper, paprika, onion flakes, minced garlic flakes, pepper flakes, and other flavorings can make a world of difference.

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Trail Munchies The experienced hiker takes on fuel and water regularly to keep his energy level up. Some water and a bit of food at each rest stop will do wonders to keep a hiker moving.

"Gorp" (good old raisins and peanuts) is a staple on the trail. But most hikers prefer their gorp a little fancier. Banana chips, coconut, dried apples, pineapple crystals, dried dates, chocolate chips, sunflower seeds, pumpkin seeds, and a variety of nuts can give each hiker's gorp its own distinctive character. Whether the seeds are roasted or raw, salted or not, is a matter of personal choice. Pass around samples of "creative gorp" for the participants to try.

Fruit "leather" is preferred by some. This consists of applesauce and mashed fruit poured into a shallow, lightly oiled or Teflon baking pan and allowed to congeal in a warm oven. When it has congealed into "leather," it's cut into strips, rolled into a cylinder, and ready for use. It's a good snack, but hard on braces, fillings, and bridgework.

"Jerky" has its fans. This is lean meat that has been spiced, salted, and dried. The best jerky is homemade--cut from strips of beef or venison. Soak the strips in salt water for 30 minutes and dry for 6-8 hours in an oven at its lowest possible setting. Commercially made jerky is quite acceptable, however a bit expensive.

---

Pure Water

It's important to drink lots of water to prevent dehydration. Unfortunately, however, the days when a camper could safely drink from a wilderness stream are unfortunately over! A number of parasites, notably giardia (sometimes known as beaver fever or cattle fever) have been carried by wildlife into even the most remote areas.

So, it will be necessary to purify all water before drinking.

Some public health officials claim that iodine crystals will properly purify water--others are advocates of 2 to 4 drops of household bleach per quart of water and 30 minutes contact time. All do agree, however, that boiling the water for 10 minutes is a sure-fire purification method. So, we'll boil water!

---

***Trail Food Practice - 60 Minutes***

Preparation

Ask each team to select one of the four-person trail food dinner menus to prepare for its noon meal. Use dinner menus rather than lunch menus that require little or no cooking. Issue a stove, fuel, and cooking equipment to each team and let each select its own area to prepare the meal.

---

The Objective

Announce that the objective is to experiment with preparing a dinner menu with limited utensils and one backpack stove. Each team is to prepare its meal and clean up afterwards using its best low-impact camping techniques.

Monitor  
Progress

The workshop faculty monitors the progress of each group noting who assumed leadership, how conflicts are resolved, how the meal is planned, and the general results of the experience. Faculty members may wish to prepare their own meal or subsist on a trail lunch of gorp, cheese, pilot bread, etc., so they will be free to visit each group.

---

Evaluate

When each team has finished its meal, cleaned up, and begun to relax, assemble the group for an evaluation.

- o How did the meal go? Was the food acceptable? Too much? Too little?
  - o How did you manage with only one stove? Did you serve the meal in courses? Was that okay?
  - o Why did you choose the spot you used to prepare your meal? Was it a good spot? Could you have chosen a better one?
  - o Who took charge of the meal preparation? How was he selected? Did the leadership change during the meal preparation and cleanup? How did you feel about the leadership? (And we don't want an answer to that one.)
  - o How did the equipment work? Did you learn anything you didn't previously know about the backpack stove?
  - o Did you check over your cooking site to be sure that you actually did leave no trace of your presence?
  - o How much noise did your group make--shouting, loud laughter, etc.? A low noise level is a part of low-impact camping.
- 

Check-in Gear

Ask the participants to return their equipment to the workshop quartermaster and assemble for the next session.

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### ***Low-Impact Outdoor Skills Training - 30-60 Minutes***

Preparation

This is intended as a buzz group and discussion period with each team working as a group. The length of the buzz group sessions and discussion periods can vary with the time available.

