INTRODUCTION TO OUTDOOR LEADER SKILLS

BOY SCOUTS OF AMERICA

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Introduction

Welcome to Introduction to Outdoor Leader Skills training. This hands-on program gives adult leaders the practical outdoor skills they need to lead Scouts in the out-of-doors. Imagine having hands-on knowledge setting up a campsite, pitching a tent, hiking, outdoor cooking—all the skills necessary to see the outdoor program of the Boy Scouts of America come to life.

The skills sessions presented in Introduction to Outdoor Leader Skills closely follow the *Boy Scout Handbook* and are meant to serve as an adult training outline. By using these skills sessions in conjunction with the *Boy Scout Handbook*, trainers can be sure new leaders are proficient in the basic outdoor skills through First Class rank. Each skills session references specific chapters in the handbook.

Hands-on participation makes the best learning tool, so participants should leave the training experience knowing they can show their Scouts how to accomplish outdoor skills while fulfilling rank requirements. Back home, we want leaders to feel comfortable working with and instructing their Scouts. From pitching a tent to starting a cooking fire, they should feel confident in helping their youth leaders plan and carry out their own unit campouts and exciting troop programs using these skills. With that comes great satisfaction.

Financing the Course

During the early planning stages, the course chair and professional staff adviser will prepare an estimated budget to include the cost of

- BSA insurance
- Administrative materials
- Course handouts
- Facility rental

- Food for course meals
- Refreshments for cracker barrels
- Equipment
- Refreshment items
- Any other items necessary for course success

It is assumed that many of the items on the Course Gear List will be available from a council camp and/or troops, and perhaps staff members (such as Dutch ovens), and will not have to be purchased. Using the above criteria, the Scout executive, staff adviser, and course chair determine the course participant fee. The fee should be reasonable, based on the fact that *new* adult leaders are being recruited, and former Webelos leaders will not be accustomed to high training fees or purchasing lots of gear to attend a training course.

Scheduling the Course

This schedule of skills sessions and other events can be taught over a weekend, beginning on Friday evening, all day Saturday, and Sunday until 2:30 P.M., or a series of two one-day weekend sessions. This course also presents the opportunity to implement a mentor program using more experienced trainers to work one-on-one with new leaders at a time that may be more convenient for them, teaching one skills session at a time if necessary. The mentoring program can also be used to train all adult leaders of the same unit at one time, perhaps on a weekly basis that they all can schedule.

If this program is taught in modular units, be sure that appropriate records are maintained to ensure **all** participants are checked off for each item learned, until the checklist is completed.

AREAS OF FOCUS

Be aware that Introduction to Outdoor Leader Skills focuses on outdoor camping skills and does not cover all advancement requirements. The program does not encompass practical swimming skills, although it does briefly address Safe Swim Defense and Safety Afloat. These procedures should be covered in more detail separate and apart from this program by certified and/or professionally trained instructors as authorized or approved by the BSA.

In addition, unit leaders and troop committees are responsible for encouraging positive citizenship and physical fitness habits. In all cases, the *Boy Scout Handbook,* 11th edition, serves as the primary resource for the Introduction to Outdoor Leader Skills training.

Training Techniques

Every Scout needs and deserves trained leaders. Leaders should understand their responsibilities, the aims of the program, and how to deliver it with enthusiasm and fun. In short, a Scout's participation in the program should have a positive influence on his life. Introduction to Outdoor Leader Skills training helps leaders gain confidence in their ability—through hands-on, practical application of skills and proven methods—of influencing growth in positive ways to achieve the purposes of the Boy Scouts of America. As leaders help their Scouts grow physically, mentally, emotionally, and morally, they gain satisfaction in knowing their efforts are truly worthwhile.

The program structures participation much like a Boy Scout troop. From the buddy system (as explained in the *Boy Scout Handbook*) to the patrol method, the course uses familiar techniques to help convey the fun and fellowship of Scouting, the knowledge leaders need to fulfill their roles successfully, and to reinforce safety issues. Scouters delight in sharing their personal experiences, and each individual benefits from the interaction and group enthusiasm. Leaders feel reassured knowing that others have the same interests, needs, and concerns in delivering the best possible Scouting program to their units.

Leaders and trainers alike should understand that "training" is a process that will continue as long as you are active in Scouting. Trainers should also be aware that adult learning takes place from experience. Adults learn when there is a need to learn and when they see that there is an application to their learning effort. A leader's motivation for learning stems from wanting to become good enough with "hands-on" practice to teach and set an example for Scouts.

This program works best when implemented by having participants pair off with a buddy to do each skill. Since skills training involves, among other things, memorization, the buddy system allows you to teach (with sufficient instructors to ensure learning and participation) and have each participant practice the task with enough repetition to learn the skill well. Adults have a fear of failure, so working with a buddy teaches with positive reinforcement and helps eliminate the possibility of nonparticipation or embarrassment in a large group.

The focus on learning by doing makes the buddy system approach the key difference between this course and merely showing how to accomplish a skill. **Each participant must be able to complete and check each item from a task list, just like a Scout does.** It eliminates superficial participation and truly builds confidence in leaders through accomplishment. Leaders should also encourage this method when instructing in their own units—let the Scouts work and learn together.

Course Structure

Depending on the expected number of participants, this course can be conducted by the council, district, multiple districts, or a group of experienced Scout leaders. Participants pair up with a "buddy" who may or may not be from the same troop. Four buddy pairs form a patrol for the course.

Participating troop leadership should include the Scoutmaster, all assistant Scoutmasters, interested troop committee members, and new adult leaders from Webelos graduation and round-ups. Enlist one instructor for every four to eight participants, ensuring that each participant has a hands-on, small-group experience and actually learns how to accomplish the skill.

The delivery of this course is flexible enough to be offered as needed to new leaders who join existing units, and for newly organized troops on a regularly scheduled, year-round basis.

Comments and questions regarding Introduction to Outdoor Leader Skills are welcome and should be addressed to:

Director, Boy Scout Training
1325 West Walnut Hill Lane
P.O. Box 152079
Irving, TX 75015-2079

Course Organization

Weekend Program Schedule

This schedule encompasses a three-day weekend, beginning Friday evening, all day Saturday, and Sunday until 2:30 P.M. The participant schedule is as follows:

Friday Evening

6:00–7:00 P.M.	Participants arrive; orientation and check-in
7:15–7:45 P.M.	Staff introductions Explain the patrol method Conduct the opening flag ceremony Review how to display, raise, lower, and fold the U.S. flag.
7:45–9:00 P.M.	**Campsite Selection** Conduct a demonstration on how to set up camp, pitch a tent, make a camp bed.
9:00–9:30 P.M.	**Leave No Trace**
9:30–10:00 P.M.	Cracker barrel

Saturday

7:00–8:00 A.M.	Breakfast at campsites
8:00–9:30 A.M.	**Ropes—Whipping, Tying, and Lashing**

9:30–10:30 A.M.	**Woods Tools—Knife, Camp Saw, and Ax**
10:30–11:30 A.M.	**Fire Site Preparation and Building**
11:30 A.M.–12:30 P.M.	**Cooking**
12:30–1:00 P.M.	Lunch from cooking demonstrations
1:00–3:00 P.M.	**First Aid**
3:00–4:00 P.M.	**Plant Identification**
4:00–5:00 P.M.	**Animal Identification**
5:00–6:30 P.M.	Dinner at campsites
6:30–8:30 P.M.	Individual coaching on areas of interest or concern
8:30–9:30 P.M.	Campfire program
9:30–10:00 P.M.	Cracker barrel

Sunday

7:00–8:30 A.M.	Breakfast at campsites
8:30–9:00 A.M.	Interfaith worship
9:15–10:30 A.M.	**Packing and Hiking Techniques**
10:30 A.M.–noon	**Finding Your Way—Map and Compass Reading**
Noon–1:30 P.M.	Trail lunch
1:30–2:00 P.M.	Break camp, clean up
2:00–2:30 P.M.	Closing assembly

Schedule for Two One-Day Programs

This schedule divides the sessions into two one-day programs, preferably on Saturdays. The sessions may be conducted on two consecutive weekends or split to accommodate the council or district's calendar.

First Saturday

8:00 A.M.	Participants arrive; orientation and check-in
8:15–8:45 A.M.	Staff introductions Explain the patrol method Conduct the opening flag ceremony Review how to display, raise, lower, and fold the U.S. flag.
8:45–10:00 A.M.	**Campsite Selection** Conduct a demonstration on how to set up camp, pitch a tent, make a camp bed.
10:00–11:30 A.M.	**Ropes—Whipping, Tying, and Lashing**
11:30 A.M.–1:00 P.M.	Lunch
1:00–2:00 P.M.	**Woods Tools—Knife, Camp Saw, and Ax**
2:00–3:00 P.M.	**Fire Site Preparation and Building**
3:00–4:00 P.M.	**Cooking**
4:00–5:30 P.M.	Dinner from cooking demonstrations
5:30–6:00 P.M.	Campfire program
6:00–7:00 P.M.	Break camp, clean up

Second Saturday

8:00 A.M.	Participants check in and set up camp
9:00–10:30 A.M.	**Finding Your Way—Map and Compass Reading**
10:30–11:30 A.M.	**Plant Identification**
11:30 A.M.–12:30 P.M.	Trail lunch
12:30–1:30 P.M.	**Animal Identification**
1:30–2:00 P.M.	**Leave No Trace**

2:00–4:00 P.M.	**First Aid**
4:00–4:45 P.M.	Individual coaching on areas of interest or concern
4:45–6:00 P.M.	**Packing and Hiking Techniques**
6:00–7:00 P.M.	Dinner
7:00–7:45 P.M.	Break camp, clean up
7:45–8:15 P.M.	Closing assembly

Course Site Selection and Physical Arrangements

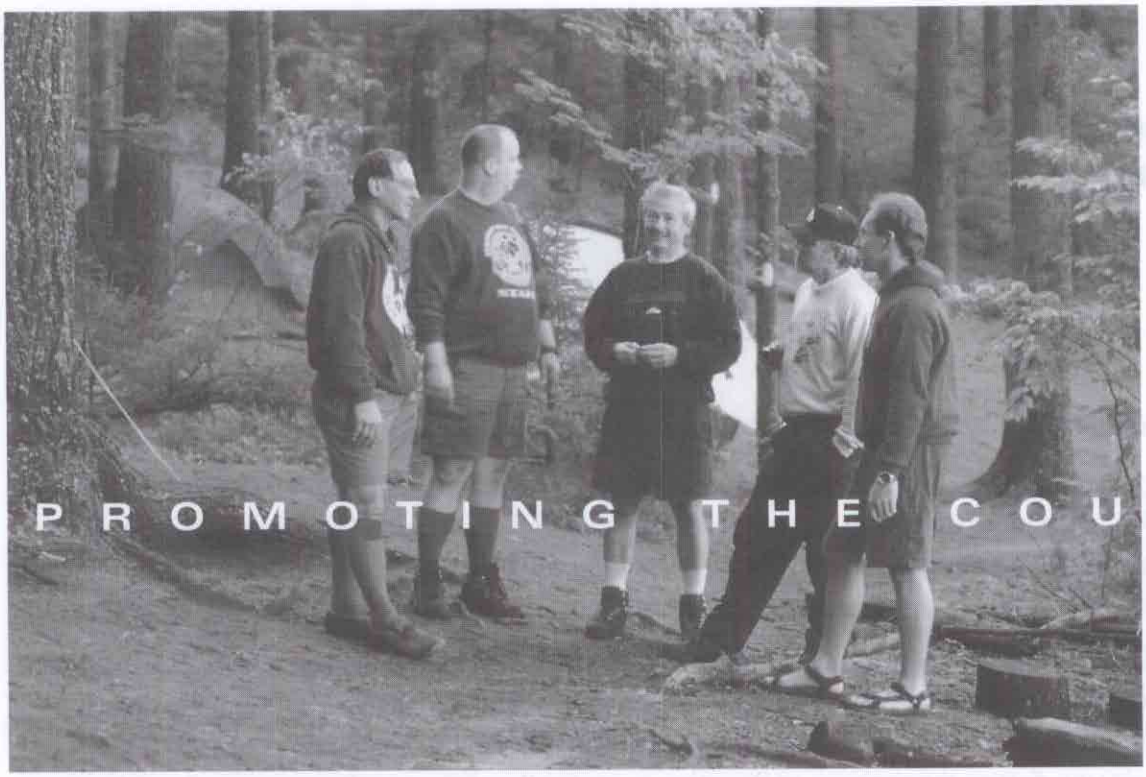
This course requires an outdoor area, which could be the council camp facilities, a short-term camp area; state, national, or municipal park; or similar area. The location should be central and convenient to all districts.

Depending on the number of participants, more than one instructor may teach the same skill at the same time in a nearby area. Thus, you will need the capability to "spread out" a bit so as not to interfere with other groups. The size of individual learning areas should accommodate one instructor for every four to eight participants. Each participant will practice the skill being taught in each training session. (Remember the buddy system, as participants will be paired.) Each eight participants will form a patrol for the day or weekend course.

Your course campsite should be approved for ground fires, as several of the cooking sessions require building and extinguishing wood-burning campfires. Picnic tables work well for demonstrations such as camp stoves, first aid, map reading, etc.

The weekend course requires additional outdoor area for overnight camping and a campfire program. In conducting the two-day course, do not move instruction areas inside to a classroom setting. This defeats the purpose of the course in teaching leaders to feel comfortable with their skills in the outdoors.

Other necessary site considerations include parking, refrigeration and storage area for foods, a source for adequate potable drinking water, first-aid station, and if possible, toilet and bathhouse facilities.



Promoting the Course

The Introduction to Outdoor Leader Skills training needs to target specific individuals to attend. This can be achieved by using the suggested letter and through personal contact. It is not enough to schedule a course and advertise it in your council newsletter.

Personal Letter to Participants

This is a suggested letter to be mailed to registered Scoutmasters, Boy Scout leaders, second-year Webelos leaders, troop committee members, as well as program and training committee chairs. This format can also be used as a flier to distribute at roundtables and other program events.

(BSA local council letterhead)

(Date)

TO: Scoutmasters, Boy Scout Leaders, and Troop Committee Members

The _____ Council invites you to participate in Introduction to Outdoor Leader Skills, a fun-filled program of hands-on skills training in the outdoors, designed to help you master basic camp skills required for Tenderfoot to First Class. This course will be at _____ Camp, located in _____(city), on _____(dates).

Instructors will help you learn how to set up camp, cook, work with woods tools and about ropes, first aid, planning campfire programs, map reading and compass skills, hiking and packing techniques, nature identification, and Leave No Trace. Each outdoor session will bring to life the pages of the *Boy Scout Handbook* to help you deliver the promise of Scouting to yourself and the youth you serve. It will increase your comfort level and give you confidence as a trained, skilled leader. The program will also give you the opportunity to work with other Scout leaders from your area, meet new friends, and reinforce skill techniques with fellow unit leaders.

We look forward to hearing from and working with you in this unique and exciting program. Please complete the registration form below, then clip and return it to the local council office by _____(date), along with your participation fee of $_____. We will send you a map to the location, gear list, and any other information you will need to join us—and please "pass the word" to other Boy Scout leaders. We don't want anyone to miss out on the fun!

Introduction to Outdoor Leader Skills
Participant Registration Form

Name _____ Unit _____

Address _____

City _____ State _____ Zip _____

Home phone _____ Work phone _____

Please return this form along with the $_____ participation fee to

_____
Local council

_____
Address

_____
City/state/zip

For additional information, call

_____
Name Home phone Work phone

Confirmation Letter to Registered Participants

This is a suggested follow-up letter to be mailed to registered participants 45 days prior to the course date. With this letter, return the What to Bring checklist, appropriate medical form, a map or directions to the course camp, and any other information you feel necessary.

(BSA local council letterhead)

(Date)

(Participant's name)
(Address)
(City, state, zip)

RE: Introduction to Outdoor Leader Skills Training

Dear (name):

This letter is to confirm receipt of your registration and participation fee for the upcoming Introduction to Outdoor Leader Skills course. We are so glad you will be joining us for a fun-filled _____ (weekend or day), and memorable outdoor learning experience.

Our _____ (weekend or day) at _____ Camp will begin at _____ (time) on _____ (day) and end at _____ (time) on _____ (day). Please make arrangements to attend the entire course during this time frame. Our schedule is full and you won't want to miss any of the activities.

We have enclosed a _____ (map or directions) to help you find your way to the course camp; please park at _____ (location) and check-in at _____ (location) when you arrive on _____ (day). You might want to check with other leaders from your area, encourage their attendance, and car-pool or trade days on transporting.

At the morning check-in, please turn in a completed BSA Personal Health and Medical Record—Class 1 form, No. 34414.

The attached What to Bring checklist covers the equipment you will need to bring to camp. If you do not personally own any of the items listed, you may want to contact other troop leaders or friends to borrow them for the _____ (weekend or day). While we want you to be comfortable, we want to ensure you make the most of this training without shouldering too many expenses.

In addition, please let us know if your have any physical limitations or special dietary or medical needs so we can be prepared before the course begins. The staff looks forward to working with you and seeing you there!

Yours in Scouting,

_____
(Name)

_____
(Person's title—training or course chair)

What to Bring

REFERENCE: *Boy Scout Handbook,* chapter 9, "Camping"

Overnight gear, outdoor essentials and appropriate clothing are the heart of camping equipment. Carry a light load of only what you need to keep yourself safe and make a good camp; leave all unnecessary items at home. Use lightweight backpacking tents for two only—no wall or large recreation types.

