



INTRODUCTION TO

OUTDOOR

LEADER SKILLS



BOY SCOUTS OF AMERICA®

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INTRODUCTION

Welcome to Introduction to Outdoor Leader Skills training. The Introduction to Outdoor Leader Skills (IOLS) course builds and expands on the concepts and themes introduced in Scoutmaster Position-Specific Training and Varsity Coach Position-Specific Training, and provides Scouters with the confidence to take youth into the outdoors.

Specifically, this hands-on program gives adult leaders a practical introduction to the patrol method of a boy-led troop by teaching many of the practical outdoor skills they need to lead Scouts in the out-of-doors. In addition, the teaching methods, activities, and games model the variety of teaching used in effective and engaging Scouting programs.

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 many of the basic outdoor skills through First Class rank, and gain exposure to the patrol method and numerous teaching methods and learning games. Each skills session references specific chapters in the handbook and highlights the 2016 advancement requirements.

Hands-on participation is the best learning tool, and this course models the techniques used by effective Scoutmasters, Coaches, Advisors, and other leaders in the Scouting program. Attendees will see and experience different aspects of how Scouting works while playing the role of Scouts in a troop.

Participants should leave the training experience with a full understanding of how the patrol method operates, a feeling of comfort in working with and instructing their Scouts, and an increased level of confidence taking Scouts outdoors safely. 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 (such as Dutch ovens) will be available from a council camp and/or troops, and perhaps staff members, 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 course has been designed to be taught over one full day and an overnight. Two recommended formats are included in the “Course Organization” section.

No test-out option is available for this course, even in the case of experienced outdoorsmen. The experiential nature of participating in a patrol and troop, as well as engaging in various methods of learning, provides benefits much greater than just learning the outdoor skills taught.

AREAS OF FOCUS

Be aware that Introduction to Outdoor Leader Skills focuses on outdoor camping skills and does not cover all advancement requirements. For example, the program does not encompass practical swimming skills or first aid, which are more effectively taught in a different environment. 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*, 13th 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—to influence 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 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, to demonstrate the knowledge leaders need to fulfill their roles successfully, and to reinforce safety issues.

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.

Leaders should also encourage this method when instructing in their own units—let the Scouts work and learn together. Note that the Boy Scout advancement requirements related to the skills sessions are provided within each session. You can also refer to “2016 Advancement Requirements” in the appendix.

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.

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:

Scouting University
1325 West Walnut Hill Lane
P.O. Box 152079
Irving, TX 75015-2079

COURSE ORGANIZATION

Course Schedules

Schedule A is for an evening and full-day course, typically a Friday evening through Saturday evening. Schedule B is for a full day and morning course, typically all day Saturday through noon Sunday.

Schedule A

Day One

5:15-6 p.m.	Registration and check-in	45 minutes
6-7:15 p.m.	Campsite Selection and setup	75 minutes
7:15-7:45 p.m.	Opening Ceremony	30 minutes
7:45-8:15 p.m.	Outdoor Ethics	30 minutes
8:15-9 p.m.	Fire Site Preparation and Building	45 minutes
9-9:30 p.m.	Campfire program	30 minutes
9:30-10 p.m.	Cracker barrel	30 minutes

Day Two

7-8 a.m.	Cooking (during breakfast)	60 minutes
8-8:30 a.m.	Interfaith worship	30 minutes
8:30-8:45 a.m.	Flag ceremony	15 minutes
8:45-10:15 a.m.	Ropes	90 minutes
10:15-10:30 a.m.	Break	15 minutes
10:30-11:30 a.m.	Woods Tools	60 minutes
11:30 a.m.-12:15 p.m.	Trail lunch	45 minutes
12:15-1:15 p.m.	Plant Identification	60 minutes
1:15-2 p.m.	Animal Identification	45 minutes
2-3:15 p.m.	Finding Your Way	75 minutes
3:15-3:30 p.m.	Break	15 minutes
3:30-4:45 p.m.	Packing and Hiking Techniques	75 minutes
4:45-5:15 p.m.	Closing ceremony	30 minutes
5:15-6 p.m.	Break camp	45 minutes