---

New Skills  
Are Needed

Point out that by now the participants have concluded that most older Scouts and Explorers may need some new outdoor skills in order to become successful low-impact campers in wilderness or backcountry areas. Traditional Scout camping techniques and methods are more appropriate to the council long-term or short-term camp and established camping facilities.

Explain that each team will have a chance to work as a buzz group with the following topic: "What new or improved skills must the older Scouts or Explorers in the troops or posts we represent master in order to become skilled low-impact campers?" Announce whatever time limit has been established for this buzz group session.

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Teams Meet	Each team now meets as a buzz group. Workshop faculty members may wish to monitor progress. Give the teams a one minute warning before reassembling.
<hr/>	
Reports and Discussion	Ask each group to report its findings and discuss the results. The length of the discussion will depend on the amount of time allowed to this session.
<hr/>	
Who Will Train and How?	Ask each team to go back into a buzz session with the following question: "Specifically, how can we train our older Scouts and Explorers in the techniques and attitudes of low-impact camping? Who should conduct that training?"
<hr/>	
Teams Meet	Once again the teams meet with the faculty monitoring. Give a one minute warning before reassembling.
<hr/>	
Team Reports	Ask each team to report its findings and discuss as appropriate. Try to get as many resources as possible from the group and list these on the easel pad. The length of the discussion will depend on the amount of time allowed for this session.
<hr/>	
Summary	Summarize the discussion with the key points made in the team reports. Stress the fact that most older Scouts or Explorers will need special preparation--both in skills and attitude--before attempting wilderness or backcountry camping.

**Wilderness and Backcountry Programs - 30-60 Minutes**

Different Programs Needed	A typical Scout views camp as a place to run, jump, shout, and burn off excess energy with raucous abandon. But in a wilderness or backcountry area, this behavior is not only unethical, it may be illegal! Once the day's hike is ended and camp is made, few leaders feel the need for a carefully orchestrated program of activities. As one leader says, "Throw out a couple of Frisbees and Scouts will amuse themselves for hours." But eight Scouts chasing Frisbees in the fragile environment of a wilderness alpine meadow can cause damage that may take 25 years to heal. So, creative programming is needed.
<hr/>	
The Problem	Pose the following problem to the participants:  You are the leader of a group of eight Scouts on a weeklong hike through a designated wilderness area managed by the U.S. Forest Service. You have obtained a permit from the local ranger and understand the limits placed on activities in this area.

It is 3 p.m. and your day's hike is finished. The group has set up a typical low-impact campsite just below timberline in a wooded area adjoining an Alpine meadow through which flows a rushing mountain stream. The terrain is mountainous and you've noticed a number of small animals and unusual plants. Fishing is permitted and all members of the party have licenses and fishing gear. The ranger was very insistent that noise be kept to a minimum.

Your problem: What will you and these eight Scouts do from now until a 9:30 p.m. bedtime that will be in keeping with the spirit and intent of this designated wilderness ?

---

Teams Meet                      Ask each team now to meet, discuss the problem, and suggest activities appropriate to this situation. Announce the time allowed for this project, monitor progress, and give a warning shortly before reassembling.

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Teams Report                    Ask each team to report on its plan. Discuss and evaluate each plan as appropriate. The length of the discussion will depend on the amount of time allowed for this session.

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A Further Problem              When the discussion is concluded, remind the participants that we have been struggling with only one afternoon and evening in a weeklong wilderness experience. It should be clear that the leader of a wilderness Scouting expedition must give careful thought and planning to programs and activities that will produce a true wilderness experience for his Scouts.

---

Summary                              Point out that when a leader fully realizes the limitations and opportunities involved in a wilderness or backcountry expedition, he will probably make one of two decisions: (1) Go somewhere else where the more traditional Scouting activities are acceptable, or (2) undertake some careful planning and training to ensure that his Scouts have a true wilderness experience in "...an area where the earth and its community of life are untrammelled by man, where man himself is a visitor who does not remain."

---

Wilderness Commitment              To conclude the course, distribute a copy of the folded Wilderness Commitment to each participant. Read with them the Outdoor Code and then the Wilderness Pledge. Point out that the seven key points to consider in low-impact camping are listed as a check list and reminder.