PERSONAL OVERNIGHT CAMPING GEAR

- ☐ *Boy Scout Handbook*
- ☐ **SCOUT OUTDOOR ESSENTIALS**
  - ☐ Pocketknife
  - ☐ First-aid kit
  - ☐ Extra clothing
  - ☐ Rain gear
  - ☐ Water bottle filled with potable water
  - ☐ Flashlight
  - ☐ Matches and fire starters
  - ☐ Sun protection
  - ☐ Map and compass
- ☐ Clothing for the season (warm-weather or cold-weather)
- ☐ Backpack
- ☐ Rain cover for backpack
- ☐ Sleeping bag, or two or three blankets
- ☐ Sleeping pad
- ☐ Ground cloth
- ☐ **EATING KIT**
  - ☐ Spoon
  - ☐ Plate
  - ☐ Bowl
  - ☐ Cup
- ☐ **CLEANUP KIT**
  - ☐ Soap
  - ☐ Toothbrush
  - ☐ Toothpaste
  - ☐ Dental floss
  - ☐ Comb
  - ☐ Wash cloth
  - ☐ Towel
- ☐ **PERSONAL EXTRAS (OPTIONAL)**
  - ☐ Watch
  - ☐ Camera and film
  - ☐ Notebook or paper
  - ☐ Pencil or pen
  - ☐ Sunglasses
  - ☐ Small musical instrument
  - ☐ Swimsuit
  - ☐ Gloves

PATROL OR GROUP OVERNIGHT CAMPING GEAR

The following items can be borrowed from your troop gear box or other leaders:

- ☐ Two-person backpacking tent with poles, stakes, ground cloths, and lines
- ☐ Dining fly
- ☐ Nylon cord, 50 feet
- ☐ **CLEANUP KIT**
  - ☐ Sponge or dishcloth
  - ☐ Biodegradable soap
  - ☐ Sanitizing rinse agent (bleach)
  - ☐ Scouring pads (no-soap type)
  - ☐ Plastic trash bags
  - ☐ Toilet paper in plastic bag
- ☐ **REPAIR KIT**
  - ☐ Thread
  - ☐ Needles
  - ☐ Safety pins
- ☐ **GROUP EXTRAS (OPTIONAL)**
  - ☐ Hot-pot tongs
  - ☐ Camp shovel
  - ☐ Water container, one 1-gallon or two ½-gallon collapsible, plastic
  - ☐ Washbasin
  - ☐ Grill
  - ☐ Pot rods
  - ☐ Patrol flag
  - ☐ Small U.S. flag
  - ☐ Sheathed ax
  - ☐ Camp saw

The Training Team

Selection

The Scout executive, council training committee, or team assigned to leadership training is responsible for selecting the chair, training team, and staff members for this course, and seeing that they are trained and that the course is planned and conducted effectively. If a multiple-district course is being planned, or a leader mentoring program established, they will likewise be accountable to the council and the same selection procedures.

The course chair is chosen first, then given the opportunity to assist in the selection and recruitment of staff members. The council should also select a professional staff adviser to help and serve as liaison to the course and its needs. The staff can include professional "guest" trainers as well as the council's most experienced and competent Boy Scout trainers. Recruit an adequate number of staff members so that no one trainer feels overloaded.

Every staff member should have a meaningful job and the ability to demonstrate several of the course skills. Skills presentations will be conducted in small patrols, and several staff members will teach the same skill at the same time. Based on the number of registered participants, recruit one instructor for each four to eight participants (two to four buddy pairs), ensuring each participant will have a hands-on experience and be observed actually accomplishing the skills presented.

The use of a course quartermaster is recommended, but optional. You may decide whether each instructor is individually responsible for the required materials, or the group may pool resources through the use of an assigned staff person to be quartermaster.

Responsibilities

A leader and the appropriate number of competent instructors will be assigned to each skills session. It is logical to select a staff member most experienced in a particular skill to work with other staff members during course development briefings to ensure there is adequate staff to guide and work with the small participant patrols.

Each staff member is to be given (mailed or presented) a copy of this *Introduction to Outdoor Leader Skills* manual prior to the first development briefing and asked to study it carefully, paying special attention to scheduling the course and training techniques. This plan will provide an understanding of the materials, references, how the schedule is to be presented, and how the skills sessions complement each other—giving a broad perspective of the course as a whole.

A variety of techniques are suggested. The primary resource is the *Boy Scout Handbook*. It is important that all staff members use the handbook in preparing appropriate gear, materials, and the proper techniques to set a good example. What the participants see, hear, and do while attending this course will be taken back to their units and duplicated by them, to the best of their abilities, in their unit campouts. It is essential that this course set a top-quality example. Staff members should not use short cuts or poor presentation techniques that will ultimately surface in the quality of training that unit leaders give Scouts.

Staff Briefings and Schedule

In reviewing the work schedule on page 23, note that three staff briefings are shown as an important part of the overall course schedule. These briefings shall be held for the purpose of understanding the session contents, time frames, training assignments, skills practice, securing appropriate gear, gathering training aids and handouts, preparing displays, timing demonstrations and coming together as a training team. The briefings can be held on weeknights or weekends and should last one to two hours each, with the flexibility to schedule more time if needed.

The first two briefings can be held indoors at a church, school, assembly hall, etc. The third briefing (and final briefing before the course) should be held at the course campsite for a walk-through. This gives each staff member a chance to become familiar with the layout, campsites, eating areas, facilities, parking, etc. The final staff briefing could also be held at camp on the Friday afternoon of the course, before the participants arrive at 6:00 P.M. The preparedness by staff members will indicate if additional briefing times are necessary.

The course chair, **all** staff members, and the professional adviser should attend **all three** briefings. This is a reasonable number of briefings, and each one will be used to help prepare for different aspects of the training course. The material in this manual is not intended to be read to participants. Instructors cannot "wing it" on-site; staff members must understand their assignments and practice them in advance. The following is a suggested staff briefing work schedule to be initiated and led by the course chair.

First Staff Briefing (Three to four months prior to course)

1. Individually, have staff members introduce themselves, sharing information such as the district they come from, their current registered Scouting position, and their special skills.
2. The chair introduces the professional adviser.
3. The group reviews the course manual, which should be read prior to this briefing), with attention given to this training plan, concept, and course schedule.
4. Make preliminary assignments such as session skill leader, based on experience, conversations during recruitment, or professional recommendations. Assign the leaders skills to review with staff members at upcoming briefings, and materials they will need. (Coordinate materials with the quartermaster, if you are using one). Review course gear list and equipment staff will furnish (coordinate with quartermaster).
5. Distribute copies of promotional materials, participant recruitment letter, registration confirmation letter, and the registration and Personal Health and Medical Record forms.
6. Discuss the importance of promoting this course at roundtables. Make it clear that building attendance is everyone's responsibility. Remind staff of roundtable recruitment and participant promotions—sign them up! Ask staff members for a personal attendance objective they would like to achieve.
7. Review the requirements for wearing the official Boy Scout staff field uniform to training sessions, to set the appropriate example.
8. Discuss other business appropriate to your course and schedule.

Second Staff Briefing (Two months prior to course)

1. Leaders for skill sections review materials with staff members—hands-on—to assure skill understanding and ability to demonstrate to participants.
2. Establish a "back-up leaders" list for skills session assignments—input from "leaders."
3. Remind staff of roundtable recruitment and participant promotions—sign them up! Ask how many individuals each staff member has recruited.
4. Other business as is appropriate to your course and schedule.
5. Finalize all staff skill assignments, as well as greeters, registration, opening flag ceremony, interfaith worship, campfire program, participant campsite set-up demonstrations, and confirm the back-up leaders list.

Final Staff Briefing (Two weeks prior to course)

This briefing can be held at the course campsite for a walk-through, as previously mentioned.

1. Distribute copies of final course schedule of training assignments, map of area with layout of course, parking, etc.—cover any and all details as related to your course location and number of participants registered and/or anticipated.

2. Chair will finalize with quartermaster or appropriate persons assigned, all gear and equipment requirements. Determine where all materials and equipment are located, who will purchase food, who will prepare handouts, who is bringing what, when, where, and how, any and all course materials and supplies needed.
3. Review with the professional adviser any funds required to purchase supplies—so purchase orders can be submitted to the council office for approval and issue of same.
4. Review official Boy Scout staff field uniform requirements for training sessions, to set the appropriate example.
5. With the professional adviser, coordinate funds issued to persons purchasing food or course materials; all money should be accounted for by return of receipts to the adviser.
6. Review attendance, develop action plan to help build further attendance.
7. Chair or assigned staff person will follow-up on any course campsite items as noted in the walk-through, i.e., cleanliness of area, picnic tables moved if needed, etc.
8. Chair or assigned "registration" staff person will coordinate with professional adviser a final participant count and contingency plans for walk-ins (which will require an official receipt book).
9. Other follow-up as is appropriate to your course and schedule.

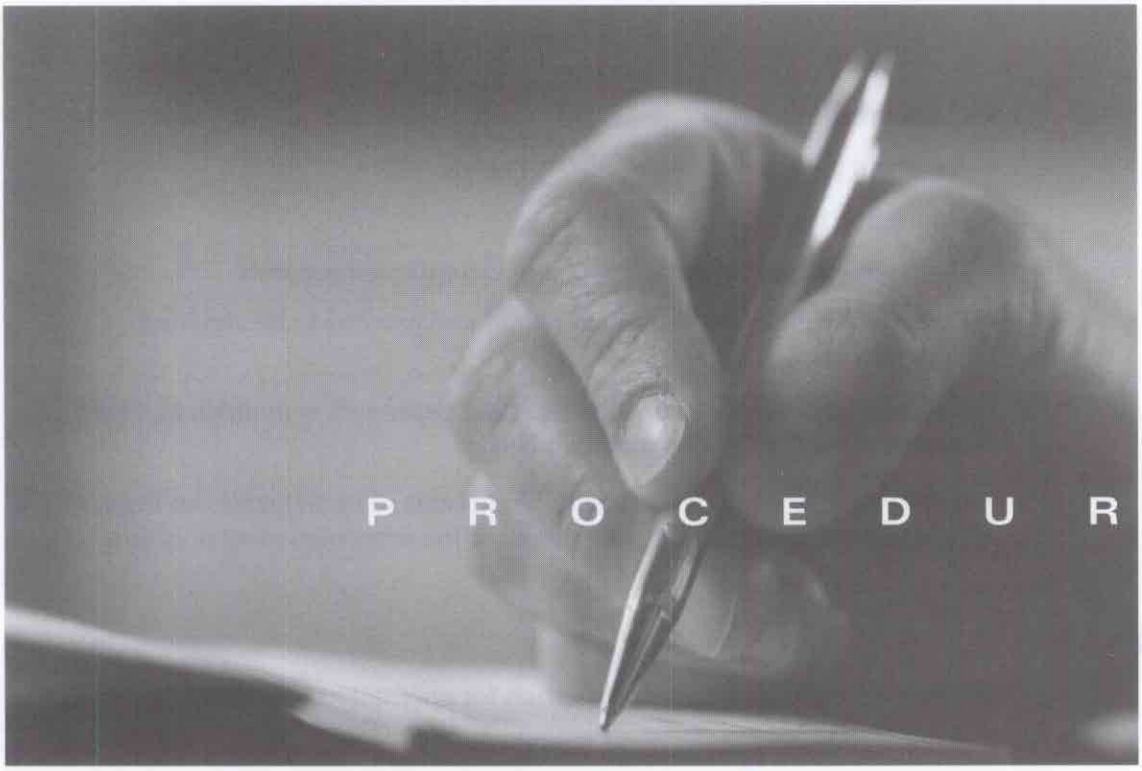
Day of the Course

1. If conducting the weekend course—which begins Friday evening—it is advisable for the staff members to be at the course campsite that day, no later than noon (bringing a bag lunch) to help set-up registration and skills areas. These areas would include the opening flag ceremony, camp making demonstration area, evening cracker barrel area and any areas to prepare for the remainder of the weekend such as the Saturday night campfire program, etc., based on the schedule. This is the time period to be sure all areas are in order and everyone is prepared!
2. Call a uniform check early in the day to be sure everyone is properly outfitted.
3. Final coordination with quartermaster or those assigned to prepare the evening cracker barrel—is everything ready?
4. Most importantly, remind staff members about the purpose of this course. They should convey to the participants an attitude of *"I will teach you, show you, work with you, and help you be successful in mastering the skill"* so the leaders *"can do it, will do it, and will help the Scouts do it and have fun doing it."* This course can be one of the best training experiences in a leader's life—if the staff makes it so!

Introduction to Outdoor Leader Skills

Work Schedule

COMPLETE DAYS PRIOR	ACTION TO BE TAKEN	MONTH AND DAY OF START	ASSIGNED TO	DATE COMPLETED
365	Set course date(s) and location(s).			
300	Hold leadership training committee meeting.			
270	Recruit course chair.			
235	Identify potential staff members and clear the individuals through the Scout executive and/or council training committee.			
180	Recruit training team and staff members—per approved names.			
160	Prepare and submit budget for approval.			
120	Distribute course manual to staff members for review.			
100	First staff briefing; make assignments.			
100	Mail promotional and registration bulletin.			
90	Publish first promotional article in council newsletter.			
60	Second staff briefing.			
60	Start promotion at roundtables.			
60	Start promotional telephone calls.			
60	Second promotional article appears in council newsletter.			
60	Promote at roundtables.			
50	Order all materials and supplies.			
45	Mail follow-up promotion.			
30	Promote at roundtables.			
30	Third promotional article appears in council newsletter.			
14	Registration deadline, reconfirm food preorders and supply count.			
14	Third (final) staff briefing with detailed schedule.			
1	All staff members arrive at course site.			
0	Introduction to Outdoor Leader Skills training.			
5	Thank-you letters sent to all staff members.			
5	Submit Training Attendance reports.			
15	Make final report.			
15	Write thank-you article for council newsletter.			



Check-In, Registration, and Orientation Procedures

The council office should handle all course registrations so monies and lists can be maintained and updated as fees are paid. At each staff briefing, the professional course adviser should report the number of registered participants, status of promotional mailings, and should encourage staff members to attend roundtables and other functions to promote participant recruitment.

This manual contains a suggested registration letter and form to send to potential participants. It should be edited accordingly, to your area. Remind participants that they will need to bring with them the registration form and a completed BSA Personal Health and Medical Record—Class 1, No. 34414 (the Class 1 Personal Health and Medical History portion of this form).

As registrations are received, a follow-up letter to the participant should be sent within one week, along with a copy of the What to Bring checklist and any other information you deem appropriate to send in advance of the course and to confirm receipt of individual fees.

On the first day of the weekend course and each day of the two-day course, staff "greeters" should be stationed in the parking areas to direct participants to registration and check-in areas.

Check-In and Registration

On the first day of the course, the assigned registration staff members, along with the professional adviser, will be stationed (preferably at a table) to check in registered participants from the council list. They will

- Collect any outstanding fees
- Issue official BSA receipts

- Collect medical forms
- Ask about any special diet or medical needs
- Issue name tags
- Hand out course materials, maps, and campsite assignments
- Direct participants to "drop their packs" and proceed to the opening ceremony area.

Make participants feel welcome, assure their paperwork is in order, and help them feel comfortable with staff members.

You may want to set up refreshments in this area so participants can begin to mingle and get to know one another before the scheduled program starts.

Materials

Be prepared with the following materials for orientation and check-in.

- Council prepaid and registered list
- Walk-in forms
- Official receipt book
- Name tags
- Pencils

Orientation

Use the orientation period to

- Introduce staff members and briefly share their background to help validate their credentials and qualifications.
- If time permits and there aren't too many of them, have participants quickly introduce themselves.
- Clarify the purpose of the Introduction to Outdoor Leader Skills course.
- Dispel any fears or misunderstandings and answer questions about this training session and materials that will be used.
- Explain the patrol method and how it applies to this training course.
- Introduce and review the principles of Leave No Trace, and explain its role in the Boy Scout outdoors program as stated in the *Boy Scout Handbook,* chapter 9.

Following the welcome and introductions, acquaint patrol members with one another. Then direct the participants to the opening flag ceremony and session on the proper handling of the United States flag.

Program Events

These campwide events address other elements intrinsic to a Boy Scout camping experience. The events recognize our duty to God and country and provide opportunities for fellowship.

Opening Flag Ceremony

Time Frame

20 minutes

Materials

- U.S. flag, at least one for every eight participants
- Flag pole
- Rope for the flag line

The group will need a designated area to conduct the opening flag ceremony.

Resources

- *Boy Scout Handbook*—chapter 3, "Tenderfoot Scout"
- *Your Flag*

Goals

By the end of this session, participants will be able to

- Properly display, raise, lower, and fold the U.S. flag.
- Demonstrate how flag ceremonies should be conducted at Scouting events.
- Communicate to Scouts an awareness of and the importance of maintaining and preserving respect for the U.S. flag.
- Feel confident and comfortable when handling the U.S. flag.

Participants should take turns raising, lowering, and folding the U.S. flag using the flagpole area established by the instructors. Later in the course, during the session on ropes, participants can practice lashing four Scout staves together to create a temporary campsite flagpole.

About Our Flag

Our U.S. flag represents our people, our land, and our many ways of life. By handling and displaying it correctly, we learn how to respect the flag and the ideals it represents. Some basic rules help ensure that the United States flag will always be displayed in an orderly and respectful manner.

The U.S. flag can be flown every day. If it is made of weather-resistant material, it can be flown in any conditions. A flag is usually flown from sunrise to sunset, but it should be flown on all national and state holidays, and on other days as proclaimed by the president. Take pride in your country by flying the flag at full-staff. Hoist it briskly and lower it slowly. Always treat it with respect.

IT TAKES TWO PEOPLE TO RAISE THE FLAG. One person holds the folded flag and prevents it from touching the ground. The other person attaches the flag to the flag line (or *halyard*) and raises the flag briskly, keeping the line tight. Once the flag leaves the arms of the first person and flows freely, that person should step back and salute the flag as the other person ties the halyard to the flagpole.

IT TAKES TWO PEOPLE TO LOWER THE FLAG. One person unfastens the halyard from the pole and slowly lowers the flag while the other person salutes. When the flag is within reach, the saluter gathers the flag without letting it touch the ground. The first person removes the flag from the halyard and secures the halyard to the pole.

FOLDING THE FLAG TAKES TWO PEOPLE AS WELL. The two begin by folding the flag in half lengthwise and then again in half lengthwise, keeping the blue field on the outside. Then, while one person holds the flag by the blue field, the other makes a triangular fold in the opposite (striped) end and continues folding in triangles until nothing shows but the blue field. Secure the end by tucking it into the other folds. When stored, always keep the flag folded in this manner.