Schedule B**Day One**

8-8:45 a.m.	Registration and check-in	45 minutes
8:45-10 a.m.	Campsite Selection and setup	75 minutes
10-10:30 a.m.	Opening Ceremony	30 minutes
10:30-10:45 a.m.	Break	15 minutes
10:45-11:15 a.m.	Outdoor Ethics	30 minutes
11:15 a.m.-12:15 p.m.	Woods Tools	60 minutes
12:15-1 p.m.	Trail lunch	45 minutes
1-2:30 p.m.	Ropes	90 minutes
2:30-2:45 p.m.	Break	15 minutes
2:45-3:45 p.m.	Plant Identification	60 minutes
3:45-4:30 p.m.	Animal Identification	45 minutes
4:30-4:45 p.m.	Flag ceremony	15 minutes
4:45-5 p.m.	Break	15 minutes
5-6 p.m.	Cooking	60 minutes
6-7 p.m.	Dinner	60 minutes
7-8:15 p.m.	Packing and Hiking Techniques	75 minutes
8:15-9 p.m.	Fire Site Preparation and Building	45 minutes
9-9:30 p.m.	Campfire program	30 minutes
9:30-10 p.m.	Cracker barrel	30 minutes

Day Two

7-8 a.m.	Breakfast	60 minutes
8-8:30 a.m.	Interfaith worship	30 minutes
8:30-8:45 a.m.	Flag ceremony (optional)	15 minutes
8:45-10 a.m.	Finding Your Way	75 minutes
10-10:15 a.m.	Break	15 minutes
10:15-10:45 a.m.	Closing ceremony	30 minutes
10:45-11:30 a.m.	Break camp	45 minutes

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.

Some activities will be taught as an entire troop, while others will be delivered as break-outs by patrol. 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 duration of the 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, map reading, etc.

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 food, a source for adequate drinking water, first-aid station, and if possible, toilet and bathhouse facilities.

PROMOTING THE COURSE

To be successful, 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 or on your council website.

Personal Letter to Participants

This is a suggested letter to be mailed to registered Scoutmasters, Boy Scout leaders, Varsity Scout leaders, second-year Webelos leaders, and troop and team 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, Coaches, Boy Scout Leaders, and Unit 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, and work with woods tools, and about ropes, planning campfire programs, map reading and compass skills, hiking and packing techniques, nature identification, and outdoor ethics. 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 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 and memorable outdoor learning experience.

Our 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 carpool or trade days on transporting.

and verification that you have completed Youth Protection Training and Weather Hazards Training (either instructor-led or via MyScouting).

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 course. 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 you 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.

PERSONAL OVERNIGHT CAMPING GEAR

- | | |
|--|--|
| <ul style="list-style-type: none"> <input type="checkbox"/> <i>Boy Scout Handbook</i> <input type="checkbox"/> OUTDOOR ESSENTIALS <ul style="list-style-type: none"> <input type="checkbox"/> Pocketknife <input type="checkbox"/> First-aid kit <input type="checkbox"/> Extra clothing <input type="checkbox"/> Rain gear <input type="checkbox"/> Water bottle filled with potable water <input type="checkbox"/> Flashlight <input type="checkbox"/> Matches and fire starters <input type="checkbox"/> Sun protection <input type="checkbox"/> Map and compass <input type="checkbox"/> Clothing for the season (warm-weather or cold-weather) <input type="checkbox"/> Backpack <input type="checkbox"/> Rain cover for backpack <input type="checkbox"/> Sleeping bag, or two or three blankets <input type="checkbox"/> Sleeping pad <input type="checkbox"/> Ground cloth <input type="checkbox"/> EATING KIT <ul style="list-style-type: none"> <input type="checkbox"/> Spoon <input type="checkbox"/> Plate <input type="checkbox"/> Bowl <input type="checkbox"/> Cup | <ul style="list-style-type: none"> <input type="checkbox"/> CLEANUP KIT <ul style="list-style-type: none"> <input type="checkbox"/> Soap <input type="checkbox"/> Toothbrush <input type="checkbox"/> Toothpaste <input type="checkbox"/> Dental floss <input type="checkbox"/> Comb <input type="checkbox"/> Washcloth <input type="checkbox"/> Towel <input type="checkbox"/> PERSONAL EXTRAS (OPTIONAL) <ul style="list-style-type: none"> <input type="checkbox"/> Watch <input type="checkbox"/> Camera and film <input type="checkbox"/> Notebook or paper <input type="checkbox"/> Pencil or pen <input type="checkbox"/> Sunglasses <input type="checkbox"/> Small musical instrument <input type="checkbox"/> Swimsuit <input type="checkbox"/> 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.

The program is organized along the lines of a Scout troop, with staff members playing the role of Scoutmaster, senior patrol leader, troop guides, and instructors. Program participants play the role of Scouts and function in patrols for the duration of the course.

In order to model the patrol method as closely as possible, the course chair should play the role of the senior patrol leader, with the professional staff adviser (or other assigned course mentor) playing the role of the Scoutmaster. This best demonstrates the concept of a boy-led troop. Other program staff should be assigned as troop guides (one per patrol), and may double as instructors for group sessions if needed or desired.