Ask each participant to make a personal commitment to observe the highest standards of environmentally sound hiking and camping in wilderness, primitive, and backcountry areas.



When each participant has signed the commitment, congratulate them on completing the training program and offer best wishes for a future of outdoor adventures:

"Scouting is an organization that believes in principles and values. We are charged to share these values with future generations through our work with today's youth.

"We care about people--not only our own members, but the general public with whom we associate. We reach out to others and give of ourselves.

"We care about the land and its resources. Our task is to protect the wild spaces for present and future generations.

"We commit ourselves to positive action. If we believe in our mission to serve youth, it follows that nothing good and worthy is an impossible task."

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## APPENDIX

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LEVELS OF SCOUTING'S

# OUTDOOR PROGRAM



**EXPLORERS,  
OLDER SCOUTS,  
AND  
VARSITY SCOUTS**



**OLDER YOUTH**



**BOY SCOUTS**



**WEBELOS  
SCOUTS**

**CUB SCOUTS**



**TIGER CUBS**

WILDERNESS  
AND  
BACKCOUNTRY  
CAMPING

- NATIONAL HIGH ADVENTURE
- COUNCIL HIGH ADVENTURE

- UNIT LONG-TERM AND SHORT-TERM CAMPING OFF COUNCIL PROPERTY

- CAMPOREES • SHORT-TERM CAMPS
- WEEKEND CAMPOUTS • OUTPOST CAMPING • THEME CAMPING
- JAMBOREES

**BOY SCOUT CAMP**

- BOY SCOUT HIKES

- CUB SCOUT AND WEBELOS SCOUT RESIDENT CAMP
- ACTIVITY BADGE ADVENTURES
- WEBELOS OVERNIGHT CAMPING

**CUB SCOUT DAY CAMP**

- FIELD TRIPS • OUTINGS • DEN WALKS • NATURE WALKS
- PICNICS • BACKYARD OVERNIGHTS

- BOY-PARENT EXCURSIONS

↑  
INCREASING  
LEVEL OF  
SKILLS AND  
LEADERSHIP  
REQUIRED

↑  
INCREASING  
STAFF SUPPORT

↑  
FAMILY  
CAMPING

### LOW-IMPACT CAMPING QUIZ

1. In wilderness areas it's a good idea to use brightly colored tents so your campsite can be spotted in case of emergency.  
 True       False
2. Low-impact camping standards suggest that cans and other metal containers be burned and then buried.  
 True       False
3. The maximum size of a party in wilderness areas should be 10 to 12 persons.  
 True       False
4. Meadows and grassy areas are usually the preferred place to camp in a wilderness or primitive area.  
 True       False
5. Boy Scouts of America national policy prohibits the use of gasoline or other chemical fueled stoves.  
 True       False
6. To avoid damage to the environment, you should stay no more than a week at one campsite.  
 True       False
7. It's always a good idea to build a circle of stones to contain your cooking fire.  
 True       False
8. Your low-impact campsite should be at least 200 feet from trails, lakes, streams, or meadows.  
 True       False
9. A cathole latrine should be dug in dry, sandy, or gravel soil, at least 50 feet from water, camp, or trails.  
 True       False
10. Fish entrails should be tossed back into the lake or stream as food for other fish.  
 True       False

11. Since backcountry is so wide and spacious, loud games, campfire programs, and vigorous activities are unlikely to disturb others.  
 True     False
12. If trails are muddy, it is acceptable to leave the established trail as long as you parallel it closely.  
 True     False
13. Wilderness camping is a good opportunity to collect specimens of flowers, plants, and rock samples.  
 True     False
14. When breaking camp, you should leave a pile of wood at your primitive campsite for the next camper.  
 True     False
15. "Take nothing but pictures" is an appropriate motto for low-impact campers.  
 True     False
16. Most typical Boy Scout troops, Varsity Scout teams, and Explorer posts will need some specialized training before qualifying for a wilderness or backcountry camping experience.  
 True     False
17. It is a good idea to repackage food and other items in lightweight, burnable, or pack-out containers.  
 True     False
18. Using builders' plastic sheeting as "disposable" tents or flies is a good technique for backcountry camping.  
 True     False
19. When horses or pack animals are met on the trail, hikers should step off the lower side of the trail, stand still, and talk quietly while the riders and animals pass.  
 True     False
20. Each wilderness area may have specific rules for its use and permits are sometimes required for entry.  
 True     False