Let participants practice folding the extra flags.

Interfaith Worship

Time Frame

30 minutes

Resources

The *Boy Scout Handbook,* chapter 3, states, "The Boy Scouts of America maintains that no boy can grow into the best kind of citizen without recognizing his obligation to God." The *Scoutmaster Handbook* (chapter 11, "Working With Boys") further explains a Scout's duty to God.

Goals

By the end of this session, participants will be able to

- Explain the importance of religious principle as addressed in the Scout Oath or Promise and Scout Law and the application for membership.
- Strongly emphasize the spiritual ideals of Scouting.
- Discuss the importance of respecting the religious obligations of others.
- Explain the commitments implied through duty to God, reverence toward God, fulfillment of religious duties, and respect for the beliefs of others.
- Describe the firm requirements of some faiths regarding observance of the Sabbath.
- Make provisions for four major faiths—Protestant, Catholic, Jewish, and Mormon—and make other appropriate arrangements based on needs of the local area.
- Show through spirit, example, and program presentation, the development of spiritual values.
- Tell why religious instruction is the responsibility of the parents and religious institution to which the member belongs.
- Plan religious services that reflect an interfaith worship different from a "non-denominational" service—which usually means Protestant and is unsuitable for many faiths, including non-Christians.
- Present a suitable grace at mealtimes.

A Scout's Duty to God

At an appropriate time in the course, discuss the differences among faiths between Sabbaths. In advance, discuss with participants your ability to meet their needs.

SCOUT OATH OR PROMISE

On my honor I will do my best to do my duty to God and my country and to obey the Scout Law; to help other people at all times; to keep myself physically strong, mentally awake, and morally straight.

SCOUT LAW

A Scout is trustworthy, loyal, helpful, friendly, courteous, kind, obedient, cheerful, thrifty, brave, clean, and reverent.

GIVE THANKS

Before every meal, take a moment to share your thanks for the food you have been given, the experiences you are having, and the joy of being with friends. The grace used at Philmont Scout Ranch expresses that gratitude simply.

PHILMONT GRACE

For food, for raiment,
For life, for opportunity,
For friendship and fellowship,
We thank Thee, O Lord.
Amen.

Campfire Program

Time Frame

45 minutes

Materials

- Campfire Program Planner, one sheet per participant
- *Troop Program Resources*

Resources

Group participation area, with or without an actual ground fire; observe Leave No Trace principles (Artificial campfires can be used to conduct indoor or foul-weather programs.)

Goals

By the end of this session, participants will be able to

- Set, by example, a campfire program without formal instruction.
- Utilize the campfire program to promote fun and bonding through mutual interest and enjoyment.
- Create a lively and entertaining program for the outdoors.
- Teach Scouts how to conduct their own campfire programs, with or without leader participation.

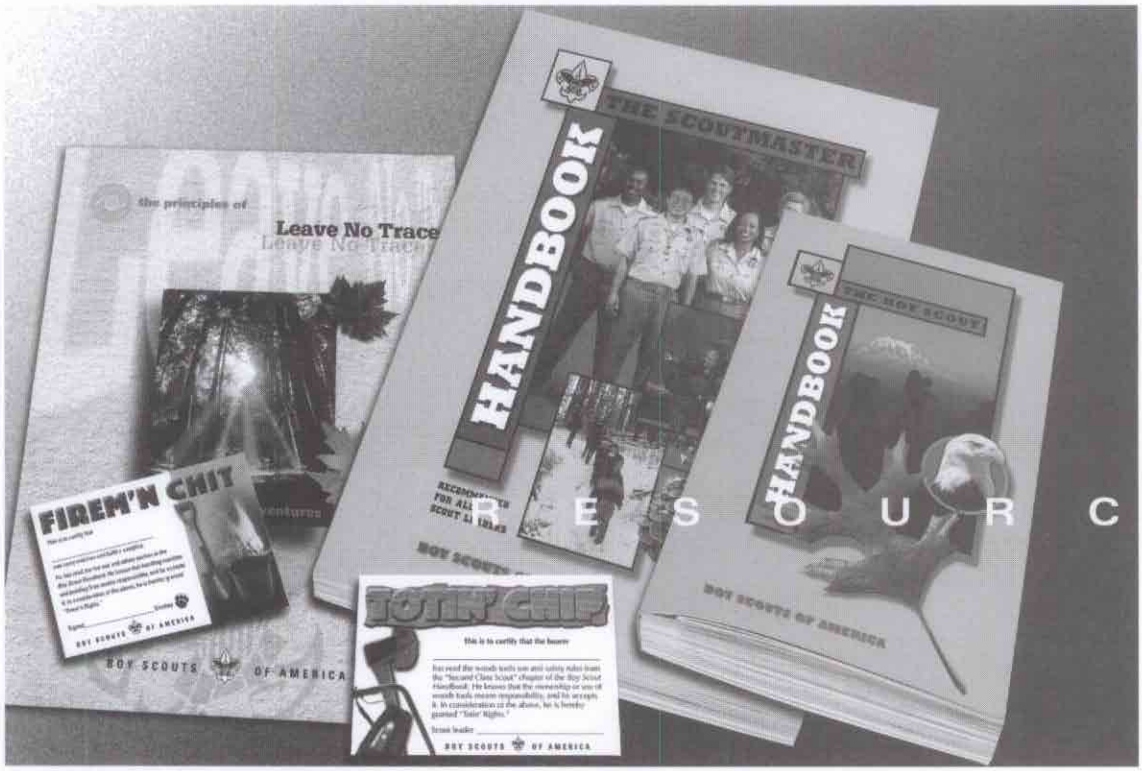
During the weekend program, conduct the campfire program after dinner the second night of the course—no more than 30 minutes long to allow time for participants to return to their campsites for cracker barrel and to retire at a reasonable hour.

During the two-day course, conduct the campfire program after dinner on the first program day—no more that 30 minutes long to allow time for participants to prepare for departure.

Planning Your Campfire Program

This session is designed to set a pattern for a shared, enjoyable experience in which everyone participates. Staff members should contribute by teaching a song, leading a cheer or clap, demonstrating a campfire game, performing a skit, or telling a short story. The program should have a proper balance and move smoothly from one type of activity to another.

The participants should regard the campfire as an opportunity to build spirit and morale. Make the program short and lively, no more than 30 minutes.



Scouting Resources for the Course

Primary Resources

Boy Scout Handbook, No. 33105

Guide to Safe Scouting, No. 34416A

Scoutmaster Handbook, No. 33009

Secondary Resources

Camp Cookery for Small Groups, No. 33592A

Firem'n Chit pocket certificate, No. 34236B

Outdoor Code pocket card, No. 33428A

Outdoor Code poster, No. 33689A

Plant and animal identification guides for your area

Principles of Leave No Trace, No. 21-105

Safe Swim Defense pocket card, No. 34243

Safety Afloat, No. 34242A

Totin' Chip pocket certificate, No. 34234B

Troop Program Features, Volume I, No. 33310

Troop Program Features, Volume II, No. 33311

Troop Program Features, Volume III, No. 33312

Troop Program Resources, No. 33588

Your Flag, No. 33188

Gear and Quartermaster Equipment Provided by the Course

Staff members and participants of this training course will provide their personal gear as stated on the What to Bring checklist (see page 16). The following lists suggest supplies for course session demonstrations and use in patrol campsites. The quantity or amount of each item will depend on the number of participants and the needs of the trainers. Individual staff members may want to use additional personal equipment during their session presentations.

General Supplies

- ☐ Lanterns, one per patrol
- ☐ Cooler or large beverage containers, at least one per patrol
- ☐ Coolers for food storage, at least one per patrol
- ☐ Resealable bags for storage, a quantity for each patrol
- ☐ Coffee pot, one per patrol
- ☐ Food for participants and staff members
- ☐ Backpacking stove and fuel, 1 for each group of 4 participants
- ☐ Cook kit to fit stoves, 4-quart maximum
- ☐ Program literature and information per the Scouting Resources for the Course list
- ☐ Garbage cans with covers
- ☐ Heavy duty trash bags
- ☐ Paper towels
- ☐ Toilet paper
- ☐ Binder twine

Registration and Orientation

- ☐ Roster of participants
- ☐ BSA receipt book
- ☐ Notebook paper and pencils
- ☐ Name tags
- ☐ U.S. flag, flagpole
- ☐ Program for interfaith worship

Skills Session: Campsite Selection

Time Frame

1 hour 15 minutes

Materials

- Campsites area where a campsite can be set up
- Tents, one per participant (Provided by the participant)
- Extra tent stakes

Resources

- *Boy Scout Handbook*—chapter 9, "Camping"
- *Guide to Safe Scouting*

Goals

By the end of this session, participants will be able to

- Train Scouts in selecting, establishing, maintaining, and breaking down campsites with consideration for patrol safety, preventing damage to equipment, and minimizing harm to the environment.
- Pitch a tent.

Assignments

- Spend at least one night on a patrol or troop campout. Sleep in a tent you have helped pitch. T2
- On one of these campouts, select your patrol site and sleep in a tent that you have pitched. S2b

Before You Begin

While safety considerations and Leave No Trace principles need to be addressed immediately, campsite selection as a class should be taught after participants have had the opportunity to pick their sites. Reinforce the information covered in this session by exposing them to both good and undesirable campsites.

The skills session on Leave No Trace contains additional information helpful to this lesson. Leave No Trace will help reinforce the practices taught in this lesson.

Lesson Plan: Campsite Selection

Selecting a Campsite

Choosing the right campsite can make or break your outdoor experience. A good site offers plenty to see and do while allowing you to practice no-trace camping skills. Planning ahead, knowing how to behave in the outdoors, and being respectful of other visitors all play a part in ensuring a safe and unforgettable outdoor adventure.

CAMP SMART

Responsible campers know that

- Tents will mat down vegetation and deprive it of water, air, and sunlight.
- Walking to and from pathways in and around camp will trample vegetation and form unwanted pathways.
- Heavy foot traffic in the same area will compact the soil, making it difficult for new plants to take root.
- They should bypass places that might not withstand the impact of camping and hiking.

Campsite Guidelines

Consider these issues when selecting your campsite.

- **ENVIRONMENTAL IMPACT.** Use established campsites whenever you can.
- **SAFETY.** Avoid dead trees and limbs. Be weather-wise.
- **SIZE.** Comply with area regulations on group size, and choose a site that's large enough to accommodate the group.
- **WATER.** Be sure the group has a safe and sufficient supply of water.
- **TERRAIN.** Consider drainage, natural cover, and sunlight *before* setting up camp.

- **STOVES AND CAMPFIRES.** Use lightweight camp stoves whenever possible. If a fire must be made for cooking, use existing fire rings where possible.
- **PRIVACY.** Respect the privacy and solitude of other visitors.
- **PERMISSION.** When camping on private property, get permission in advance from landowners or from land managers when using public lands. Secure the proper permits.

Activities

1. Let the participant patrol select its campsite, and have patrol members critique the site they have chosen.
2. Have patrols set up their own campsite, pitch their tents, and establish a cooking area.
3. Just before leaving, walk the patrols through their campsite. Evaluate how well the site was camouflaged and what improvements, if any, could be made.

Skills Session: Ropes—Whipping, Tying, and Lashing

Time Frame

1 hour 30 minutes

Materials

- Hemp or sisal rope
- Nylon or plastic rope
- Whipping cord
- Matches and candles
- Staves, one per participant
- Deadfall branches

Resources

Boy Scout Handbook—chapter 3, "Tenderfoot Scout"; chapter 5, "First Class Scout"; chapter 9, "Camping"

Goals

By the end of this session, participants will be able to

- Whip and fuse rope.

- Tie two half hitches and the taut-line hitch, and demonstrate how these knots are used for pitching a tent.
- Tie the timber hitch and clove hitch
- Demonstrate the square, shear, diagonal, tripod, round, and floor lashings, and explain the appropriate and inappropriate uses for these lashings.
- Use the timber hitch and clove hitch to join two or more poles or staves together.
- Use lashing to make a useful camp gadget.
- Tie the bowline knot and tell how it can be used.

Assignments

- Demonstrate how to whip and fuse the ends of a rope. T4a
- Demonstrate that you know how to tie the following knots and tell what their uses are: two half hitches and the taut-line hitch. T4b
- Discuss when you should and should not use lashings. F7a
- Demonstrate tying the timber hitch and clove hitch and their use in square, shear, and diagonal lashings by joining two or more poles or staves together. F7b
- Use lashing to make a useful camp gadget. F7c
- Demonstrate tying the bowline knot and describe several ways it can be used. F8a

Before You Begin

Conduct the skills session on ropes early in the course, while participants are "fresh," to help reinforce successful completion of these skills.

Lesson Plan: Ropes—Whipping, Tying, and Lashing

Rope Basics

Rope is made by twisting together the stringy fibers of certain plants, or by twisting together or weaving strands of nylon, plastic, or other modern materials. Wear and tear sometimes cause a rope to unravel. For a temporary fix, tie a knot in each end or wrap it with duct tape. For a more permanent fix, whip or fuse the ends.

WHIPPING

Give each participant a piece of rope that has started unraveling. To whip a rope:

1. Cut off any of the rope that has already unraveled.
2. Take a piece of strong string—preferably waxed and at least two feet long—and form a loop with it.
3. Lay the loop near the end of the rope and tightly wrap—*whip*—the string around the rope.

4. When the whipping is at least as wide as the rope is thick, slip the end through the loop and pull hard.
5. Trim off the excess string, then whip the rope's other end.

FUSING

Plastic or nylon rope and cord melt when exposed to high heat. To fuse a rope:

1. Cut away the frayed part of the rope.
2. Working in a well-ventilated area, hold each end a few inches above a lighted match or candle to melt and fuse the strands together.

Melted rope can be hot and sticky; *don't touch the end until it has cooled*. Do not try to fuse ropes made of manila, sisal, hemp, cotton, or other natural fibers, because they will burn rather than melt.

KNOTS AND HITCHES

Learning how to tie knots takes practice. Carry a piece of cord in your pocket and, several times a day, pull it out and tie the knots you have learned. Practice until you can tie them quickly—even with your eyes closed—and you'll be confident and ready to use them whenever necessary.

A knot should

- Be easy to tie.
- Stay tied.
- Be easy to untie.

A *hitch* is a knot that ties a rope to something. Friction caused by the wraps of the rope holds the hitch in place.

HITCHES, KNOTS, AND BENDS

- **TWO HALF HITCHES.** Use two half hitches to tie a rope around a post.
- **TAUT-LINE HITCH.** The taut-line hitch is tied on a line that is tight, or *taut*. Use the taut-line hitch to tighten or loosen a tent guyline by pushing the hitch up or down.

  When participants have learned the two half hitches and taut-line knots, remind them to check their tent set-ups at their campsite and retie any incorrect knots.
- **TIMBER HITCH.** Use the timber hitch for dragging heavy objects such as a log. The timber hitch starts a diagonal lashing, too. When dragging, use a steady motion; slacking and jerking may loosen the hitch.
- **CLOVE HITCH.** The clove hitch is a widely used knot and can be used to start most lashings. This is the knot for attaching a rope or cord to your bear bag—a bag of food hung from a tree, out of reach of animals. The clove hitch can also be tied by laying the knot over the open end of a pole. Drop one overhand and one underhand loop over the post and draw them together.

- **BOWLINE KNOT.** Properly tied, a bowline never slips or jams. It holds permanent or adjustable loops and may be used to attach a cord to a pack frame, secure tarps and tents, secure a line to a canoe, in rescue situations, and in many other ways.
- **SHEET BEND.** This knot works well for tying together two ropes of the same or different diameters. It's similar to the bowline, and it's untied in the same way.

LASHINGS

Lashings come in handy for binding together timbers or other structures.

- A table keeps food preparation off the ground.
- A tripod holds a washbasin.
- In a pinch, several pack frames lashed together form a stretcher.

Hiking staffs, or *staves*, are used as a lashing demonstration tool to emphasize Leave No Trace camping in not using or cutting live trees. Staves lashed together make excellent emergency stretchers and splints.

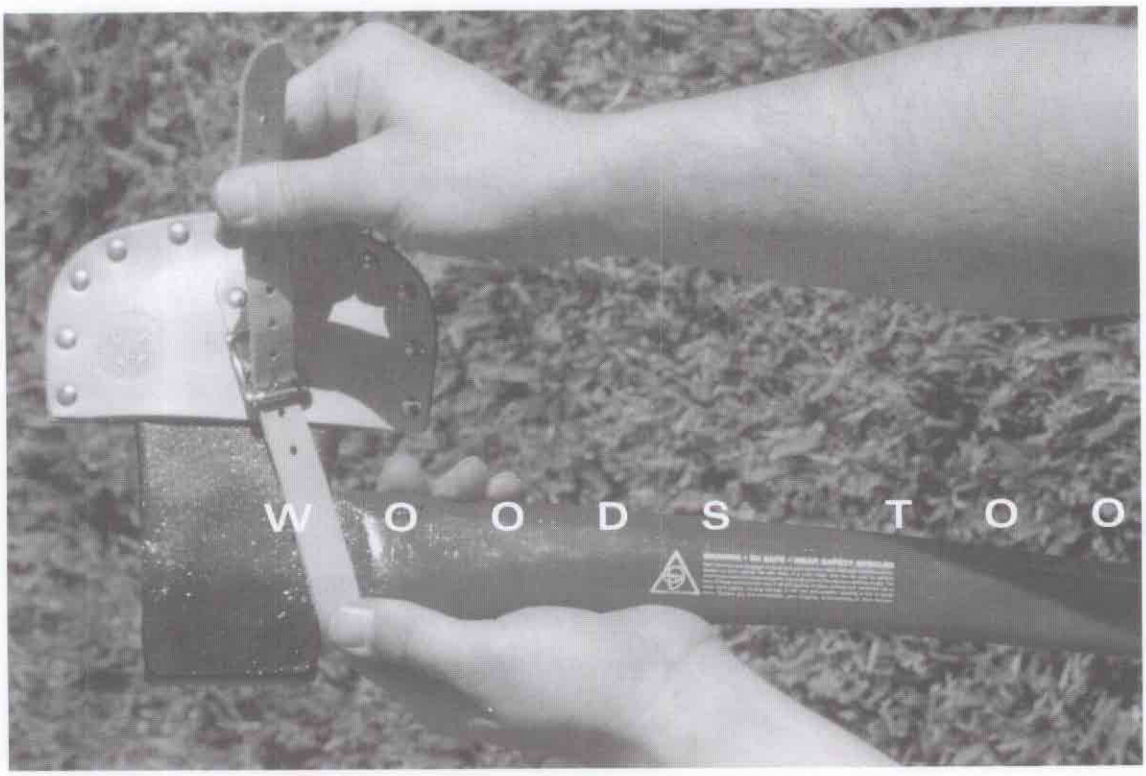
LASHINGS

- **SQUARE LASHING.** The square lashing binds together two poles that are at right angles, or *square,* with each other.
- **SHEAR LASHING.** Poles secured with a shear lashing can be raised as an A-frame.
- **DIAGONAL LASHING.** Use the diagonal lashing when it's necessary to bind two poles at an angle other than a right angle.
- **TRIPOD LASHING.** The tripod lashing resembles the shear lashing. It is used for making a tripod or joining together the first three poles of a tepee.
- **ROUND LASHING.** This lashing binds two poles side by side. Since there are no fraps in a round lashing, the wraps must do all the work. Pull them tight. Make a second round of lashing farther along the poles to keep them from twisting out of line.
- **FLOOR LASHING.** The floor lashing secures tabletops, the deck of a raft, the floor of a signal tower, or the walkway of a bridge.