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. For example, the council outdoor ethics advocate, outdoor ethics master, or trainer should lead the Outdoor Ethics course development briefing.

Each staff member is to be given a copy of this *Introduction to Outdoor Leader Skills* training guide 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 and 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 is 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 shortcuts 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 19, 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, and training assignments; practicing skills; 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. 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 training guide 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 training guide (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 troop guide 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 the 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 Annual 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 skills sessions review materials with staff members—hands-on—to assure skill understanding and ability to demonstrate to participants.
2. Establish a “backup leaders” list for skills session assignments—get 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, and participant campsite setup demonstrations, and confirm the backup 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 the final course schedule of training assignments, map of the area with layout of course, parking, etc.—cover any and all details as related to your course location and the 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.
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, and develop an 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. In many cases, it will make sense for staff to arrive early to help set up registration and skills areas. These areas would include the opening flag ceremony, camp-making demonstration area, evening cracker barrel area, etc. This is the time 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 training guide 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 and social media.			
-60	Second staff briefing.			
-60	Start promotion at roundtables.			
-60	Start promotional telephone calls.			
-60	Second promotional article appears in council newsletter and social media.			
-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 and social media.			
-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 and enter into My.Scouting Tools.			
+15	Make final report.			
+15	Write thank-you article for council newsletter.			

CHECK-IN AND REGISTRATION 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 and the status of promotional mailings, and should encourage staff members to attend roundtables and other functions to promote participant recruitment.

This training guide contains a suggested registration letter and form to send to potential participants. It should be edited as appropriate to your area. Remind participants that they will need to bring with them the registration form and a completed Annual Health and Medical Record, No. 680-001.

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 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 dietary 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 check-in.

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

Troop Guides

Troop guides are key to the success of this training. They are the primary trainers, and it is their responsibility to understand and teach concepts outlined in this course and help maintain the scheduled pace of learning. By organizing into small groups, the training can be more personalized and interactive.

While it may be difficult to assess participants' experience with Scouting, it is recommended that patrols be organized in such a way that more experienced participants are mixed with participants who have less experience.

During the registration process, troop guides are on hand to:

- Welcome participants
- Organize their patrols
- Answer basic questions about the course and schedule
- Spend time getting to know the participants and their background
- Help nominate a senior patrol leader (near the end of the registration period)

Setting Up Patrol Campsites

Once the registration period is complete, troop guides meet in their respective patrols and escort patrol members to the designated patrol campsite.

- Troop guides are responsible for ensuring that patrols follow acceptable practices for organizing and setting up campsites.
- Troop guides deliver the Campsite Selection skills session and ask the patrol to set up its site and elect a patrol leader.
- Troop guides are also expected to help their patrols manage their time and be punctual to all training sessions.

Teaching Outdoor Skills to Boys

As troop guides, you will be teaching participants the skills they need to take their troops on outdoor experiences. The success of the outdoor program is dependent on how well the required skills are learned. Because skills in the outdoors are often taught in a patrol setting by other Scouts, it is important to ensure that leaders are prepared to handle the responsibility.

Sometime during this course, plan on leading a discussion with your patrol on how to help boys learn to teach skills. Use the handout "Techniques for Teaching Outdoor Skills" as your guide (see the appendix).

Scoutmasters need to anticipate where Scouts might fall short in their teaching. They need to help things go right from the beginning rather than correct after the fact if skills sessions are to be effective. Even more experienced Scouts may be uncomfortable teaching skills in front of their peers.

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

15 minutes

Materials

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

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

Resources

- *Boy Scout Handbook*
- *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. 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

Goals

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

- Explain the importance of religious principle as addressed in the Scout Oath 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 “nondenominational” service—which usually means Protestant and is unsuitable for many faiths, including non-Christians.
- Present a suitable grace at mealtimes.
- Emphasize the importance of Scouts leading the worship while being aware of others’ beliefs.

A Scout's Duty to God

The Boy Scouts of America maintains that no boy can grow into the best kind of citizen without recognizing his obligation 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

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.

GIVETHANKS

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

30 minutes

Materials

Group participation area, with or without an actual ground fire. (Artificial campfires can be used to conduct indoor, foul-weather, or low-impact programs, or where fires are prohibited by local regulation.)

Resources

- Campfire Program Planner, one sheet per participant
- *Troop Program Resources*
- Sample Campfire Program (see appendix)

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.

Conduct the campfire program after dinner—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.