## **ANSWERS TO LOW-IMPACT CAMPING QUIZ**

1. Generally false. Tents, clothing, and other equipment should be of a color that will blend into the environment. Earth tones, rust, and green are preferred. Red, yellow, orange, and blue are too conspicuous. The idea is for a hiker to pass your camp and not notice it. In some wilderness areas--the Adirondacks, for example--brightly colored tents are not discouraged as campers are monitored by aircraft and bright gear is easy to spot. Check the local standards for the area visited.  
  
Note: One or two bright colored ponchos in the party are a good idea as they can be used as signaling devices and for air rescue panels.
2. False. If fires are permitted, it's a good idea to burn flattened cans to remove food scraps, but they must always be packed out.
3. Generally true. In some wilderness areas the maximum size of a party is limited to as few as six persons. A small group will allow cross-country trails to recover, reduce trampling in the campsite area, produce minimum impact on the land, and be less obvious to other campers and disruptive of wildlife.
4. False. Meadows and grassy areas are fragile environments easily damaged. Small forested ridges are preferred campsites. The camp will be warmer, less subject to insect pests, and less obvious to other campers.
5. False. The Boy Scouts of America policy on chemical fuels states that lighting and refueling of gasoline and liquid-fueled lanterns and stoves must be done under the supervision of, or by, a responsible adult who is knowledgeable in safety precautions and their use. The key words are "adult supervision."
6. False. The recommended maximum stay in one campsite is 4 days--less is even better. This will assure that grasses and plants are not trampled beyond recovery and that the soil is not compacted.
7. False. Rocks are not needed to contain a fire if the ground has been suitably prepared. Smoke-stained rocks are unsightly. If a fire pit is dug, carefully preserve the sod and subsoil. When moving camp, drench the coals with water, remove them from the pit, and scatter them in woods or high grass where they will not be seen. Fill the pit with its original subsoil and replant the sod. Scatter ground litter over the area to further disguise its location.
8. True. Camping at least 200 feet from trails, lakes, streams, or meadows will assure that fragile environments are protected, wildlife have access to water, and the campsite is not obvious to others.
9. False. Latrines should be dug 6 to 8 inches deep in biologically active soil at least 200 feet from water, camp, or trails. Biologically active soil will assure the speedy decomposition of human waste.
10. False. Fish entrails should be buried in the latrine or burned in the fire. If returned to the lake or stream, they are more likely to befowl the water than to serve as food for other fish.