Activities

1. After learning the timber hitch and clove hitch, and their use in square, shear, and diagonal lashings, use these new skills to join two or more poles or staves together.
2. Use lashing to make a useful camp gadget at the patrol campsite. Use only deadfall trees and branches when constructing camp gadgets.

Remember to obtain permission before building camp gadgets and other structures. Many backcountry areas prohibit such structures. Use only the materials that have been approved for the project and, if found, gathered with permission from the landowner or land manager. Take everything apart when you are done, and leave no trace that you were there.



Skills Session: Woods Tools—Knife, Camp Saw, and Ax

Time Frame

1 hour

Materials

There should be one of each of the following items for every two participants.

- Knife
- Ax
- Camp saw
- Sharpening stone
- Honing oil
- 8- or 10-inch mill bastard file
- Chopping blocks
- Ignition file

Resources

- *Boy Scout Handbook*—chapter 4, "Second Class Scout"
- Totin' Chip pocket certificate, No. 34234B

Goals

By the end of this session, participants will be able to

- Demonstrate the proper methods when using a pocketknife, camp saw, and ax.
- Properly care for and sharpen woods tools.
- Explain when woods tools should be used.
- Using the knife, saw, and ax properly, prepare tinder, kindling, and fuel for a cooking fire.

Assignments

- On one campout, demonstrate proper care, sharpening, and use of the knife, saw, and ax, and describe when they should be used. S2c
- Use the knife, saw, and ax to prepare tinder, kindling, and fuel for a cooking fire. S2d

Before You Begin

The Woods Tools session should take place before the session on fire building (when the woods tools will need to be used—preceding lunch).

Lesson Plan: Woods Tools—Knife, Camp Saw, and Ax

Woods Tools Know-How

Whether you are splitting firewood, repairing equipment, or clearing a trail, woods tools can make your work easier. Proper use and care of your pocketknife, camp saw, and ax will help ensure that these tools will be in tip-top shape whenever you need them.

You should also know how ***not*** to use them. Carving or chopping on live trees can kill them. Hacking at dead trees and logs can leave unsightly scars. Don't cut any trees without the permission of a landowner or land manager.

Pocketknife Tips

Use a pocketknife to cut rope or cord, open a can of food, whittle a tent stake, tighten a screw, make wood shavings for fire starter, trim a bandage. A good general knife has a can opener, screwdriver, and a blade or two for cutting.

NOTE: The Boy Scouts of America does not encourage the use of large sheath knives, which are heavy, awkward to carry, and unnecessary for most camp chores.

CLEANING. Keep your pocketknife clean. Open all the blades, then twirl a small bit of cloth onto the end of a toothpick, moisten the cloth with light oil, and wipe the inside of the knife. Wash any blade that has been exposed to food using hot, soapy water.

SHARPENING. Sharpen your knife with a whetstone (follow the manufacturer's instructions). Most knives can be sharpened as follows:

- Hold the blade against the stone at about a 30-degree angle. Tilt the blade off the stone about one-third of the way to vertical. (Some specialty knives may require a sharper angle to produce a keener edge.)
- Push the blade along the stone as though you were slicing layers off the top, or use a circular motion. Sharpen the other side of the blade in the same manner.
- Wipe the knife clean and examine the edge of the blade under a bright light. A dull edge reflects light and looks shiny; a sharp edge is so thin it has no shine at all.

USING A POCKETKNIFE SAFELY

Do

- Keep the blades closed except during use.
- Cut away from yourself.
- Close the blades before passing a knife to someone else.
- Keep fingers clear of the sharp edge as you open and close the blades.
- Keep your knife sharp and clean.

But

- **Don't** carry a knife with the blade open.
- **Don't** throw a knife.
- **Don't** cut toward yourself. If the blade slips, you could be injured.
- **Don't** strike a knife with another tool or pry with the point of a cutting blade.

Camp Saw Tips

The camp saw works well for most outdoor woodcutting. The blades of a *folding saw* close into their handles (like those of a pocketknife). The *bow saw* has a curved metal frame that holds its blades in place.

- When sawing a branch from a tree, first make an *undercut,* then saw from the top down.
- Keep folding saws closed when they aren't in use and store in a secure place.
- Protect the blade of a bow saw with a sheath when not in use.
- Replace dull blades, which make sawing hazardous. Take along a spare if you have to do a lot of cutting.

When cutting firewood:

- Brace the piece of wood against a solid support.
- Use long, smooth strokes.
- Let the weight of the saw pull the blade into the wood.

SAFE SAW USE

Do

- Sheathe a saw whenever it's not in use.
- Carry a saw with the blade turned away from your body.
- Replace dull blades. Sharp saws are easier to use and to control.
- Use care when passing a saw to another person.
- Wear gloves and protective eyewear when using a saw.

But

- **Don't** cut any trees—alive or dead—without permission.
- **Don't** allow the saw's blade to cut into the ground because soil and rocks will quickly dull the blade.
- **Don't** leave a saw lying around camp. Store it properly, out of harm's way.

Tips for Safely Using the Ax

The ax comes in handy for splitting firewood, clearing fallen trees, and trail work. The size and implementation of the ax makes it an especially dangerous woods tool. Follow these safety tips for safe ax use.

- **SAFE TOOL.** Keep your ax in top condition. Make sure your ax has a secure head and sharp blade; otherwise, don't use it.
- **SAFE SHOES.** Wear proper footwear to help protect your feet while using the ax.
- **SAFE WORKING AREA.** Rope off an ax yard large enough to work in, and enter this area only to chop and saw wood. Check for clearance, and select an area free of brush and branches. Be certain others stay at least 10 feet away while you are cutting. Clear the area of chips, bark, and debris when you are done.
- **SAFE TECHNIQUE.** Follow the proper techniques for *limbing* (chopping branches off a log) and *bucking* (cutting through a log). Learn how to swing the *bit* (cutting edge) into the log, split wood on a *chopping block* (piece of a log that provides a solid, flat surface), and how to use the *contact method* (placing the ax bit against the stick).
- **SAFE CARRYING.** Cover the blade with a sheath whenever it is not in use. Carry the ax at your side in one hand, with the blade turned away from your body. Never carry an ax on your shoulder—that will put the ax bit too close to your neck and head! If you stumble, toss the ax away from you as you fall.

- **SAFE HANDLING.** Hand an ax to someone by holding it vertically, with the handle facing up and ax head facing down. Pass it with the bit turned away from both of you. The passer should always wait until the receiver says "Thank you" and has a firm grip on the handle.
- **SAFE STORAGE.** Keep your ax sheathed when not in use. Store it safely out of the way, and keep it dry.

MORE AX SAFETY TIPS

- Use leather gloves for protection from splinters and to help prevent blisters.
- Wear safety goggles to keep flying debris from injuring your eyes.
- Keep your ax sharp using a sharp 8- or 10-inch-long *mill bastard file.* While using the file, protect your hands by wearing leather gloves and a *knuckle guard.*
- Remove the protective sheath only when you are ready to use the ax correctly.

Activity

During fire building and cooking preparation, let participants practice what they have learned about using woods tools.

Skills Session: Fire Site Preparation and Building

Time Frame

1 hour

Materials

Every patrol should have one each of the following items:

- Site suitable for building a fire
- Camp shovel
- Fuelwood
- Matches
- Plumbers' candles (fire starters)
- Cotton gloves
- Water
- Rake (optional, for demonstration purposes)
- Canvas or plastic pieces to protect fuelwood

Resources

- *Boy Scout Handbook*—chapter 4, "Second Class Scout"; chapter 10, "Cooking"
- *Guide to Safe Scouting*
- Firem'n Chit pocket certificate, No. 34236B

Goals

By the end of this session, participants will be able to

- Demonstrate the proper use, safety, maintenance, and care of backpacking stoves and fuel containers.
- List environmental and safety considerations in selecting a fire site and firewood, and the construction, use, and care of a campfire.
- Explain the function and rationale for using fires and whether a ground fire should be built or a backpacking stove should be used.
- Prepare and build a safe, functional, environmentally sound campfire.
- Explain the types and functions of common fire starting materials and demonstrate how to light a campfire.
- Explain how to start a fire during inclement weather.
- Demonstrate how to return the fire site to its natural state.

Assignments

- Discuss when it is appropriate to use a cooking fire and a lightweight stove. Discuss the safety procedures for using both. S2e
- Demonstrate how to light a fire and a lightweight stove. S2f

Before You Begin

Conduct this lesson after the Woods Tools skills session but before participants prepare their first cooked meal. Before starting, check and clear all fire-building regulations for the course area. Depending on the use of backpacking stoves, this session should also be supplemented during the Packing and Hiking Techniques skills session.

Recommend that staff members use the lecture and demonstration format, followed by hands-on practice for participants at a central location that has accessible fire sites.

Lesson Plan: Fire Site Preparation and Building

Campfire know-how requires attention to safety, environmental ethics, and other elements of responsibility. The *Boy Scout Handbook* provides greater detail about all aspects of fire site preparation and building.

Camp Stoves vs. Campfires

Many Scout units now use lightweight camp stoves on all their camping trips, especially with the shift toward low-impact camping and awareness of Leave No Trace principles. Every good Scout learns when it's more appropriate to use a lightweight stove than it is to build a cooking fire.

How to Build a Campfire

- **MAKE A SAFE FIRE SITE.** Make sure that nothing will burn except the fuel you feed the flames, the fire cannot spread, and use existing fire sites whenever possible.
- **BARE-GROUND FIRE SITE.** Protect the ground from the heat by building an earthen pad 2 feet square and 3 inches thick on the bare ground.
- **GATHER TINDER, KINDLING, AND FUELWOOD.** Key ingredients for a successful fire:
  - — Patience
  - — Tinder (dry pine needles, grasses, shredded bark, fluff from seed pods)
  - — Kindling (dead twigs no thicker than a pencil)
  - — Fuelwood (which can be as thin as your finger or as thick as your wrist)
- **LAY THE FIRE.** Arrange the tinder, kindling, and fuelwood so that the heat of a single match can start your campfire.
- **FIREPLACES.** The fireplace holds your cook pots in place above the flames and allows air to keep your fire burning. See the *Boy Scout Handbook* for surefire wet-weather fire tips.
- **PUTTING OUT A CAMPFIRE.** Extinguish a fire **cold out** when it is no longer needed—cold enough so that you can run your hands through the ashes.
- **CLEANING A FIRE SITE.** When the fire site has cooled, pick out and pack out any bits of paper, foil, and unburned food left. Leave No Trace.

How to Use Lightweight Stoves

Camp stoves make cooking fast and easy. There are many types to choose from, so remember to follow the manufacturer's instructions carefully and exactly.

PRACTICAL BENEFITS OF USING A CAMP STOVE

- They are easy to light in most weather conditions and work well in deserts, at high altitudes, and in deep forests.
- They are clean and quick to heat water and food.
- The heat can easily be adjusted for the type of cooking required.
- Stoves make cleanup easier and faster.
- They leave no marks on the land.
- Lack of firewood won't be a problem.
- Many areas do not permit campfires.

STOVE SAFETY RULES

Camp stoves don't come without their own set of guidelines. Closely follow the "Stove Safety Rules" listed in chapter 10, "Cooking," of the *Boy Scout Handbook*.

Activity

At a central location, have participants build a fire in their patrol, cook a meal for the course, and dine together. Concentrate on properly gathering and preparing tinder, kindling, and fuel for a cooking fire.

Skills Session: Cooking

Time Frame

1 hour

Materials

The materials listed below will be used for demonstration and hands-on learning.

- Good kitchen/cooking area
- Campfire and/or backpacking stove
- Stove-top oven and stabilizing tin
- Grill
- Griddle
- Fry pan or tote oven
- Dutch ovens
- Fuel for camp stove
- Cooking utensil kit
- Water jug or sack (for cooking and to extinguish fire)
- Personal mess kit (cup, bowl, spoon)
- Water bottle
- Cotton gloves
- Hot pot tongs

- Dishwashing pans or buckets
- Biodegradable detergent or bleach for dishwashing
- Storage bags for utensils and pots
- Storage bags or containers for food
- Bear bags

Resources

- *Boy Scout Handbook*—chapter 10, "Cooking"
- *Camp Cookery for Small Groups*

Goals

By the end of this session, participants will be able to

- Plan and budget a nutritious, well-balanced meal for one person and for a patrol.
- Cook a meal for one person and assist with planning, purchasing, and cooking a meal for a patrol.
- Establish a safe, well-organized kitchen and cooking area.
- Explain the importance of sterilizing utensils and cleaning kitchen gear.
- Demonstrate the procedures for cleanup.
- Demonstrate and explain the proper procedures for handling and storing perishable foods.
- Lead grace at a meal and feel comfortable doing so.

Assignments

- On a campout, assist in preparing and cooking one of your patrol's meals. Tell why it is important for each patrol member to share in meal preparation and cleanup, and explain the importance of eating together. T3
- On one campout, plan and cook over an open fire one hot breakfast or lunch for yourself, selecting foods from each group in the food pyramid. Explain the importance of good nutrition. Tell how to transport, store, and prepare the foods you selected. S2g
- Help plan a patrol menu for one campout—including one breakfast, lunch, and dinner—that requires cooking. Tell how the menu includes foods from each group in the food pyramid and meets nutritional needs. F4a
- Using the menu planned above, make a list showing the cost and food amounts needed to feed three or more boys and secure the ingredients. F4b

- Tell which pans, utensils, and other gear will be needed to cook and serve these meals. F4c
- Explain the procedures to follow in the safe handling and storage of fresh meats, dairy products, eggs, vegetables, and other perishable food products. Tell how to properly dispose of camp garbage, cans, plastic containers, and other rubbish. F4d
- On one campout, serve as your patrol's cook. Supervise your assistant(s) in using a stove or building a cooking fire. Prepare the breakfast, lunch, and dinner planned in the assignment above. Lead your patrol in saying grace at the meals and supervise cleanup. F4e

Before You Begin

Conduct this session after Fire Site Preparation and Building and just prior to preparing a meal. Recommend that staff members use the lecture and demonstration format in addition to discussion, followed by hands-on practice for participants at a central location that has accessible fire sites. Encourage participants to experiment and be creative in their cooking.

Participants should understand that they will be expected to prepare for themselves at least one meal, and another meal as a patrol.

Lesson Plan: Cooking

Feeding a hungry patrol requires some basic cooking skills and a lot of planning. Cooking takes practice and patience, too, but it's satisfying to feel appreciated when thankful Scouts dig into a bowl of piping hot stew on a cold winter's eve or fresh pan-fried trout on a crisp spring day.

Planning Your Meals

Careful planning helps prevent you from taking too much—or too little—to camp. Scouts require balanced meals that will give them the energy they need for physical activities they undertake while in the outdoors. During planning, find out

- How many Scouts are going and how long you will be away from home
- What you will be doing
- How you will reach camp
- What kind of weather can be expected

Planning will help determine what form of camping food you will need to take: fresh, nonperishable, dried/dehydrated, canned, retort pouches, or a combination.

COOKING BEGINS WITH CLEAN WATER

When in the outdoors, make sure you have access to a source of safe water, whether you bring your own or use some from another source.

Water from **public supplies** (faucets, drinking fountains in campgrounds) usually has been tested by public health officials and is almost always safe to use. **Open water** from streams, lakes, and springs must be properly disinfected before consumption. (The *Boy Scout Handbook* tells how to prepare water by melting clean snow.)