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. 34554

Guide to Safe Scouting, No. 34416

Troop Leader Guidebook, Vol. 1, No. 33009

Secondary Resources

Camp Cookery for Small Groups, No. 33592

Firem'n Chit pocket certificate, No. 34236

Outdoor Code pocket card, No. 33428

Outdoor Code poster, No. 33689

Outdoor Ethics Awareness and Action Awards Program, No. 430-063
(available at www.scouting.org/OutdoorProgram)

Plant and animal identification guides for your area

Program Features for Troops, Teams, and Crews, Volume 1, No. 33110

Program Features for Troops, Teams, and Crews, Volume 2, No. 33111

Program Features for Troops, Teams, and Crews, Volume 3, No. 33112

Safe Swim Defense pocket card, No. 34243

Safety Afloat pocket card, No. 34242

Teaching Leave No Trace (available at www.scouting.org/OutdoorProgram)

Totin' Chip pocket certificate, No. 34234

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 14). 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, one for each group of four 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

- Roster of participants
- BSA receipt book
- Notebook paper and pencils
- Name tags
- U.S. flag, flagpole

OPENING CEREMONY

Time Frame

30 minutes

Scoutmaster: Welcome to Introduction to Outdoor Leader Skills!
My name is _____, and I'm the Scoutmaster for this course.

This course is designed to give you some familiarity with the outdoor skills used by boys earning their initial ranks in Scouting. But more than that, it will give you some experience in Scouting's patrol method, which is Baden-Powell's vision for how boys lead other boys.

In the patrol method, you'll find that the Scoutmaster is rarely center stage, so without further ado, let me introduce to you our senior patrol leader.

The senior patrol leader then comes forward as the Scoutmaster makes a few comments about his experience, etc.

At this time, I'd like to swear in our new senior patrol leader.

The senior patrol leader raises his right hand in the Scout sign.

Senior Patrol Leader Oath

On my honor, I will do my best to perform the office of senior patrol leader, for the sake of the Scouts in the troop, and in the world brotherhood of Scouting.

With your senior patrol leader sworn in, I will turn the time over to him.

Scoutmaster moves off to the side, leaving the senior patrol leader to conduct the remainder of the opening ceremony.

Senior Patrol Leader: Thank you, Scoutmaster. Welcome to Introduction to Outdoor Leader Skills! First, let's have our color guard raise our flags and lead us in reciting the Scout Oath and Scout Law.

The staff conducts a well-rehearsed flag ceremony that sets a high standard for participants. The Scout Oath and Scout Law can be recited, and an opening prayer can be offered. One possible flag ceremony is provided in the "Program Events" section.

Thank you to our color guard! Now let's have the staff introduce themselves.

Each staff member takes a minute to introduce themselves and their role in the course. Optionally, each participant might also introduce themselves to the group.

Senior Patrol Leader: Now, let's talk about this course and how it works. You've already also been asked to nominate a patrol leader. Will those patrol leaders please come forward to be sworn in.

The patrol leaders make the Scout sign and repeat the following oath:

Patrol Leader Oath

On my honor, I will do my best to perform the office of patrol leader, for the sake of the Scouts in my patrol and troop, and in the world brotherhood of Scouting.

Great! With patrols and patrol leaders in place, we're ready to begin Scouting! This course introduces you to many of the outdoor skills needed for rank advancement for Scout, Tenderfoot, Second Class, and First Class. But more than that, you'll also learn about how Scouts learn and some techniques for teaching, so pay attention and have fun!

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*
- *Guide to Safe Scouting*

Goals

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

- Explain the basics of campsite selection.
- Describe the value of having older Scouts teach younger Scouts.

Overview

Conducted in patrols by each troop guide, this activity shows the value of an experienced Scout teaching younger Scouts. The troop guide should explain the key learning points in the lesson plan and take time to answer any questions from the patrol.

During this time, the patrol should also take the time to elect a patrol leader, who will be installed during the opening flag ceremony.

Advancement Requirements

- **T-1b.** Spend at least one night on a patrol or troop campout. Sleep in a tent you have helped pitch.
- **SC-1c.** On one of these campouts, select a location for your patrol site and recommend it to your patrol leader, senior patrol leader, or troop guide. Explain what factors you should consider when choosing a patrol site and where to pitch a tent.

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 minimal impact 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.

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.** Get permission in advance from landowners when camping on private property 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.
4. Briefly discuss the value of having more experienced Scouts work with younger boys to teach and practice skills.

OUTDOOR ETHICS TIPS

Outdoor Code:

Be Considerate in the Outdoors—Think about others as well as yourselves. Ensure other visitors around you are able to enjoy their stay.

Leave No Trace/Tread Lightly!:

Plan Ahead and Prepare/Respect the Rights of Others—If camping on or traveling through private property, gain permission first. Remember, respected access is open access.