11. False. The key to backcountry camping is to draw as little attention as possible to your party. Loud and vigorous activity can be disturbing to other campers, may do considerable damage to the environment, and can be disruptive to wildlife.
12. False. If trails are muddy, it's best to wait until they dry out. In no case should a new trail be established. This can lead to a network of parallel trails which is most damaging to the environment.
13. False. All flowers, plants, rock samples, and other natural features should be left for the enjoyment of others. If flowers are picked or plant samples collected, seeds will not form and the plants will not reproduce themselves.
14. False. The idea is to "leave no trace," even a woodpile in a primitive site violates that principle. Leftover wood should be scattered conveniently in a realistic manner--the next camper will probably find it. In an established site, it is a courtesy to leave a supply of wood for the next party.
15. True. The best souvenirs of a wilderness experience are pictures and memories. Leave the wilderness in place for others to enjoy.
16. True. Most typical Scout and Explorer camp activities are not appropriate for wilderness or backcountry camping. Special training may be needed. Most Scouts and Explorers will need to be conditioned to expect and enjoy a wilderness or backcountry experience. The traditional vigorous camp activities are best reserved for the Boy Scout camp or youth camping areas in state or national parks and forests.
17. True. Repackaging food can save weight, space, and the need for packing out bulky containers.
18. False. The temptation to abandon a torn piece of plastic sheeting in the backwoods is too great for many people. Besides, sheeting makes a poor tent! If plastic sheeting is used for groundcloths, be sure each member of the party realizes that "if you carried it in, you'll carry it out."
19. True. If the hiker moves to the lower side of the trail, the horse is less likely to spook. If the horse should become frightened, a hiker on foot has less trouble maneuvering than the rider may have in controlling the mount. This is particularly important for pack trains where animals may be tied together. If one animal is spooked over the edge of a trail it can drag the others with it.
20. True. Rules may vary widely from one wilderness area to another. Permits are often required to assure that campers understand the rules and that the number of parties in the area can be kept within reasonable limits. Be sure to check on rules and the need for permits well in advance of the trip. This will avoid the disappointment of being turned away at the trail's roadhead.

## **Wilderness Policy of the Boy Scouts of America**

All private or publicly owned backcountry land and designated wilderness are included in the term "wilderness areas" in this policy. The Outdoor Code of the Boy Scouts of America applies to outdoor behavior generally, but for treks into wilderness areas minimum impact camping methods must be used. Within the outdoor program of the Boy Scouts of America, there are many different camping skill levels. Camping practices that are appropriate for day outings, long-term Scout camp, or short-term unit camping do not apply to wilderness areas. Scouts and Explorers need to adopt attitudes and patterns of behavior, wherever they go, that respect the rights of others, including future generations, to enjoy the outdoors.

In wilderness areas, it is crucial to minimize our impact on particularly fragile ecosystems such as mountains, lakes, streams, deserts, and seashores. Since our impact varies from one season of the year to the next, it becomes important for us to adjust to these changing conditions as well, to avoid damaging the environment.

The Boy Scouts of America emphasizes these practices for all troops, teams, and posts planning to use wilderness areas:

- o Contact the landowner of land managing agency (Forest Service, National Park Service, Bureau of Land Management, U.S. Fish & Wildlife Service, State, private, etc.) well in advance of the outing to learn the regulations for that area and to obtain required permits and current maps.
- o Always obtain a tour permit, available through council Scout service centers, meet all conditions specified, and carry it on the trip.
- o Limit the size of groups generally to no more than 8 to 11 persons, including at least one adult leader (maximum: 10 persons per leader). Two leaders per group are best. Do not exceed the group size if one has been established for the wilderness area. Organize each group (patrol, team, or crew) to function independently by planning their own trips on different dates, serving their own food, providing their own transportation to trailhead, securing individual permits, and camping in a separate and distinct group. When necessary to combine transportation and planning or buying, small groups should still camp and travel on the trail separately from other groups of the same unit.
- o Match the ruggedness of high adventure experiences to the skills, physical ability and maturity of those taking part. Save more rugged treks for older youth members who are more proficient and experienced in outdoor skills.
- o Participate in training for adult leaders in low-impact camping or be proficient and experienced in the leadership and skills required for treks into wilderness areas.
- o Conduct pre-trip training for the group that stresses proper wilderness behavior, rules, and skills for all of the potential conditions that may be encountered.



- o Use backpacking stoves, particularly where the fuel supply is limited or open fires are restricted. Supervision by an adult knowledgeable in the use of the stoves must be provided. If a fire is necessary, keep it as small as possible and use established fire lays where available if in a safe area. After use, erase all signs.
- o Emphasize the need for minimizing impact on the land through proper camping practices and preserving the solitude and quietness of remote areas. Camp at low use areas--avoid popular sites that show signs of heavy use.
- o Leave dogs, radios, and tape players at home.
- o Use biodegradable (not metal or glass) or plastic food containers. Carry out unburnable trash of your own and any left by others.
- o Dig shallow holes for latrines and locate them at least 200 feet from the nearest water source. Cover the latrines completely before leaving.
- o Wash clothes, dishes, and bodies at least 200 feet from any source of natural water.
- o Where a choice is available, select equipment of muted colors which blend with natural surroundings.
- o Look at and photograph; never pick or collect.
- o Follow trail switchbacks and stay on established trails.
- o Treat wildlife with respect and take precautions to avoid dangerous encounters with wildlife. Leave snakes, bears, ground squirrels, and other wildlife alone.