How to Purify Water

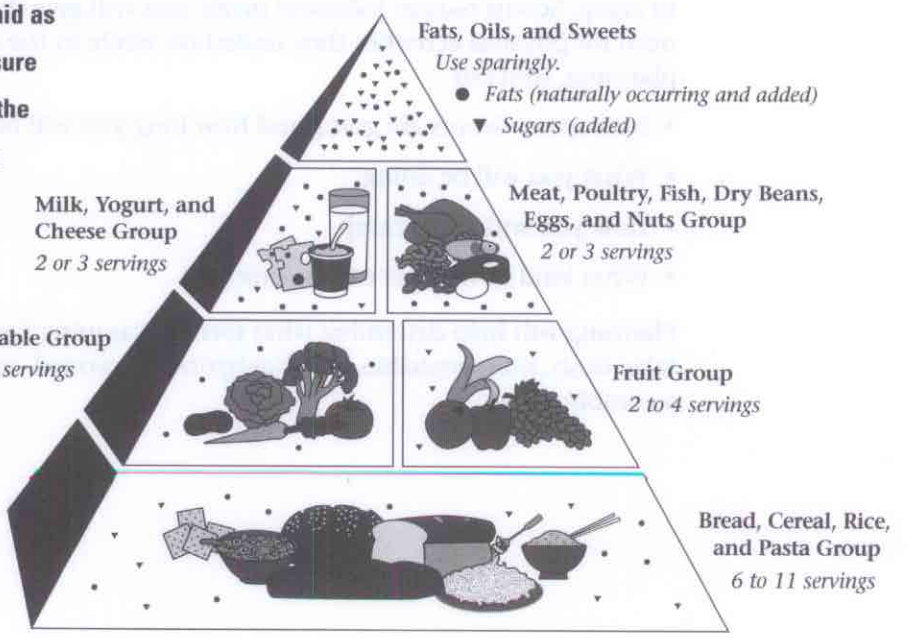
- **Boiling water**—a rolling boil—for a full minute or longer will kill most bacteria.
- **Purification tablets** are easy to use, but always check the expiration date before leaving for camp; use only fresh tablets.
- **Filters** are effective and easy to operate, but the manufacturer's instructions must be followed carefully. It's smart to carry a small bottle of water purification tablets just in case your filter malfunctions.

THE IMPORTANCE OF GOOD NUTRITION

The food you eat should

- Build up your body and keep it in good repair.
- Provide the vitamins, minerals, fiber, and bulk that your body must have in order to stay healthy.
- Serve as a source of energy for everything you do.

Using the food pyramid as a guide will help ensure that your Scouts eat the foods they need for a balanced diet.



MENUS

Menus make proper planning possible. Using the food pyramid as a resource helps keep the camp diet balanced, too. Once you know how many meals you need, write down what you want to prepare and eat for each meal. See the *Boy Scout Handbook* for ideas, or ask others for favorite family recipes.

- **SHOPPING LIST.** List every ingredient for each dish. Don't forget **staples** (sugar, flour, cooking oil), **condiments** (honey or sugar, butter or margarine, ketchup), and **herbs** and **spices** (salt, pepper, oregano, chili powder, garlic flakes).
- **COST PER PERSON.** Before buying, determine the cost per person. At the grocery store, write down the price and quantity of every ingredient needed. Calculate each Scout's share by totaling the costs and then dividing the sum by the number of Scouts who will participate.
- **SIZE OF SERVINGS.** The *Boy Scout Handbook* has a handy guide for single serving sizes (with big appetites in mind).

REPACKAGING FOOD

Lighten your load and save space by repackaging. Take only what you will need, and use resealable plastic bags for ease. Properly label and organize each bag according to meal. Don't forget the recipes!

Food Storage

Protect your food from mice, raccoons, bears, and other animals by using a bear bag. The *Boy Scout Handbook* tells you how.

BE BEAR-SAFE IN THE OUTDOORS

In grizzly or brown bear country, where they may present a problem:

1. Demonstrate how to prepare and cook food close to a fire ring.
2. Demonstrate the use of bear bags and how they are stored.
3. Discuss the importance of never eating or storing food in tents, and never storing containers that have been used for fuel, drink mix, or food, in tents as the odor will remain even after the food is gone.
4. Discuss the dangers of sleeping in clothing that has been soiled or stored with food, or worn while cooking. At night these items must be stored away from the tent.

Breakfast in Camp

In camp, plan a hearty breakfast that's easy to prepare.

- **FRUIT.** Use fresh, dried, or canned fruit—whichever best suits the type of outing your troop has planned.
- **CEREAL.** Choose from oatmeal or some other type of hot cereal for cold days, and granola for warm-weather camping.

- **EGGS.** They come boiled, fried, and scrambled—take your pick.
- **BACON AND HAM.** Fried bacon or ham makes any breakfast more satisfying.
- **BREAKFASTS FROM THE GRIDDLE.** Try pancakes or French toast.
- **BREAKFAST DRINKS.** There's a variety to choose from—milk (dried or fresh, depending on the type of camping your troop has planned), cocoa mixes, and fresh or powdered fruit drinks.

Lunch in Camp

Refuel with lunch. Pack a lunch right after breakfast and take it with you, or stop for a hot meal if you will be near the camp kitchen.

- **SANDWICHES.** Make some to take with you, or stop to build your own on the trail.
- **HOT DISHES.** Hot soup (from a can or mix) served with grilled cheese sandwiches hits the spot on a cold day.
- **BACKCOUNTRY LUNCH.** When fresh foods aren't convenient, pack crackers, jelly or jam, hard cheese, salami or summer sausage, fruit, and small cans of tuna or chicken.

Supper in Camp

Quick suppers come in handy when you have a patrol of hungry Scouts to feed.

- **QUICK ONE-POT CAMP STEW.** They say variety is the spice of life, and the one-pot camp stew provides plenty of it!
- **MEAT.** Whether grilled, fried, or stewed, meat makes the meal complete.
- **CHICKEN.** Frying, grilling, or broiling make preparing chicken easy.
- **FISH.** Fresh fish tastes great fried or poached. Try either method.
- **SIDE DISHES.** Side dishes help make sure your supper has something from every group in the food pyramid.
  - — Vegetables (boiled carrots, corn, cabbage, string beans, peas; boiled, fried, or mashed potatoes)
  - — Pasta and rice (spaghetti, macaroni, ramen noodles, white or brown rice)
- **BREAD.** There are lots of options for supper: Try biscuits, Dutch oven bread, stove-top oven bread, frying pan bread, or dumplings.
- **DESSERTS.** Round out the meal with a tasty dessert as simple as cookies or instant pudding. As a special treat, serve cobbler or brownies.

PERSONAL EATING KIT

Every Scout needs a personal eating kit when camping. Take an unbreakable plate and sturdy drinking cup. (In winter, use an insulated plastic mug to keep drinks and soup warm.) Keep your knife, fork, and spoon together by drilling a hole in the handle of each one. Run a string through and tie. Makes cleanup easier, too!

Cooking in Aluminum Foil

Lightweight packing and camp kitchen cleanup couldn't be easier than with aluminum foil cooking. Just make sure you pack out the aluminum foil for recycling or proper disposal. Try cooking hamburger, stew, chicken, potatoes, corn on the cob, fish—even fruit.

Cooking Without Utensils

A bed of hot coals makes cooking without utensils possible. You can roast potatoes or corn, broil a steak, fix kabobs, fish, or chicken, and bake a bread twist or bread cup.

Sharing Kitchen Duties

Using the buddy system make kitchen duties fast and easy. Larger groups should use the duty roster method.

Cleaning Up After Meals

Follow the steps in the *Boy Scout Handbook* for dealing with leftovers, dishwashing, and dishwater disposal.

MAKE CLEANUP EASY

Before cooking over a wood fire, smear a film of liquid biodegradable soap on the outside of your pots. Soot will wash off more easily.

Activities

1. Select a campsite kitchen area, set up a campsite kitchen, and demonstrate the use of cooking gear/utensils.
2. Demonstrate cooking and food preparation, then let patrols finish cooking and serve the meal in a centralized area for all to enjoy. Do not concentrate these activities in the kitchen area, thereby destroying the ground cover.
3. Demonstrate cleanup of the area, gear, utensils, and food storage, then have the groups help complete these tasks before the next skills session begins.

Skills Session: First Aid

Time Frame

2 hours

Materials

- Personal first-aid kit
- Patrol/troop first-aid kit
- BSA Accident Report folder

Resources

- *Boy Scout Handbook*—chapter 3, "Tenderfoot Scout"; chapter 4, "Second Class Scout"; chapter 5, "First Class Scout"; chapter 11, "First Aid"
- *Guide to Safe Scouting*

Goals

By the end of this session, participants will be able to

- Shape their attitudes and approach to first-aid situations.
- Define first aid and explain what a first-aid plan is.
- Describe a systematic approach to first aid.
- Assemble a first-aid kit that includes items for specific injuries.
- Explain the considerations for first aid in pretrip planning.

Assignments

- Demonstrate the Heimlich maneuver and tell when it is used. T12a
- Show first aid for the following: T12b
  - — Simple cuts and scratches
  - — Blisters on the hand and foot
  - — Minor burns or scalds (first-degree)
  - — Bites or stings of insects and ticks
  - — Poisonous snakebite
  - — Nosebleed
  - — Frostbite and sunburn
- Show what to do for "hurry" cases of stopped breathing, serious bleeding, and internal poisoning. S6a
- Prepare a personal first-aid kit to take with you on a hike. S6b
- Demonstrate first aid for the following: S6c
  - — Object in the eye
  - — Bite of a suspected rabid animal
  - — Puncture wounds from a splinter, nail, and fishhook
  - — Serious burns (second-degree)
  - — Heat exhaustion
  - — Shock
  - — Heatstroke, dehydration, hypothermia, and hyperventilation
- Demonstrate bandages for a sprained ankle and for injuries on the head, the upper arm, and the collarbone. F8b
- Show how to transport by yourself, and with one other person, a person F8c
  - — From a smoke-filled room
  - — With a sprained ankle, for at least 25 yards
- Tell the five most common signs of a heart attack. Explain the steps (procedures) in cardiopulmonary resuscitation (CPR). F8d

Before You Begin

For the weekend program, the First Aid skills session can be split into two time periods. Conduct this session in a lecture/demonstration format, before participants spend the night in small campsites or go on any small-group overnighters without staff members. Using role play, leaders will learn how to render aid in an emergency and how to teach these skills to Scouts so they can be prepared.

Lesson Plan: First Aid

What Is First Aid?

First aid is just that—the first help given the victim of an accident or other health emergency. First aid should

- Stop life-threatening dangers.
- Protect an injured or ill person from further harm.
- Get proper medical help for the victim.

While the First Aid merit badge and Tenderfoot, Second Class, and First Class badges provide a solid introduction to first aid, there is always more to learn. Keeping your skills sharp requires regular practice and review.

Personal First-Aid Kit vs. Patrol/Troop First-Aid Kit

The *Boy Scout Handbook* tells what items make up the **personal first-aid kit** and the **patrol/troop first-aid kit.** Always take along your *personal first-aid kit* whenever you go hiking or camping. This kit allows you to treat scratches, blisters, and other minor injuries, and to provide initial care for more serious emergencies. Everything for this kit fits in a resealable plastic bag. The *patrol/troop first-aid* kit contains a wider variety of items to treat a wide range of injuries. The kit fits easily in a fanny pack that can be carried by one Scout.

Hurry Cases

Hurry cases—stopped breathing, no heartbeat, severe bleeding, and internal poisoning—pose an immediate threat to a victim's life and require quick action by the first-aider. Assess the situation:

- Is the victim breathing?
- Is the victim's heart beating?
- Is there severe bleeding?
- Is there evidence of poisoning?

Once you have completed the quick assessment, begin treatment and have someone seek help. Start by treating the conditions that pose the greatest threat to life.

STOPPED BREATHING

The *Boy Scout Handbook* has detailed instructions on first aid for stopped breathing. Because techniques for performing rescue breathing are constantly being improved, check with your local Red Cross chapter for current methods and training opportunities.

NO HEARTBEAT

An accident or medical condition that causes stopped breathing can also cause a person's heart to stop. Performing *cardiopulmonary resuscitation (CPR)* can sometimes provide both oxygen and blood circulation for such a victim. Learning CPR requires special training from an instructor certified by the Red Cross or other appropriate organization. The *Boy Scout Handbook* gives the procedures for CPR in detail.

HEART ATTACK. Heart attack is one of the major causes of death in the United States. The *Boy Scout Handbook* tells how to be prepared to help someone else who is having heart trouble. The handbook also tells how to spot the five common warning signals of heart attack.

FIRST AID FOR SEVERE BLEEDING

Without quick first aid, the victim of a severe cut can bleed to death in a matter of minutes. The *Boy Scout Handbook* tells how to render first aid for severe bleeding, and gives recommendations for treating victims who are bleeding.

INTERNAL POISONING

Poisoning is the most frequent cause of accidental death among children. For this reason, it's important to know first aid for internal poisoning.

1. Immediately take the container of the suspected poison to a telephone. Call the poison control center toll free at 800-764-7661, or call your local emergency center at 911, or an operator, and follow the instructions you are given.
2. Treat the victim for shock and monitor breathing. Do not give anything by mouth unless you are told to do so by medical professionals.
3. Save any vomit (use any container such as a bowl, cook pot, or plastic bag). It will help a physician identify the poison and give the right treatment.

Heimlich Maneuver

Learn when it's appropriate to administer the Heimlich maneuver. Use the Heimlich maneuver whenever a choking victim nods yes but cannot speak, cough, or breathe when asked, "Are you choking?" Encourage a choking victim who is conscious and can speak, cough, or breathe, to cough up the object. Be prepared to administer first aid if necessary; have someone call for help. Practice the Heimlich maneuver, as directed in the *Boy Scout Handbook,* on a suitable training device—never on another person.

Shock

Most injuries result in some degree of shock, which prevents the circulatory system from providing enough blood to all parts of the body. Treat every victim for shock, even if no symptoms appear. Symptoms may include all or some of the following: a feeling of weakness; confusion, fear, dizziness; moist, clammy, cool, and pale skin; a quick, weak pulse; shallow, rapid, and irregular breathing; nausea and vomiting; extreme thirst. See the *Boy Scout Handbook* for information about treatment of shock.

Heat Emergencies

Avoid heat emergencies by taking a few precautions in hot weather: Drink plenty of fluids, and rest in the shade when you feel too warm. The *Boy Scout Handbook* tells how to identify and treat the different types of heat emergencies:

- **HEAT EXHAUSTION**—when the body's cooling system becomes overworked
- **HEATSTROKE**—when a victim's cooling system has stopped functioning; life-threatening

- **DEHYDRATION**—when a person loses more moisture (through breathing, sweating, digestion, urination) than is taken in; can be life-threatening

SUNBURN. Sunburn, an injury common among people who enjoy being outdoors, can easily be prevented. Use plenty of sunscreen with a sun protection factor (SPF) of at least 15. Reapply sunscreen after swimming or if you are perspiring. Use a broad-brimmed hat, long-sleeved shirt, and long pants for added protection.

Cold Emergencies

Avoid cold emergencies by wearing the right clothing when in the outdoors, eating plenty of food for energy, and drinking lots of fluids. Be prepared for bad weather, and know how to identify and treat cold emergencies.

Hypothermia occurs when the body loses more heat than it can generate. The temperature doesn't have to be below freezing for hypothermia to strike. Dehydration, exhaustion, hunger, and exposure to wind and rain increase the risk of hypothermia. A victim of hypothermia may

- Feel cold and numb.
- Display fatigue and anxiety.
- Shiver uncontrollably.
- Seem confused, irritable, and may make bad decisions.
- Stumble and or fall.
- Lose consciousness.

See the *Boy Scout Handbook* for step-by-step instructions on first aid for hypothermia.

FROSTBITE. In cold weather, learn how to identify the signs of frostbite. The toes, feet, fingers, ears, nose, and cheeks are especially vulnerable. One victim may complain that these extremities feel painful and then numb, while another might not notice anything wrong. Be alert to grayish-white patches on the skin—a sure sign of frostbite. The *Boy Scout Handbook* gives first-aid instructions for frostbite.

Other First-Aid Cases

Especially in the outdoors, Scouts will be exposed to a variety of first-aid situations.

FIRST AID FOR SIMPLE CUTS AND SCRATCHES

Cuts and scratches are *wounds*—openings in the skin and tissues that can allow germs to enter the body and cause infection.

- Wash **small wounds** with soap and water, then apply antiseptic to help prevent infection. Keep the wound clean with an adhesive bandage. On camping trips, clean and rebandage small wounds daily.
- For **large cuts**, use direct pressure to stop the bleeding. Use direct pressure to stop bleeding, and keep the wound as clean as possible to limit infection.

Cover open wounds with a sterile gauze pad or clean cloth folded to size and secure with tape, cravat bandage, or other binder.

FIRST AID FOR BLISTERS

Blisters are pockets of fluid that form as the skin's way of protecting itself from friction. Hikers can avoid foot blisters by wearing shoes or boots that fit, by changing socks if they become sweaty or wet, and by paying attention to how their feet feel. The *Boy Scout Handbook* tells how to avoid and how to treat blisters.

FIRST AID FOR FIRST- AND SECOND-DEGREE BURNS

Treatment for burns depends upon its degree.

- **MINOR (FIRST-DEGREE) BURNS OR SCALDS** will cause the skin to be tender and may cause redness. Treat immediately by holding the burn under cold water or applying cool, wet compresses until the pain subsides.
- **SERIOUS (SECOND-DEGREE) BURNS** form blisters. Place the injured area in cool water until the pain fades, then let the burn dry and protect it with a sterile gauze pad. Do not break the blisters—that makes them open wounds. **Do not apply butter, creams, salves, ointments, jellies, or sprays**—these are difficult to remove and can slow healing.

FIRST AID FOR BITES OR STINGS OF INSECTS AND TICKS

Bites from these critters can be painful, and some can cause infection. The *Boy Scout Handbook* instructs how to treat bee and wasp stings, tick bites, chigger bites, and spider bites, and has some tips for prevention.

FIRST AID FOR POISONOUS SNAKEBITES

Poisonous snakebites can cause sharp, burning pain. Avoid snakes by using a hiking stick to poke among stones and brush ahead of you while walking through areas where snakes are common. Watch where you put your hands and feet as you collect firewood or climb over rocks and logs. The steps given in the *Boy Scout Handbook* tell what to do in case of poisonous snakebite.

FIRST AID FOR NOSEBLEED

Have the victim sit up and lean forward to prevent blood from draining into the throat. Maintain pressure on the flow by pinching the nostrils together. Apply a cool, wet cloth to the area. If there are other injuries to the face and head or more severe bleeding, position the victim to keep blood out of the airway. Treat for shock and get help.

FIRST AID FOR AN OBJECT IN THE EYE

Have the person blink; tears might flush out the foreign object. If that doesn't work, with clean hands, pull the upper lid down over the lower one. The lower lashes might brush out the speck. For an object under the lower lid, place your thumb just below the lid and gently pull the lid down. Use the corner of a sterile gauze pad or clean handkerchief to lift out the speck. If that also fails, seek medical attention.