Travel and Camp on Durable Surfaces/Travel Responsibly—

- Use established campsites. Tents mat down vegetation, depriving it of water, air, and sunlight. If possible, focus activity where vegetation is absent and fluff impacted vegetation after breaking camp.
- Heavy foot traffic in an area will compact soil, making it difficult for new plants to take root.
- Concentrate travel in and around camp to established trails to prevent trampling vegetation and forming unwanted pathways.
- Bypass sensitive areas that might not withstand the impact of camping and hiking.

Minimize Campfire Impacts/Do Your Part—Cooking on camp stoves is easy in any weather, leaves no mark on the land, and does not require a fire ring, which not all campsites have.

Be Considerate of Other Visitors/Respect the Rights of Others—Use campsites designated for your group size to avoid encroaching on neighboring sites.

SKILLS SESSION

OUTDOOR ETHICS

Time Frame

30 minutes

Resources

- *Boy Scout Handbook*—chapter 7, Outdoor Ethics

Goals

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

- Explain the principles of outdoor ethics.
- Explain the meaning of the BSA's Outdoor Code and how it affects users of the outdoors and camping ethics.
- Commit to making outdoor ethics part of all outdoor Scouting experiences through ongoing activities and discussions that support the principles taught in the *Boy Scout Handbook*.
- Commit to helping Scouts develop a vision of outdoor ethics that extends to Scout camps, wilderness areas, parks, and their own neighborhoods.

Advancement Requirements

- **S-1e.** Repeat from memory the Outdoor Code. In your own words, explain what the Outdoor Code means to you.
- **T-1c.** Tell how you practiced the Outdoor Code on a campout or outing.
- **SC-1b.** Explain the principles of Leave No Trace and tell how you practiced them on a campout or outing.
- **FC-1b.** Explain each of the principles of Tread Lightly! and tell how you practiced them on a campout or outing.

Before You Begin

Outdoor ethics should be viewed as an attitude that is practiced and reinforced throughout the Scouting program. In this course, the principles of Leave No Trace and the Outdoor Code will be discussed often and are not specifically covered in any one module. Similarly, this concept should be a common thread woven through the fabric of a Scout's outdoor experiences.

Activities suggested below can be included throughout the course where applicable.

The learning method here is practice and repetition. Humans are behavioral and we tend to learn best in small, repetitive chunks. We learn best what we practice often, but we can't practice what we can't remember. The takeaway for Scoutmasters is to teach concepts in short bites—no more than two to three concepts presented at one time but reinforced and practiced frequently.

Lesson Plan: Outdoor Ethics

The troop guide, using the *Boy Scout Handbook* as a reference, introduces participants to the Outdoor Code and Leave No Trace principles. The troop guide explains that the concepts will be reinforced repeatedly throughout the course.

Suggestion: Rather than explaining each point, have participants review the appropriate sections in their handbooks and ask for comments or questions on any of the points outlined.

Think of outdoor ethics 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 outdoor ethics 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.

Tread Lightly!

Explain that motorized recreation imposes greater stress and impact on the environment than does traveling by foot. This can happen while traveling to the trail or camp by car or truck. Tread Lightly! provides a series of five principles that provide guidance on safe and responsible shooting, boating, and motorized vehicle use in the outdoors.

Add that an easy way to remember the five principles is to think of the word TREAD. Write the following on a flip chart or on individual sheets of paper (one for each letter) and discuss:

T – Travel Responsibly

R – Respect the Rights of Others

E – Educate Yourself

A – Avoid Sensitive Areas

D – Do Your Part

Ask participants to provide examples of each of the principles. If time allows, you may want to assign each of the principles to a small group that will then share examples with the rest of the participants. Answers may include:

1. TRAVEL RESPONSIBLY

- Stay on designated roads, trails, and recreation areas.
- Go over (not around) obstacles to avoid widening the trails.
- Cross streams only at designated fords.
- When possible, avoid wet, muddy trails.
- On water, stay on designated waterways and launch your watercraft in designated areas.

2. RESPECT THE RIGHTS OF OTHERS

- Leave gates as you found them.
- Yield right of way to those passing you or going uphill.
- On water, respect anglers, swimmers, skiers, boaters, divers, and those on or near the shore.

3. EDUCATE YOURSELF

- Obtain travel maps and regulations from public agencies.
- Plan your trip.
- Take recreation skills classes.
- Know how to use your equipment safely.