### **Outdoor Code**

As an American, I will do my best to--

**BE CLEAN IN MY OUTDOOR MANNERS--**I will treat the outdoors as a heritage to be improved for our greater enjoyment. I will keep my trash and garbage out of America's waters, fields, woods, and roadways.

**BE CAREFUL WITH FIRE--**I will prevent wildfire. I will build fire in a safe place and be sure it is out before I leave.

**BE CONSIDERATE IN THE OUTDOORS--**I will treat public and private property with respect. I will remember that use of the outdoors is a privilege I can lose by abuse.

**BE CONSERVATION-MINDED--**I will learn how to practice good conservation of soil, waters, forests, minerals, energy, grasslands, and wildlife; and I will urge others to do the same. I will use sportsmanlike methods in all my outdoor activities.

# THE WILDERNESS COMMITMENT

Reproduce locally; trim and fold for presentation at the end of the no-trace camping program.



<b>THE SEVEN KEYS TO NO-TRACE CAMPING</b>	
<p>1 Pretrip plans</p> <ul style="list-style-type: none"> <li>• Take dark colored gear</li> <li>• Package food in burnable or pack-out containers</li> <li>• Take trash bags</li> <li>• Plan 12 or fewer in your party</li> <li>• Select an area few people visit</li> </ul> <p>2 Travel</p> <ul style="list-style-type: none"> <li>• Stay on the trail</li> <li>• Avoid cutting across switchbacks</li> <li>• Let muddy trails dry</li> <li>• Select hard ground for cross-country travel</li> </ul> <p>3 Campsites</p> <ul style="list-style-type: none"> <li>• Select a spot free from succulent plants</li> <li>• Camp out of sight of trails, streams, and lakes</li> <li>• Avoid tent ditching</li> <li>• Limit stay in one place to four days</li> </ul> <p>4 Fires</p> <ul style="list-style-type: none"> <li>• Use a lightweight gas stove</li> <li>• Use an old fire circle in heavily used areas</li> </ul> <p>5 Sanitation</p> <ul style="list-style-type: none"> <li>• Burn small wood gathered from the ground</li> <li>• Make sure your fire is out</li> <li>• In little used areas, cover fire scars with twigs</li> </ul> <p>6 Horses</p> <ul style="list-style-type: none"> <li>• Keep number to a minimum</li> <li>• Tie to sturdy trees or rope hitch rail</li> <li>• Hobble or picket in dry areas</li> <li>• Scatter manure</li> <li>• Courtesy</li> <li>• Hikers step off trail when horses pass</li> </ul> <p>7 Courtesly</p> <ul style="list-style-type: none"> <li>• Avoid making loud noise</li> <li>• Leave wild flowers</li> <li>• Control pets</li> </ul>	<p>1 Pretrip plans</p> <ul style="list-style-type: none"> <li>• Package food in burnable or pack-out containers</li> <li>• Take trash bags</li> <li>• Plan 12 or fewer in your party</li> <li>• Select an area few people visit</li> </ul> <p>2 Travel</p> <ul style="list-style-type: none"> <li>• Stay on the trail</li> <li>• Avoid cutting across switchbacks</li> <li>• Let muddy trails dry</li> <li>• Select hard ground for cross-country travel</li> </ul> <p>3 Campsites</p> <ul style="list-style-type: none"> <li>• Select a spot free from succulent plants</li> <li>• Camp out of sight of trails, streams, and lakes</li> <li>• Avoid tent ditching</li> <li>• Limit stay in one place to four days</li> </ul> <p>4 Fires</p> <ul style="list-style-type: none"> <li>• Use a lightweight gas stove</li> <li>• Use an old fire circle in heavily used areas</li> </ul>
<p><b>Outdoor Code</b></p> <p>As an American, I will do my best to—</p> <ul style="list-style-type: none"> <li>• Be clean in my outdoor manners,</li> <li>• Be careful with fire,</li> <li>• Be considerate in the outdoors, and</li> <li>• Be conservation-minded.</li> </ul>	<p><b>WILDERNESS PLEDGE</b></p> <p>Through good camping and hiking practices, I pledge myself to preserve the beauty and splendor of America's wilderness, primitive and backcountry areas.</p> <p>I commit myself to:</p> <ul style="list-style-type: none"> <li>• Set a personal example in following the Outdoor Code.</li> <li>• Train those I lead in the skills and attitudes needed to protect and preserve wilderness for future generations.</li> <li>• Assure that parties of which I am a part observe the hiking and camping standards that will "leave no trace" of our passing.</li> </ul> <p style="text-align: right;">Signed _____</p>