FIRST AID FOR THE BITE OF A SUSPECTED RABID ANIMAL

Rabies is a deadly disease that can be transmitted through the saliva of some warm-blooded animals such as dogs and cats. If someone is bitten:

1. Scrub the bite with soap and water to remove saliva.
2. Cover the wound with a sterile bandage and get the victim to a doctor.
3. Do not put yourself at risk by trying to catch the animal. Call police, rangers, or animal control officers who are trained to do the job safely.

FIRST AID FOR PUNCTURE WOUNDS

Puncture wounds can be caused by just about any sharp object—dangerous because these objects may introduce germs into a wound that is hard to clean.

- Let **wounds from a splinter or nail** bleed to help remove impurities. Sterilize tweezers over a flame or in boiling water before using it to removing splinters or other objects you can see. Wash the area with soap and water, apply a sterile bandage, and get medical care.
- When **removing a fishhook**, first cut the line. If a doctor is not available, you might have to do this yourself. The *Boy Scout Handbook* shows you how.

Tying Bandages

Different types of injuries require different types of bandages to help protect the area from further harm.

BANDAGING A SPRAINED ANKLE

A sprained ankle occurs when your foot bends far enough to strain tendons and ligaments. If you sprain an ankle and must keep walking, don't remove your footwear, which will support your ankle. Reinforce the area by wrapping it—boot and all—with a triangular bandage or some other strip of cloth, as shown in the *Boy Scout Handbook*. As soon as you no longer need to walk, remove your shoe and rest with your leg raised. Reduce swelling with cold, wet towels or an ice pack. Seek medical care.

BANDAGING INJURIES TO THE HEAD

Head injuries require extreme urgency and care. Seek help immediately. If the victim is bleeding but conscious, have the person hold a clean cloth over the wound and apply pressure. Keep the victim as comfortable as possible while waiting for help to arrive. When the entire scalp must be covered, use the *triangular bandage* as shown in the *Boy Scout Handbook*.

BANDAGING AN INJURED UPPER ARM

Place the upper arm in a *sling* (as detailed in the *Boy Scout Handbook*), with the forearm raised about 3 inches above level. Then, using a *cravat bandage,* hold the upper arm against the side of the body. The body itself acts as a splint to immobilize the elbow and shoulder. (Make a cravat bandage from a Scout neckerchief or triangular bandage by folding the point down to the long edge, and finish by folding downward two more times to the long edge. Tie the bandage in place with a square knot.)

BANDAGING AN INJURED COLLARBONE

Place the forearm in a sling with the hand raised higher than the elbow, then tie the upper arm against the side of the body with a wide cravat bandage. No splint is necessary. (See the *Boy Scout Handbook* for a detailed illustration.)

Rescue Techniques

RESCUE FROM A SMOKE-FILLED ROOM

If your safety won't be compromised and if you cannot wait until trained rescuers arrive, you can move a person from a smoke-filled room by grasping the person's clothing with both hands and dragging the victim toward you. Or, roll the person onto a coat, blanket, tablecloth, or whatever else is handy, and drag the victim on that. You can also get behind the victim, reach under the arms, grab the wrists, and haul the person away.

RESCUE OF A VICTIM WITH A SPRAINED ANKLE

If you must transport a mildly disabled person by yourself, use the **walking assist.** Bring one of the victim's arms over your shoulder and hold onto the person's wrist. Place your free arm around the victim's waist.

If it's not possible for the victim to walk with assistance, use the **one-person carry.** Kneel in front of the victim with your back to the victim's belly. Grasp the victim's hands over your chest, and carry the person piggyback. Keep your back straight and lift with your legs.

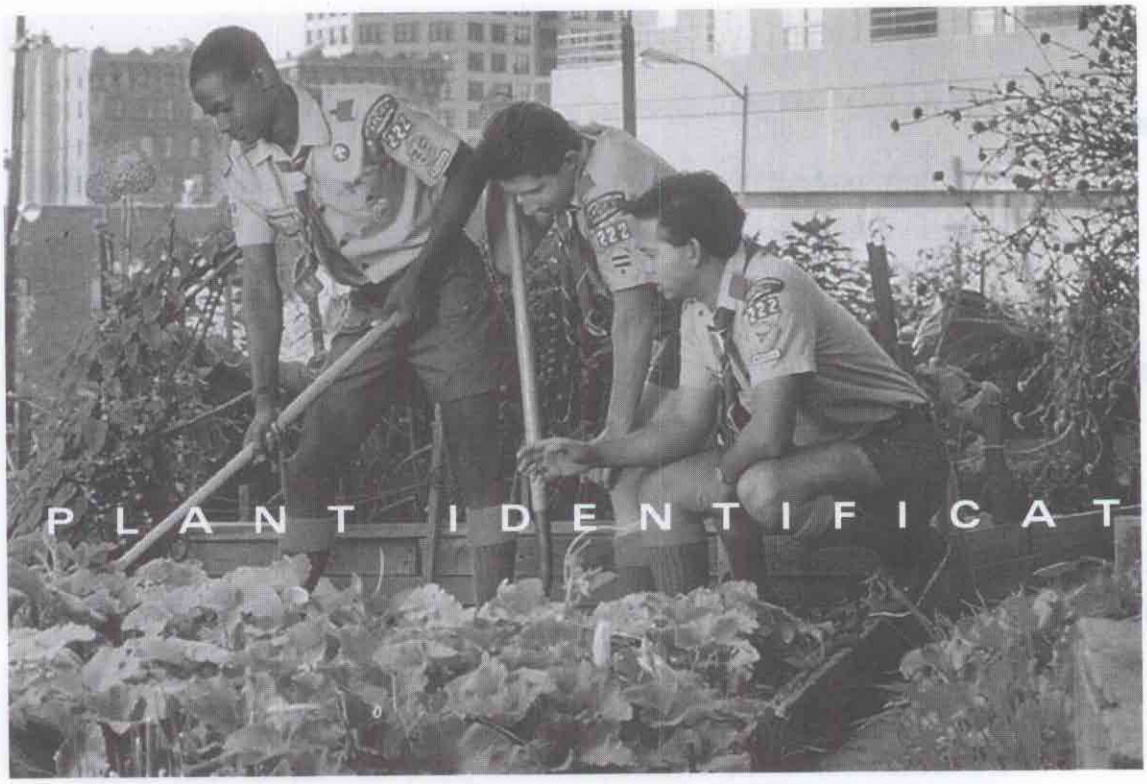
If two first-aiders are available, use the **four-handed seat carry.** The bearers grasp their own right wrist with the left hand, and then lock hands with each other. The patient then sits on their hands and places his arms around their shoulders.

Two first-aiders can also use the **two-person carry.** The bearers kneel on either side of the victim. Each bearer slides one arm under the victim's back and one under the thighs. They then grasp each other's wrists and shoulders, then rise from the ground with the patient supported between them.

See the *Boy Scout Handbook* for detailed illustrations depicting each technique.

Activity

Have participants do one of the following activities from *Toop Program Resources:* First-Aid Baseball, First-Aid Kim's Game, First-Aid Problems.



Skills Session: Plant Identification

Time Frame

1 hour

Materials

- Local plant guides
- Charts, posters, and handouts from state or federal conservation agencies

Resources

Boy Scout Handbook—chapter 3, "Tenderfoot Scout"; chapter 5, "First Class Scout"

Goals

By the end of this session, participants will be able to

- Discuss the seasonal plants in their area.
- Explain the use of plants in nature.
- Identify and explain the treatment for exposure to certain poisonous plants.
- Tell how they will help instill interest in and respect for trees, plants, and vegetation.

Assignments

- Identify local poisonous plants; tell how to treat for exposure to them. T11
- Identify or show evidence of at least 10 kinds of native plants found in your community. F6

Before You Begin

This session can be taught in the form of a discussion and leisurely walk through the camp and adjoining area, after the evening meal but still in daylight.

Lesson Plan: Plant Identification

Common Poisonous Plants

Among poisonous plants in the United States, **poison ivy, poison oak,** and **poison sumac** are the most common. The oily sap in their leaves, stems, and roots can irritate your skin and cause it to itch. This sap must remain on your skin for 10 to 20 minutes before it begins causing problems.

If you think you have touched a poisonous plant, immediately wash the area with soap and water. Since the sap also clings to clothing, change clothes and wash the outfit you were wearing. Calamine lotion helps relieve the itching; try not to scratch an affected area because that can cause the irritation to spread.

The *Boy Scout Handbook* contains illustrations and photographs of these plants.

Identifying Native Plants in Your Area

The ability to identify trees, shrubs, and grasses helps you more easily discover all the places they live, their uses, and their importance to the environment. Seek expertise from avid gardeners, botanists, or others who enjoy sharing their knowledge. They can show you how to recognize the shapes, sizes, and colors of different plants, the outlines of their leaves, and other clues that can lead to an identification.

Using a *field guide* also helps. Your local and school libraries might have copies, as might your troop or local council library. Many field guides include information about the roles that plants play in their surroundings.

The *Boy Scout Handbook* includes illustrations and photographs of types of plants to help you learn how to identify native plants. At all times in the outdoors, keep the principles of Leave No Trace in mind and leave plants as you find them.

Activity

Create a nature trail and walk through camp trail area to identify plants. In advance, identify plants along the trail that participants can handle and inspect up close. It may be possible to collect evidence—such as pressed leaves and leaf ink prints—from some types of common native plants to help you remember their characteristics. The *Boy Scout Handbook* tells you how.

Skills Session: Animal Identification

Time Frame

1 hour

Materials

- Local animal guides
- Charts, posters, and handouts from state or federal conservation agencies

Resources

- *Boy Scout Handbook*—chapter 4, "Second Class Scout"

Goals

By the end of this session, participants will be able to

- Demonstrate knowledge and respect for animals in their community.
- Explain how they will create the desire to learn more about animals.
- Discuss and identify signs, tracks, nests, and additional evidence of animal life in their community.

Assignments

- Identify or show evidence of at least 10 kinds of wild animals (birds, mammals, reptiles, fish, mollusks) found in your community. S5

Before You Begin

This session can be taught separately or combined with the Plant Identification skills session in the form of a leisurely walk through the camp area.

Lesson Plan: Animal Identification

By using charts, posters, and other resources, participants will be able to identify signs of wildlife in their area. They will discover things like where animals live, what they eat, how they survive, how they raise their young, and whether they prey on other creatures.

Kinds of Wild Animals

A handy chart in the *Boy Scout Handbook* tells about the different kinds of wild animals: birds, mammals, reptiles, fish, amphibians, invertebrates (insects, spiders, crustaceans, snails, clams, oysters, mussels, squids).

How to Find Evidence of Animals

Observers use a number of techniques to find evidence of animals.

- Looking—tufts of fur caught on twigs, overturned stones, shells on a shore, a feather on the ground; movement in the brush, in the water, and in the sky
- Listening—the buzz of insects, croaking of frogs, birdsong, chatter of a squirrel or raccoon, slap of a beaver's tail, silence
- Smelling—the aroma of flowers, trees, earth, moss, stagnant water, saltwater
- Touching—vibrations in the air, changes in water temperature or activity

Most of all, finding evidence of animals takes patience.

Tracking

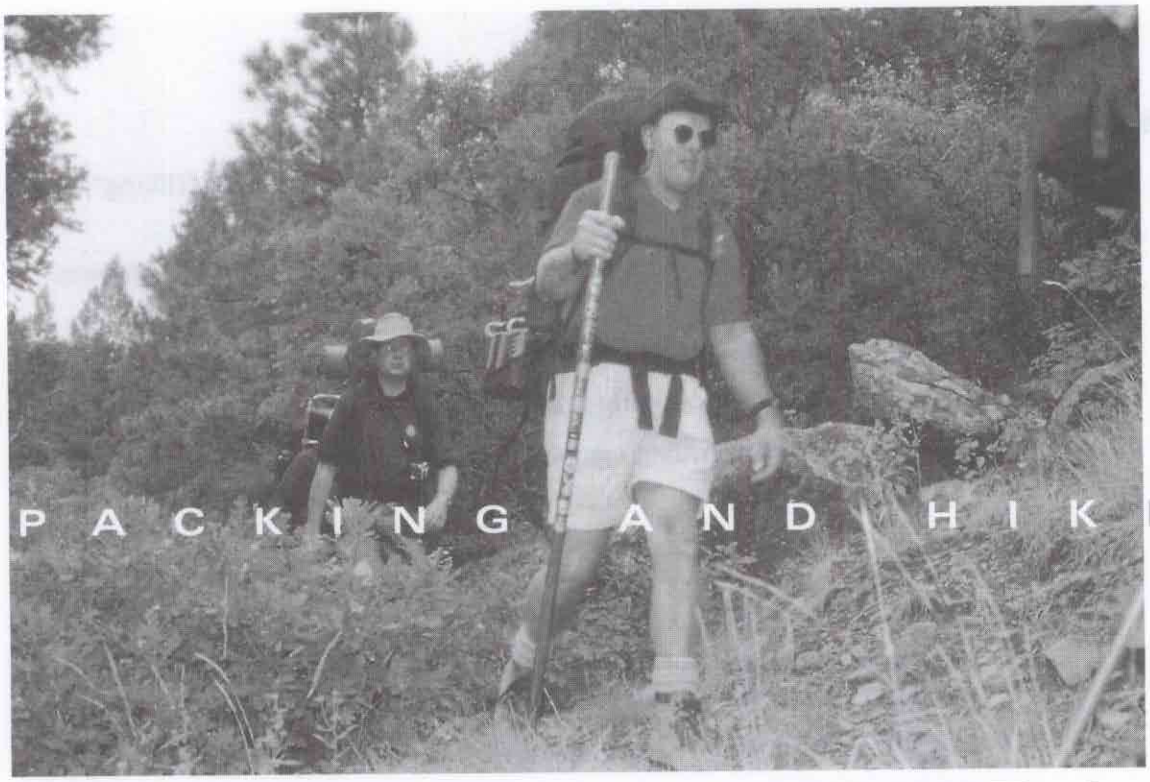
Every animal traveling on land leaves tracks—footprints, bent grass, broken twigs, chewed leaves, scat, rubbed bark, a shiny strip of slime—that teach you much about the creatures themselves. Tracking takes practice—in your yard, alongside rivers, and in parks, fields, and forests. Here's how.

- Find some tracks to follow left in winter snow, soft soil, or in pebbles and brush that have been disturbed.
- Study a single track and fix its details in your mind—even measure and sketch it.
- Track early in the morning or late in the day, when shadows cast in the prints make them easier to see.
- Think like an animal—where would you go if you were the animal?

See the *Boy Scout Handbook* for more details about tracking animals.

Activity

In conjunction with the nature trail and walk for the Plant Identification skills session, walk through the trail area and identify signs of animal life, as well as areas that animals would inhabit. Practice these Leave No Trace principles: Leave What You Find, and Respect Wildlife.



Skills Session: Packing and Hiking Techniques

Time Frame

1 hour 15 minutes

Materials

- Selected footwear
- Appropriate clothing (polypropylene, wool and synthetics—not cotton such as blue jeans, which have no insulation value when wet and take too long to dry once wet)
- Rain gear
- Backpack and/or day pack (If the group is using internal and external backpacks, it is best to demonstrate how to pack both types.)
- Items listed on the following checklists (for the packing demonstration), found in the *Boy Scout Handbook:*
  - — Warm-weather and cold-weather clothing checklists for hiking, camping, and backpacking
  - — Scout Outdoor Essentials checklist
  - — Personal overnight camping gear checklist
  - — Patrol or group overnight camping gear checklist

Resources

- *Boy Scout Handbook*— chapter 3, "Tenderfoot Scout"; chapter 8, "Hiking"; chapter 9, "Camping"
  - — Warm-weather and cold-weather clothing checklists for hiking, camping, and backpacking
  - — Scout Outdoor Essentials checklist
  - — Personal overnight camping gear checklist
  - — Patrol or group overnight camping gear checklist

Goals

By the end of this session, participants will be able to

- Explain the techniques of safe hiking and its benefits for enjoying nature, physical fitness, and nurturing self-reliance (personal growth).
- Explain the who, what, where, when, why, and how of planning a safe hike.
- Tell how to select the right footwear, clothing, and other gear.
- Explain the importance of setting a pace and resting when hiking.
- Pack a neat, well-balanced, and systematically organized backpack or daypack that is comfortable to wear and efficient to use while hiking.
- Demonstrate the ability to pack items for accessibility on the trail.

Assignments

- Present yourself to your leader, properly dressed, before going on an overnight camping trip. Show the camping gear you will use. Show the right way to pack and carry it. T1
- Explain the rules of safe hiking, both on the highway and cross-country, during the day and at night. Explain what to do if you are lost. T5
- Explain why we use the buddy system in Scouting. T9

Before You Begin

Conduct this session after the Campsite Selection skills session, when participants have set up a campsite, but prior to hiking—during the planning phase of the trek—to help ensure the safety and comfort of participants. Present it in conjunction with the Finding Your Way skills session. This session may be taught as a lecture/demonstration in which instructors display and pack their own gear. Have one or two group members lay out their gear and explain their ideas about packing. Participants may discuss the pros and cons of various approaches and be able to devise a more direct approach.

Segment the sessions in one time block such as a morning between breakfast and lunch or an afternoon between lunch and dinner. Group more experienced adult leaders together with the appropriate number of staff members and teach them "on the trail."

Tell participants how younger Scouts can be taught by initiating a discussion using a very poorly packed pack as the focus for a contest (e.g., "Find 10 things wrong with this pack"). Use the ensuing discussion to highlight the main points of packing theory. Scouts can also learn by packing "rooms" of the "house" (e.g., the "kitchen"—pots, pans, food, stove, utensils, etc.). Incorporating "teachable moments" allows leaders to point out positive and negative qualities of various packing strategies. With younger Scouts, a "Pack-of-the-Day" prize may be awarded to help encourage the proper technique.