4. AVOID SENSITIVE AREAS

- Avoid meadows, lakeshores, wetlands, and streams.
- Stay on designated routes to protect wildlife habitat and sensitive soil from damage.
- Do not disturb historical, archeological, or paleontological sites.
- On water, avoid operating watercraft in shallow waters or near shorelines at high speeds.

5. DO YOUR PART

- Model appropriate behavior.
- Leave the area better than you found it.
- Properly dispose of waste.
- Minimize the use of fire.
- Avoid the spread of invasive species.
- Repair degraded areas.

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.** During downtime or at a meal, the troop guide can ask participants to critique their own implementation of Leave No Trace in their campsite and share ideas that they practice back home.
- 3.** Include a discussion on Tread Lightly!, which reinforces the importance of practicing good stewardship in regard to access and protection of our natural resources.
- 4.** Have the troop guide conduct a comprehensive cleanup (“garbage blitz”) at the end of camp. After gear is packed and cleanup is complete, run a two-minute “garbage blitz” where participants collect as many pieces of garbage as possible. Gather participants for an official count and discussion. Awards can vary from lowest count receiving garbage pack-out duty to highest count earning a candy bar, bead, totem etc. A discussion led by the troop guide may include committing participants to live and teach the principles of outdoor ethics.

SKILLS SESSION

FIRE SITE PREPARATION AND BUILDING

Time Frame

45 minutes

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*
- *Guide to Safe Scouting*
- Firem'n Chit pocket certificate

Goals

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

- Describe the pros and cons of large group instruction in a lecture format.
- Explain the importance of Guide and Enable as critical steps in the EDGE method of instruction.
- Safely light a backpacking stove.
- 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.
- Explain the types and functions of common fire starting materials and demonstrate how to light a campfire.
- Describe how to return a fire site to its natural state.

Advancement Requirements

- **SC-2a.** Explain when it is appropriate to use a fire for cooking or other purposes and when it would not be appropriate to do so.
- ***SC-2d.** Explain when it is appropriate to use a lightweight stove and when it is appropriate to use a propane stove. Set up a lightweight stove or propane stove. Light the stove, unless prohibited by local fire restrictions. Describe the safety procedures for using these types of stoves.

** Not covered completely in this course.*

Overview

Taught to the entire troop, this activity can be used to show how large group lessons can effectively cover the Explain and Demonstrate stages of teaching a skill.

Consider assigning the Scoutmaster or senior patrol leader to teach this session, with other staffers demonstrating the skills and concepts as they are explained. Make sure that all participants have a chance to see and examine the demonstrations.

Note that time does not permit the participants to practice most of these skills (in other words, this session only Explains and Demonstrates most skills). However, at the conclusion of this session, a reflection should be held to explore why Scouts are only really learning when lessons are hands on (being Guided and Enabled)!

Lesson Plan: Fire Site Preparation and Building

Campfire know-how requires attention to safety, outdoor 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 outdoor ethics. 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 and that the fire cannot spread, and use existing fire sites whenever possible. If you must build a fire when there is no existing fire site, select a spot on gravel, sand, or bare earth that is well away from trees, brush, dry grasses, rocks, and boulders.
- **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, pack out or disperse ashes and leave a clean fire pit for the next user.

OUTDOOR ETHICS TIPS

Outdoor Code:

Be Careful With Fire—Fire is an important tool but can be devastating to the environment if it becomes out of control. Think about how best to use it and how to minimize its impacts. Ensure water buckets or an extinguisher is on hand.

Leave No Trace/Tread Lightly!:

Plan Ahead and Prepare/Educate Yourself—Know the fire regulations for the area you plan on visiting before you arrive.

Minimize Campfire Impacts/Do Your Part—

- Use only designated fire rings when permitted.
- Protect wildlife habitat by not breaking dead branches off trees.
- Use bark for tinder only from fallen dead trees.
- Collect only dead and down wood, gathered over a dispersed area, for firewood.
- Pack out garbage and food scraps. Do not use the fire ring as a trash can.
- Burn all wood to ash and ensure fire is “cold out.”
- Pack out ashes when possible or disperse ashes over a wide area.

Leave What You Find—If you plan to bring your own wood, know the firewood regulations for the area you visit. Avoid introducing invasives through transport of firewood.

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 come with an owners manual. Also be sure to follow the stove safety rules in 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.

As part of this session, patrols should have the opportunity to practice lighting a camp stove. However, time does not permit participants to practice building campfires.

Reflection

The Scoutmaster should lead a reflection on the differences between just seeing a skill demonstrated and actually practicing it. Participants should leave this session with a clear understanding that just showing a skill to Scouts is not the same as teaching it to them.