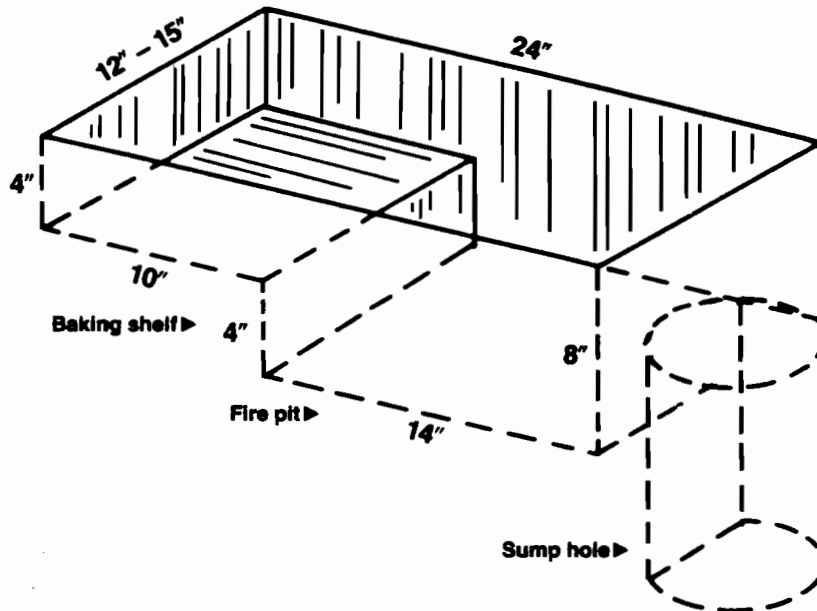
## The "Low-Impact" Fire Pit

A practical fire pit for low-impact camping is shown below. It's about 2 feet long and 12 to 15 inches wide. A baking shelf about 4 inches below the surface extends 10 inches into the pit. The bottom of the pit is 8 inches deep with a sump in a corner for wash water and garbage.

To dig the pit, carefully cut any sod at the surface, stack it in a shady spot, and keep it moist. Next dig out the soil and pile it neatly out of the way. Be careful that all duff is cleared away from around the fire pit and also piled neatly out of the way.

To restore the site after use, soak the coals thoroughly until they are cool to the touch. Remove the coals from the pit with your hands and scatter them in the brush. Your hands will get dirty but you'll know the coals are cool. It's easier to wash your hands than fight a fire!

Next, break down the sides of the pit--this soil has been baked and is now sterile. Fill the pit with the soil you've set aside and replace the sod or duff. Tamp lightly but leave the area slightly mounded. It will settle later. Now scatter duff, grass, and small twigs over the area to cover any signs of your presence. Sprinkling the sod when you wash your hands will help it become re-established.



It's a good low-impact practice to separate the food preparation area, the firewood pile, and the fire pit from each other. This reduces compaction of the soil and damage to grass and sod.