Lesson Plan: Packing and Hiking Techniques

Hiking is a great way to see the world around you. Hiking begins with safety, and this skills session focuses not only on how to hike, but how to hike comfortably and safely. That means devising a trip plan using the "Five W's":

- ***WHERE*** are you going?
- ***WHEN*** will you return?
- ***WHO*** is going with you?
- ***WHY*** are you going?
- ***WHAT*** are you taking?

Don't forget ***how*** you will respect the land by practicing the principles of Leave No Trace.

Choose the Right Gear

FOOTGEAR FOR HIKING

If your feet feel good, chances are you'll have a great time hiking. Lightweight boots work well for short hikes on easy terrain and for most hiking in good weather. Leather boots might be heavier, but they will provide the protection and support your feet and ankles need for longer hikes and inclement weather. Whatever the type of footwear you choose, make sure your boots fit well. Follow tips found in the *Boy Scout Handbook* on adjusting to new boots, caring for your boots, and the proper socks to wear.

CLOTHING FOR HIKING

Dressing properly for the outdoors calls for layering so that you can adjust your clothing to match changing weather conditions. Learn about the different fabrics for hiking wear, including rain gear. The *Boy Scout Handbook* has checklists for outdoor essentials and warm-weather and cold-weather hiking, camping, and backpacking.

Backpack

Whether you choose a backpack with an external frame (great for general backpacking, especially hiking on open trails) or an internal frame (for added stability), it should be comfortable for short hikes or for a long day on the trail. When shopping for a pack, try several models—each with plenty of weight packed inside. An internal-frame pack keeps the pack snug against your back, which makes it ideal for skiing and mountaineering (and backpacking, too). Adjustable straps and hip belt help make a better fit possible.

Use the outside pockets of your pack for water bottles, maps, and other gear that you might need in a hurry.

PACKING UP

STUFF SACKS help you organize your gear—clothing in one stuff sack, cooking utensils in another, and so on. Resealable plastic bags and bread wrappers make good stuff sacks.

LOADING A PACK will likely involve not only your personal gear, but also your share of the patrol or group equipment. Just remember these tips:

- Arrange soft items so that they will cushion your back.
- Keep rain gear, flashlight, first-aid kit, and water bottle near the top or in outside pockets for easy access.
- If your sleeping bag won't fit in your pack, wrap it with a ground cloth or stuff it in a plastic trash bag, and tuck it under the pack's top flap or strap it to the frame.
- Stow items in the same place each time you pack—you'll find what you need when you need it.

Use a rain cover (a large plastic trash bag works well) to keep your pack dry. For hiking in the rain, cut a slit in the bag so that you can cover the pack and still leave the straps free. Tuck the loose ends of the bag behind the straps or under the frame. The *Boy Scout Handbook* has lots of other packing tips and photos to show you how.

Additional Packing Tips

The *Boy Scout Handbook* recommends a **day pack** for holding things you might need for a day of hiking. You might already use this kind of pack for school. Use a **fanny pack** for carrying handy items on longer adventures and for cross-country skiing or mountain biking. The pack sits comfortably against your lower back and won't throw you off balance along the trail.

The handbook also provides a number of checklists for a variety of situations such as personal gear for overnight camping and warm-weather camping.

How to Hike

USE A HIKING STICK

A hiking stick comes in handy not only for stability, but also for pushing back branches and poking behind rocks. Personalize your hiking stick by whittling a small notch on it for every five miles you walk. Elsewhere on the staff, cut a notch for each night you camp out under the stars.

OTHER HIKING TECHNIQUES

Walking quickly is often not very important, so hike at a **pace** that is comfortable for the slowest member of your patrol. Take time to enjoy what's around you, and remember that group safety and fellowship help make a hike more meaningful.

Don't forget the importance of **resting** while hiking. Hikers need time to adjust their clothing, check their feet for signs of hot spots or blisters, take a drink, and have a snack.

Conditioning helps prepare you for longer journeys. Start with short hikes to harden your muscles, strengthen your heart and lungs, and prepare you mentally for more challenging distances. Regular exercise, jogging, and eating a healthy diet help, too.

Remember your **trail manners** while hiking. Travel single file on most trails (leave some space between you and the Scout ahead of you), and be courteous to other hikers by stepping to the side of the trail so that they can pass. The *Boy Scout Handbook* has other tips for a variety of hiking situations, such as meeting people on horseback.

Hike With a Buddy

Whether hiking along quiet back roads or in the city along busy streets, always hike with a buddy. Why use the buddy system? It's a way for Scouts to look after each other. Buddies keep track of each other at all times, sharing the good times and preventing the bad. Periodically conduct a *buddy check* by having Scouts immediately hold up the hand of their buddy. That way if anyone is missing, everyone will know it right away.

Hiking on Highways and Roads

Whenever hiking along a highway or road without a sidewalk, stay in single file on the left side, facing traffic. Wear light-colored clothing so that drivers can see you more easily. If you must hike at night, tie strips of white cloth or reflective ribbon around your right arm and leg. A fluorescent vest and flashlight also enhance visibility. **Never hitchhike.** It can be dangerous, might be illegal, and it spoils the spirit of a hike.

Hiking on Trails and Cross-Country

Following a trail makes reaching your destination less complicated and helps you avoid trampling vegetation or contributing to erosion. Wherever you hike:

- Watch your step to avoid slipping or twisting an ankle.
- Use bridges to cross streams.

- Wade through water only as a last resort, and only if the water is shallow and the current is not too swift (the *Boy Scout Handbook* tells you how).
- Detour around areas that appear to be dangerous, or go back the way you came.

As the *Boy Scout Handbook* states, **your safety is always much more important than reaching the destination of a hike.**

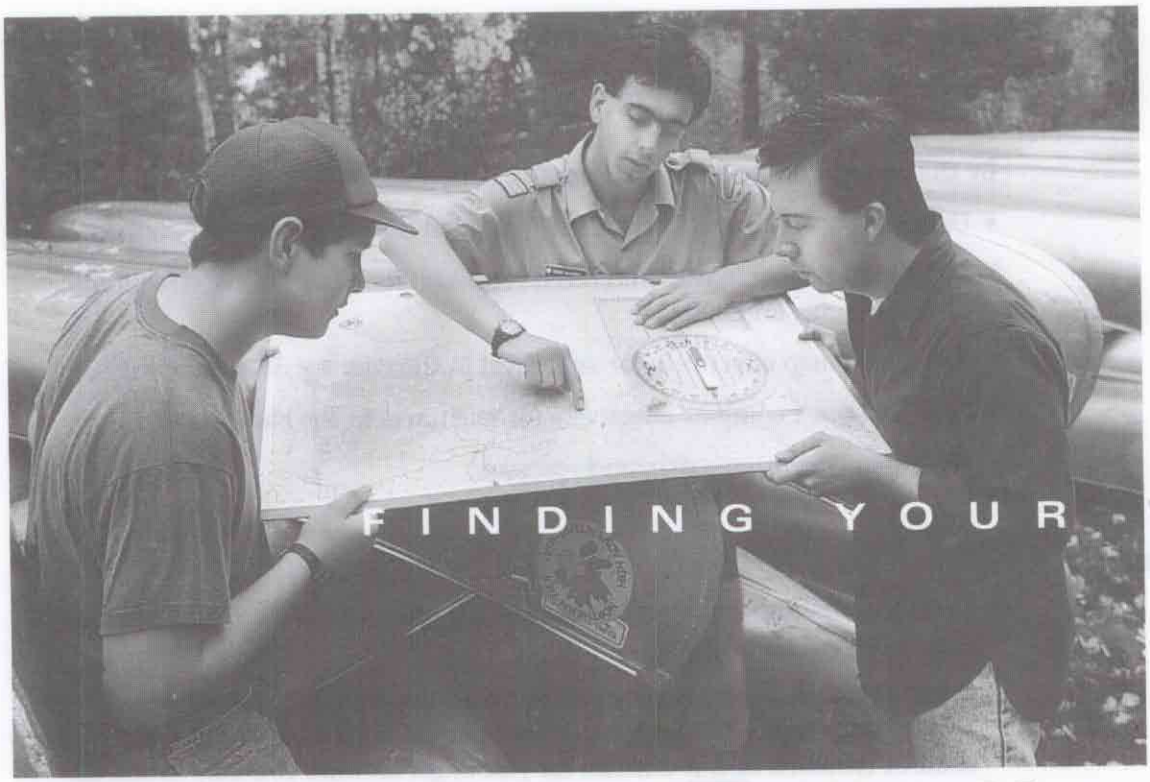
Staying Found

Know at all times where you are. Plan your route and destination on a map, then study the map to become familiar with your course. Note landmarks along the way. As you hike, pay attention. Notice your direction, and watch for hills, streams, valleys, buildings, and other details. If you have a map and compass, use them to pinpoint your location. Look back over your shoulder often to see how your return route will look.

WHAT TO DO IF YOU ARE LOST. The *Boy Scout Handbook* tells how to follow the ***STOP*** steps when you are lost. The handbook also tells you to stay put if you have no idea where you are or which way to go, and tells how to help searchers find you.

Activity

1. During the course, go on a hike that participants have helped plan. Reinforce and practice safe hiking techniques along the way.
2. Immediately after the session, staff members should observe all participants packing their own gear, to be sure the skill is understood. Observe Leave No Trace principles, and emphasize the need to "pack it in, pack it out." Whatever you take to camp must be carried back home.



Skills Session: Finding Your Way—Map and Compass Reading

Time Frame

1 hour 30 minutes

Materials

- One topographic map for at least every two participants (All maps should be of the same area.)
- Instructor's compass plus one compass per participant
- Blank paper and pen, in lieu of a field chart (to describe map symbols and features, and parts and functions of the compass), one each per participant
- Cord, ideally a different color cord to represent a different radius of the angle of a bearing (to describe the concept of bearings as angles)

Resources

Boy Scout Handbook—chapter 4, "Second Class Scout"; chapter 5, "First Class Scout"

Goals

By the end of this session, participants will be able to

- Define what a map is, how it is used, and tell how maps can be obtained.
- Demonstrate how to read and interpret a map for descriptions, direction, distance, scale, and detail.
- Interpret a map effectively for safe travel in the country or backcountry.
- Read and use a compass effectively for safe travel in the backcountry.
- Find their way using a map and compass.

Assignments

- Demonstrate how a compass works and how to orient a map. Explain what map symbols mean. S1a
- Using a compass and a map together, take a five-mile hike (or 10 miles by bike) approved by your adult leader and your parent or guardian. (If you use a wheelchair or crutches, or it is difficult for you to get around, you may substitute "trip" for "hike.") S1b
- Demonstrate how to find directions during the day and at night without using a compass. F1
- Using a compass, complete an orienteering course that covers at least one mile and requires measuring the height and/or width of designated items (tree, tower, canyon, ditch, etc.). F2

Before You Begin

Map skills may be introduced to participants almost immediately, while traveling the first few days of the course. More defined classes are usually taught in conjunction with a "trailless" hike or mountain climb when skills can be applied immediately.

Before teaching compass reading, cover map reading and help participants develop their orienteering skills to create an understanding of how the map and compass are used in orienteering.

Lesson Plan: Finding Your Way—Map and Compass Reading

Hiking With Map and Compass

The map and compass are tools hikers use to help them stay on track and avoid getting lost as they reach their destination. The key to orienteering—using both tools together to reach a destination—is learning how to use the map and compass individually.

WHERE TO GET MAPS

Many sporting goods stores sell topographic maps of local recreation areas. The U.S. Geological Survey also makes useful topographic maps for hikers. For information about ordering maps, contact the U.S. Geological Survey, Distribution Branch, Box 25286, Federal Center, Denver, CO 80225; 800-HELP-MAP; Web site www.usgs.gov.

UNDERSTANDING HOW TO READ A MAP

MAP SYMBOLS. Reading a map requires an understanding of the symbols used in that map. Most maps have a template that shows symbols for elements such as railroads, bridges, lakes, boundaries, schools, and important buildings. Other factors include:

- **DIRECTIONS**—north (toward the top of most maps), south, east, west.
- **DISTANCES**—bar scales measure feet, meters, and miles on a map.
- **SCALE**—comparing the size of the elements on the map to the area it represents.
- **DATE**—check when your map was drawn or last redrawn; older maps may not show new buildings, roads, trails, or other changes on the land.
- **COLORS**—*green* (heavy vegetation); *white* (areas that are mostly clear of trees); *blue* (water); *black* (structures made by humans); and *brown* (contour lines and the shape of the land, such as the elevation of hills, valleys, mountains, and plains)

CONTOUR LINES. The contour lines on a map represent terrain—the elevation and steepness of the land.

UNDERSTANDING HOW A COMPASS WORKS

The compass operates with a magnetic needle that floats freely on a pivot that points toward *magnetic north* (an area in Canada more than a thousand miles away from the North Pole); *true-north* (as on maps) points toward the North Pole. The difference between true north and magnetic north, measured in degrees, is called *declination*.

The *Boy Scout Handbook* explains map symbols, contour lines, how a compass works, how to orient a map, and how to use the compass and map together in greater detail so that you can plan a hike appropriate for your troop.

Other Methods for Finding Your Way

There may be a time when you don't have a map or compass handy for finding your way. A number of methods can be used to help get you back on track, all of which the *Boy Scout Handbook* discusses in more detail.

USING THE STARS

For thousands of years, people have used stars and the constellations they form to help guide them in their travels on sea and land. Two methods—the **North Star method** (helps determine a true north-south line) and the **constellation method** (gives a sense of direction)—can still be used to find your way at night.

USING THE SUN

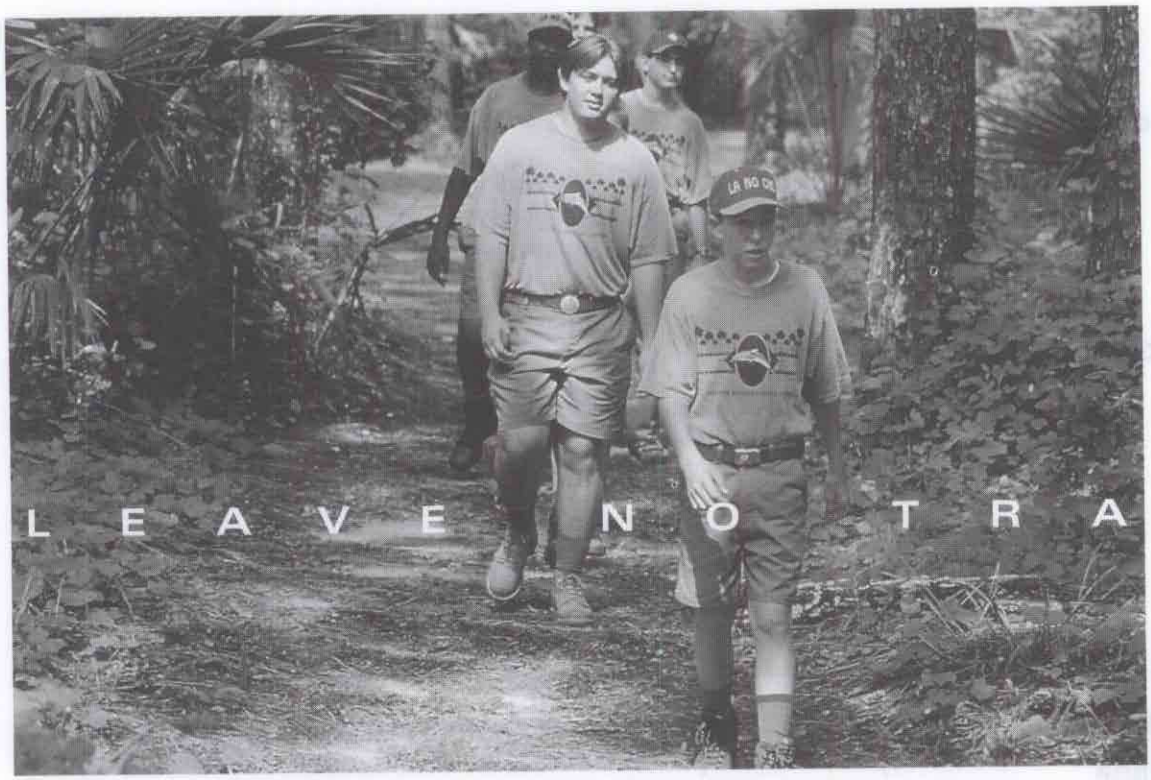
The sun can help you determine your direction if you take into account factors such the season and time of day. You can also utilize the **watch method** (your watch must be set on standard time), **shadow-stick method** (helps determine compass direction), and **equal-length shadow method** (another method for determining compass direction).

USING THE MOON

Since the moon comes up in the east and goes down in the west, as does the sun, the shadow-stick method will work just as well on nights when the moon is bright enough to cast a shadow.

Activities

1. Map and compass skills can be developed early on along the trail and during breaks to establish the location of north, the general direction of travel along the trail. Arouse interest by calling attention to prominent topographic features and then locating these on the map. Introducing map terminology helps make participants more aware of their natural surroundings.
2. Combine lecture and discussion during formal map classes. Focus on a general overview of all map features and their identification on sample maps. As a skills practice, instructors have participants conduct a theoretical journey across a map and describe the identifiable map features, obstacles, or land forms that will be encountered along the way. To help build awareness of map scale and a base of experience, ask them to predict upcoming terrain features along the trail and have them measure the distance traveled.
3. Help participants develop more advanced map skills by conducting a "trailless" hike where they must observe and look for terrain features in order to follow a trail on their maps. Treeless mountaintops make excellent class sites for understanding contouring, distance, and how terrain may have changed over time. Have participants orient their maps without the use of a compass—to identify prominent land features and show where they are located on the map.
4. Reinforce an understanding of contour lines by having participants use the method described in the *Boy Scout Handbook*—explaining the term and drawing lines on the knuckles of their hand. The handbook tells how to compare the contour lines drawn with those shown on a topographic map.
5. Compass training should combine lectures, demonstrations, and immediate opportunity for practice. Participants following instruction in the technique of establishing field and map bearings should immediately apply this knowledge in the surrounding environment by taking bearings on easily visible landmarks and matching the bearings to their maps.
6. Once participants have gained confidence in taking bearings, a short compass course or simple trailless hike will allow them to practice following a bearing in the field. Take special care to ensure that the compass course area is completely "safe" and "disoriented" participants cannot get lost. Participants should be teamed up so that route determination is a patrol effort, allowing mutual teaching, reinforcement, and confidence. Observe Leave No Trace rules to help preserve fragile ecosystems.