OUTDOOR ETHICS TIPS

Leave No Trace/Tread Lightly!
Minimize Campfire Impacts/Do Your Part—Cooking on camp stoves instead of an open fire reduces the amount of firewood you have to collect and minimizes the impact to wildlife habitat.

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
- Dishwater strainer, sieve, or window screening
- Biodegradable detergent or bleach for dishwashing
- Storage bags for utensils and pots
- Storage bags or containers for food
- Bear bags

Resources

- *Boy Scout Handbook*
- *Camp Cookery for Small Groups*

Goals

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

- Recognize the value of the *Boy Scout Handbook* as a tool for adult Scouters.
- Provide an overview of the issues related to cooking in the outdoors.
- Describe the main themes of Scout through First Class rank requirements involving cooking.
- Explain the role of cooking during Scouting activities as a key element in the patrol method.

Advancement Requirements

- ***T-2a.** On the campout, assist in preparing one of the meals. Tell why it is important for each patrol member to share in meal preparation and cleanup.
- ***T-2b.** While on a campout, demonstrate an appropriate method of safely cleaning items used to prepare, serve, and eat a meal.
- **T-2c.** Explain the importance of eating together as a patrol.
- ***SC-2e.** On one campout, plan and cook one hot breakfast or lunch, selecting foods from MyPlate or the current USDA nutritional model. Explain the importance of good nutrition. Demonstrate how to transport, store, and prepare the foods you selected.
- ***FC-2a.** Help plan a menu for one of the above campouts that includes at least one breakfast, one lunch, and one dinner, and that requires cooking at least two of the meals. Tell how the menu includes the foods from MyPlate or the current USDA nutritional model and how it meets nutritional needs for the planned activity or campout.

** Not covered completely in this course.*

Overview

An assigned staff member should run this session as a discussion, inviting participants to share their knowledge and providing additional information from the *Boy Scout Handbook* as needed to cover all points.

Use the provided questions as a starting point, but feel free to supplement them with any questions that make sense for the group.

The facilitating staffer should openly hold and reference the *Boy Scout Handbook* as he or she discusses the items in this session.

This discussion-based method of teaching emphasizes two key points, firstly that groups can often “teach themselves” by being asked questions and secondly that adults in Scouting don’t have to be experts in all topics, but can use resources (such as the *Boy Scout Handbook*) as they are called upon to teach skills.

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 evening or fresh pan-fried trout on a crisp spring day.

Question: Why is it important that a patrol cook and eat together?

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.

Question: What elements should you consider as you plan a menu?

- 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.

OUTDOOR ETHICS TIPS

Leave No Trace/Tread Lightly!
Plan Ahead and Prepare/
Educate Yourself—

- Know the regulations for how you must store your food to prevent wildlife from accessing it.
- Planning for the right amount of food and what your patrol enjoys eating will prevent excess leftovers, which must be carried out.

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 *Fieldbook* discusses how to prepare water by melting clean snow.)

Question: What methods are you familiar with to treat water?

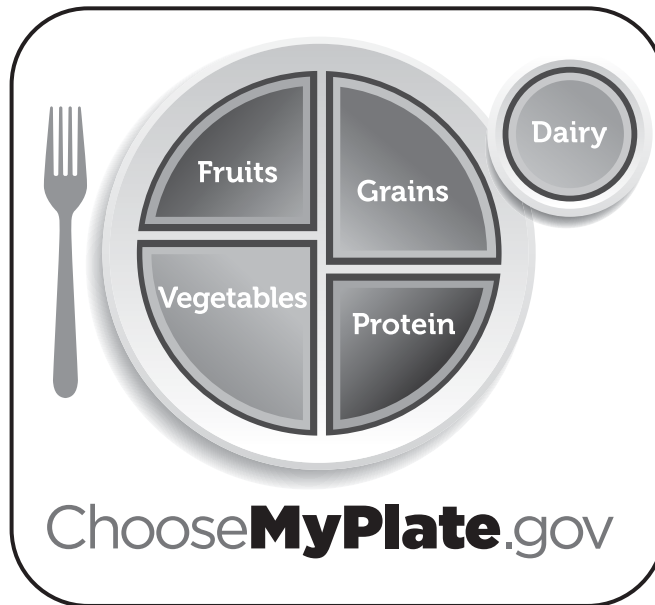
- **Boiling water**—a rolling boil—for a full minute or longer will kill most bacteria.
- **Treatment tablets** are easy to use, but always check the expiration date before leaving for camp; use only fresh tablets.
- **Filters** are effective and easy to operate, but the manufacturer's instructions must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

Question: What breakfast foods have you enjoyed on campouts?

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 can be 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

Question: What lunches have you enjoyed on campouts?

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.