Skills Session: Leave No Trace

Time Frame

30 minutes

Materials

Outdoor Code poster

Resources

- *Boy Scout Handbook*—chapter 1, "The Adventure Begins"; chapter 8, "Hiking"; chapter 9, "Camping"
- Principles of Leave No Trace

Goals

By the end of this session, participants will be able to

- Explain the principles of Leave No Trace.
- Explain the meaning of the BSA's Outdoor Code and how it affects users of the outdoors and camping ethics.
- Commit to Leave No Trace and to apply these principals to all outdoor adventures.
- Explain the BSA concept of the levels of outdoor program and where their Scouting units likely fit into this scheme.

Assignments

Although none of the rank requirements encompasses Leave No Trace per se, much of what Scouting is all about does. All Scouts should take pride in being responsible users of the outdoors because leaving no trace is everyone's responsibility.

Before You Begin

Present this session at the end of the course as a wrap-up to reinforce Leave No Trace principles and review opportunities for low-impact camping presented in earlier skills sessions.

In order to reinforce understanding and subsequent use of Leave No Trace by participants in all activities and everywhere in their lives, including established Scout camps, wilderness areas, parks and their own neighborhoods, continually mention the principles and applications throughout the course in all skills areas.

Lesson Plan: Leave No Trace

Think of Leave No Trace as an attitude, not a set of rules. It applies as much in your backyard and local park as it does in the backcountry. Make Leave No Trace a habit; practice Leave No Trace principles wherever you go. Scouting's Outdoor Code serves as an added reminder.

The Outdoor Code

The Outdoor Code reminds us all of the importance of caring for the environment. The code has special meaning whenever we camp, hike, and take part in outdoor events. By embracing the ideals of the Outdoor Code, we can enjoy the outdoors without harm to the environment.

THE OUTDOOR CODE

As an American, I will do my best to—
Be clean in my outdoor manners,
Be careful with fire,
Be considerate in the outdoors, and
Be conservation-minded.

Leave No Trace

Leave No Trace reminds us to respect the rights of other users of the outdoors as well as future generations. Consider the combined effects of millions of outdoor visitors and you will appreciate the significance of a poorly located campsite or campfire. Think of how thousands of such instances seriously degrade the outdoor experience for all. Each Leave No Trace principle addresses a special area of camping and hiking and helps us remember that, as visitors of the outdoors, we must travel lightly on the land.

1. **PLAN AHEAD AND PREPARE.** Planning ahead helps prevent unexpected situations and makes compliance with area regulations more manageable.
2. **TRAVEL AND CAMP ON DURABLE SURFACES.** That helps prevent soil erosion and keeps damage to land in check.
3. **DISPOSE OF WASTE PROPERLY (PACK IT IN, PACK IT OUT).** Accept the challenge of taking home everything you bring.
4. **LEAVE WHAT YOU FIND.** Allow other visitors a sense of discovery, and remember that good campsites are found, not made.
5. **MINIMIZE CAMPFIRE IMPACTS.** Use lightweight camp stoves whenever possible—they make camp cooking much easier and more desirable than harmful campfires do.
6. **RESPECT WILDLIFE.** Considerate campers help keep wildlife wild.
7. **BE CONSIDERATE OF OTHER VISITORS.** Thoughtful campers are considerate of other campers and respect their privacy.

Activities

1. In camp and along the nature trail and walk for the Plant Identification and Animal Identification skills sessions, point out opportunities to practice Leave No Trace principles.
2. Have a discussion so that participants can critique their own implementation of Leave No Trace in their campsite and share tips for Leave No Trace that they practice back home.

Introduction to Outdoor Leader Skills

Self-Evaluation

Rate yourself on a scale of 1 to 5, with 1 being "uncomfortable/uncertain" and 5 being "comfortable/confident."

I feel comfortable and confident fulfilling and teaching the following rank requirements and outdoor skills:

	UNCOMFORTABLE/ UNCERTAIN				COMFORTABLE/ CONFIDENT
1. Spend at least one night on a patrol or troop campout. Sleep in a tent you have helped pitch. T2	1	2	3	4	5
2. On one of these campouts, select your patrol site and sleep in a tent that you have pitched. S2b	1	2	3	4	5
3. Demonstrate how to whip and fuse the ends of a rope. T4a	1	2	3	4	5
4. Demonstrate that you know how to tie the following knots and tell what their uses are: two half hitches and the taut-line hitch. T4b	1	2	3	4	5
5. Discuss when you should and should not use lashings. F7a	1	2	3	4	5
6. Demonstrate tying the timber hitch and clove hitch and their use in square, shear, and diagonal lashings by joining two or more poles or staves together. F7b	1	2	3	4	5
7. Use lashing to make a useful camp gadget. F7c	1	2	3	4	5
8. Demonstrate tying the bowline knot and describe several ways it can be used. F8a	1	2	3	4	5
9. On one campout, demonstrate proper care, sharpening, and use of the knife, saw, and ax, and describe when they should be used. S2c	1	2	3	4	5
10. Use the knife, saw, and ax to prepare tinder, kindling, and fuel for a cooking fire. S2d	1	2	3	4	5
11. Discuss when it is appropriate to use a cooking fire and a lightweight stove. Discuss the safety procedures for using both. S2e	1	2	3	4	5
12. Demonstrate how to light a fire and a lightweight stove. S2f	1	2	3	4	5

	UNCOMFORTABLE/ UNCERTAIN				COMFORTABLE/ CONFIDENT
13. On a campout, assist in preparing and cooking one of your patrol's meals. Tell why it is important for each patrol member to share in meal preparation and cleanup, and explain the importance of eating together. T3	1	2	3	4	5
14. On one campout, plan and cook over an open fire one hot breakfast or lunch for yourself, selecting foods from each group in the food pyramid. Explain the importance of good nutrition. Tell how to transport, store, and prepare the foods you selected. S2g	1	2	3	4	5
15. Help plan a patrol menu for one campout—including one breakfast, lunch, and dinner—that requires cooking. Tell how the menu includes foods from each group in the food pyramid and meets nutritional needs. F4a	1	2	3	4	5
16. Using the menu planned above, make a list showing the cost and food amounts needed to feed three or more boys and secure the ingredients. F4b	1	2	3	4	5
17. Tell which pans, utensils, and other gear will be needed to cook and serve these meals. F4c	1	2	3	4	5
18. Explain the procedures to follow in the safe handling and storage of fresh meats, dairy products, eggs, vegetables, and other perishable food products. Tell how to properly dispose of camp garbage, cans, plastic containers, and other rubbish. F4d	1	2	3	4	5
19. On one campout, serve as your patrol's cook. Supervise your assistant(s) in using a stove or building a cooking fire. Prepare the breakfast, lunch, and dinner planned in the assignment above. Lead your patrol in saying grace at the meals and supervise cleanup. F4e	1	2	3	4	5
20. Demonstrate the Heimlich maneuver and tell when it is used. T12a	1	2	3	4	5

	UNCOMFORTABLE/ UNCERTAIN				COMFORTABLE/ CONFIDENT
21. Show first aid for the following: T12b					
a. Simple cuts and scratches	1	2	3	4	5
b. Blisters on the hand and foot	1	2	3	4	5
c. Minor burns or scalds (first-degree)	1	2	3	4	5
d. Bites or stings of insects and ticks	1	2	3	4	5
e. Poisonous snakebite	1	2	3	4	5
f. Nosebleed	1	2	3	4	5
g. Frostbite and sunburn	1	2	3	4	5
22. Show what to do for "hurry" cases of stopped breathing, serious bleeding, and internal poisoning. S6a	1	2	3	4	5
23. Prepare a personal first-aid kit to take with you on a hike. S6b	1	2	3	4	5
24. Demonstrate first aid for the following: S6c					
a. Object in the eye	1	2	3	4	5
b. Bite of a suspected rabid animal	1	2	3	4	5
c. Puncture wounds from a splinter, nail, and fishhook	1	2	3	4	5
d. Serious burns (second-degree)	1	2	3	4	5
e. Heat exhaustion	1	2	3	4	5
f. Shock	1	2	3	4	5
g. Heatstroke, dehydration, hypothermia, and hyperventilation	1	2	3	4	5
25. Demonstrate bandages for a sprained ankle and for injuries on the head, the upper arm, and the collarbone. F8b	1	2	3	4	5
26. Show how to transport by yourself, and with one other person, a person F8c					
a. From a smoke-filled room	1	2	3	4	5
b. With a sprained ankle, for at least 25 yards	1	2	3	4	5

	UNCOMFORTABLE/ UNCERTAIN				COMFORTABLE/ CONFIDENT
27. Tell the five most common signs of a heart attack. Explain the steps (procedures) in cardiopulmonary resuscitation (CPR). F8d	1	2	3	4	5
28. Identify local poisonous plants; tell how to treat for exposure to them. T11	1	2	3	4	5
29. Identify or show evidence of at least 10 kinds of native plants found in your community. F6	1	2	3	4	5
30. Identify or show evidence of at least 10 kinds of wild animals (birds, mammals, reptiles, fish, mollusks) found in your community. S5	1	2	3	4	5
31. Present yourself to your leader, properly dressed, before going on an overnight camping trip. Show the camping gear you will use. Show the right way to pack and carry it. T1	1	2	3	4	5
32. Explain the rules of safe hiking, both on the highway and cross-country, during the day and at night. Explain what to do if you are lost. T5	1	2	3	4	5
33. Explain why we use the buddy system in Scouting. T9	1	2	3	4	5
34. Demonstrate how a compass works and how to orient a map. Explain what map symbols mean. S1a	1	2	3	4	5
35. Using a compass and a map together, take a five-mile hike (or 10 miles by bike) approved by your adult leader and your parent or guardian. (If you use a wheelchair or crutches, or it is difficult for you to get around, you may substitute "trip" for "hike.") S1b	1	2	3	4	5
36. Demonstrate how to find directions during the day and at night without using a compass. F1	1	2	3	4	5
37. Using a compass, complete an orienteering course that covers at least one mile and requires measuring the height and/or width of designated items (tree, tower, canyon, ditch, etc.). F2	1	2	3	4	5
38. Explain the seven principles of Leave No Trace and what it takes to be a responsible user of the outdoors. Tell how Leave No Trace is everyone's responsibility. (Although this is not a rank requirement, all Scouts and Scouters should know and practice the principles of Leave No Trace.)	1	2	3	4	5

Introduction to Outdoor Leader Skills

Course Evaluation

Date _____ Location _____

THANK YOU for your participation and the time you have spent for the enhancement of your personal Scouting skills. Your commitment to give our youth confidence in outdoor skills will be a special part of your unit program. To assist us with future courses, please take a moment to complete the following.

1. Did we provide information, ideas and materials that will help you understand your responsibility in teaching Scouts outdoor skills? ☐ Yes ☐ No

   If no, what was lacking? _____

2. What part of this course will have the most value for you in achieving these skills? _____

   _____

   What part will have the least value? _____

3. What sessions did you enjoy the most? _____

4. Were there sessions that left you with unanswered questions? ☐ Yes ☐ No

   If yes, which ones? _____

   What do you need to know? _____

5. Do you know where to find more information on the skills presented? ☐ Yes ☐ No

6. Could you see and hear the presenters? ☐ Yes ☐ No

7. Did you benefit from the hands-on teaching methods used? ☐ Yes ☐ No

8. Were the skills well-presented and clearly demonstrated? ☐ Yes ☐ No

9. Did we lose your interest any time during the sessions ☐ Yes ☐ No

   If yes, how can we prevent this next time? _____

10. Did you have BSA Leader Fast Start before coming to this training? ☐ Yes ☐ No

11. Did you have fun? ☐ Yes ☐ No

Did you enjoy the buddy system? ☐ Yes ☐ No

12. How did you hear about this training? _____

13. Would you encourage others to attend? ☐ Yes ☐ No

Please use this space for any additional comments.

Introduction to Outdoor Leader Skills

Personal Record

Name _____ District _____

Course date _____ Location _____

THE AMERICAN FLAG

_____ Raise, fold, display

TENTS AND SHELTER

_____ Pitching a tent

ROPES AND LASHING

_____ Whip and fuse ends
_____ Taut-line hitch
_____ Clove hitch
_____ Shear lashing
_____ Bowline
_____ Two half hitches
_____ Timber hitch
_____ Square lashing
_____ Diagonal lashing

WOODS TOOLS

_____ Knife
_____ Ax—methods
_____ Camp saw
_____ Sharpening tools

CAMP FIRES

_____ Tinder
_____ Fire fuel
_____ Kindling
_____ Extinguishing

COOKING

_____ Menu planning
_____ Clean-up
_____ Backpack stove
_____ Compass reading

ADDITIONAL SKILLS

_____ Map reading
_____ Measuring
_____ Camp and pack basics
_____ Plant identification
_____ Orienteering
_____ Hiking basics
_____ Animal identification
_____ Leave No Trace camping

TENDERFOOT FIRST AID

_____ Cuts and scratches
_____ Minor burns and scalds
_____ Identify poisonous plants
_____ Nosebleed
_____ Frostbite and sunburn
_____ Hand and foot blisters
_____ Bites and stings of insects
_____ Poisonous snakebites
_____ Heimlich maneuver

SECOND CLASS FIRST AID

_____ Serious bleeding
_____ Object in the eye
_____ Puncture wounds
_____ Heat exhaustion
_____ Heatstroke
_____ Hypothermia
_____ Internal poisoning
_____ Rabid animal bite
_____ Serious burns
_____ Shock
_____ Dehydration
_____ Hyperventilation

FIRST CLASS FIRST AID

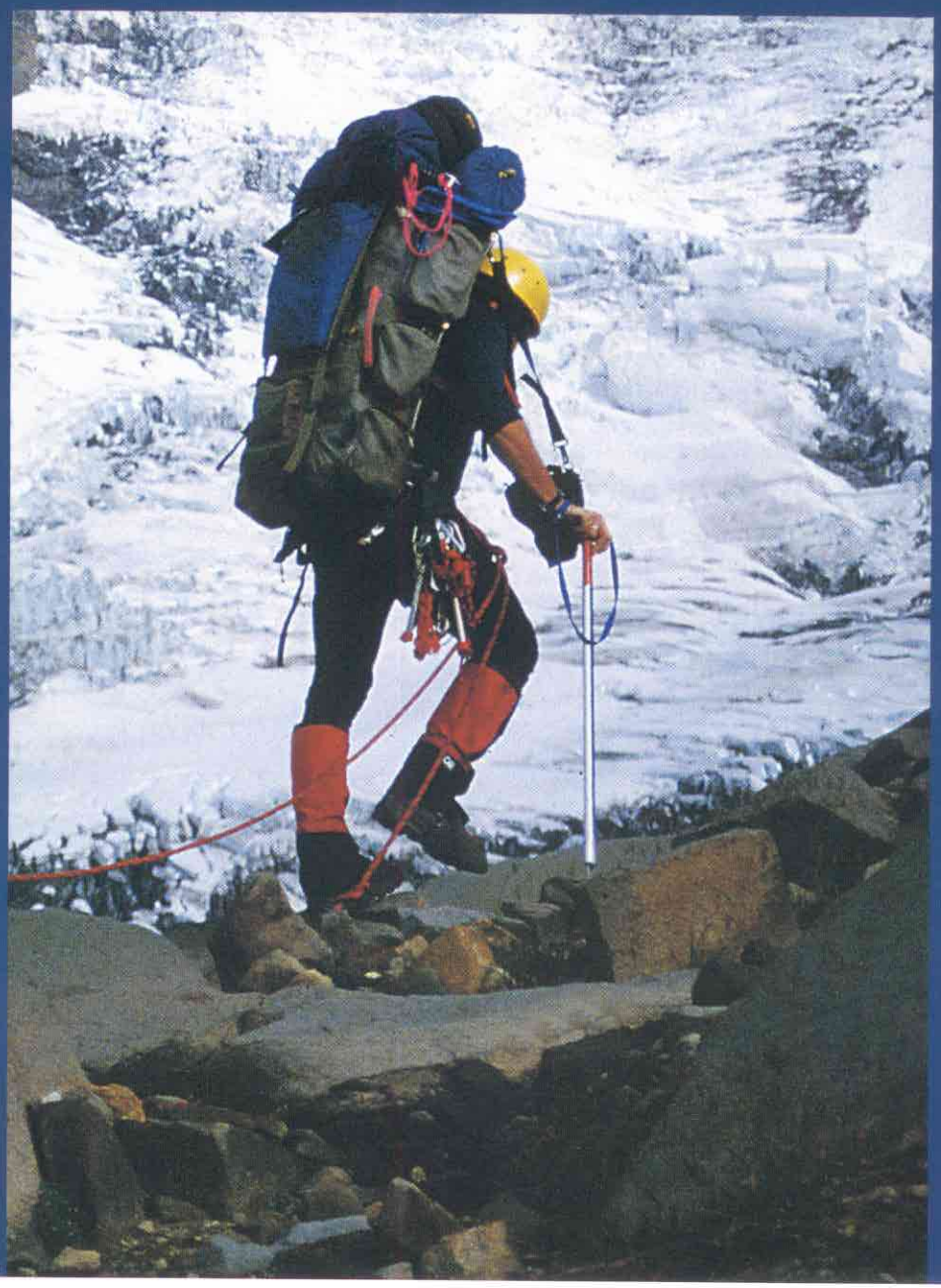
Bandages
_____ Head injury
_____ Collarbone
Transport
_____ Smoke-filled room
_____ Five signs of heart attack
_____ Upper arm
_____ Sprained ankle
_____ Sprained ankle—25 yards
_____ Explain basic CPR

_____
TRAINING COURSE CHAIR

_____
COUNCIL TRAINING CHAIR

_____
COURSE DATE

_____
COURSE LOCATION



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