OUTDOOR ETHICS TIPS

Outdoor Code:

Be Considerate in the Outdoors—Think about how our presence impacts wildlife and the environment. Store food properly to prevent altering animal behavior and creating "problem animals."

Be Conservation Minded—

- Reducing excess packaging at home allows for easier recycling of waste.
- Wildlife that consume human food can suffer from tooth decay, gum infections, and ulcers.
- Chances of survival are slim when wardens must trap and relocate "problem" wildlife.

Leave No Trace/Tread Lightly!:

Dispose of Waste Properly/Do Your Part—Repackaging food allows you to minimize waste you must deal with in camp.

Respect Wildlife/Do Your Part—

- Protect wildlife by securely storing your food and trash in containers appropriate for the wildlife in the area.
- Feeding wildlife damages their health, alters natural behavior, and exposes them to predators and other dangers.

Supper in Camp

Question: What dinners have you enjoyed on campouts?

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 food group.
 - 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 makes 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 dishwasher 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. The camp kitchen and social area of a campsite, usually the fire circle, should be located on the most durable surfaces available. As such, concentrate activity here so as not to destroy the ground cover in other areas of the site.
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.

OUTDOOR ETHICS TIPS

Outdoor Code:

Be Clean in My Outdoor Manners—Proper disposal of dishwater prevents leaving signs of your presence.

Leave No Trace/ Tread Lightly!:

Dispose of Waste Properly/Do Your Part—Strain your dishwater to remove food particles using a sieve or window screen before dispersing the water in order to avoid attracting wildlife to your leftovers.

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

Resources

Boy Scout Handbook

Goals

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

- Explain the EDGE method of teaching a skill.
- Discuss the role of interpatrol competitions in the patrol method.
- Whip and fuse a rope.
- Tie the square knot, two half hitches, taut-line hitch, timber hitch, sheet bend, and clove hitch.
- Demonstrate the square, shear, diagonal, tripod, round, and floor lashings, and explain the appropriate and inappropriate uses for these lashings.
- Tie the bowline knot and tell how it can be used.

Advancement Requirements

- **S-4a.** Show how to tie a square knot, two half hitches, and a taut-line hitch. Explain how each knot is used.
- **S-4b.** Show the proper care of a rope by learning how to whip and fuse the ends of different kinds of rope.
- **T-3a.** Demonstrate a practical use of the square knot.
- **T-3b.** Demonstrate a practical use of two half hitches.
- **T-3c.** Demonstrate a practical use of the taut-line hitch.
- **SC-2f.** Demonstrate tying the sheet bend knot. Describe a situation in which you would use this knot.
- **SC-2g.** Demonstrate tying the bowline knot. Describe a situation in which you would use this knot.
- **FC-3a.** Discuss when you should and should not use lashings
- **FC-3b.** Demonstrate tying the timber hitch and clove hitch.
- **FC-3c.** Demonstrate tying the square, shear, and diagonal lashings by joining two or more poles or staves together.
- **FC-3d.** Use lashings to make a useful camp gadget or structure.

Overview

This activity illustrates the use of the EDGE method of teaching a skill. Troop guides should be familiar with the EDGE method, and should describe each step as they use it to introduce each new knot and lashing skill. Please note that internalizing the EDGE method is as important as learning the knots!

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 2 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 setups 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, to secure tarps and tents, to 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.

OUTDOOR ETHICS TIPS

Outdoor Code:

Be Conservation Minded—Think about your impacts to the environment. Avoid cutting trees for staves.

Leave No Trace/Tread Lightly!: Leave What You Find/Do Your Part—

- Use only fallen timber for staves. Do not cut standing trees.
- If possible, have a collection of treated reusable staves in your troop or team trailer and bring them to camp to avoid the possibility of spreading invasive species.
- Good campsites are found, not made. Disassemble all camp gadgets and structures before you leave and disperse collected staves, leaving the campsite as you found it.

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 low-impact 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.

Interpatrol Contest (20 minutes)

At the conclusion of the instructional period, the troop members gather together for an interpatrol contest to Enable the new knot-tying skills they have learned.

SAMPLE CONTEST: KNOT-TYING RELAY

Organize a simple relay race in which each patrol member runs to a designated point, ties a knot, and then runs back to his patrol. Knots to be tied can be random or assigned ahead of time.

Feel free to substitute a different game or a variation on this one. The goal is to illustrate a game that reinforces a skill and also creates some friendly interpatrol rivalry.

Reflection

The senior patrol leader should lead a brief reflection on the value of interpatrol contests. Be sure to bring out ideas such as contests help patrol members grow closer together through working together, increase patrol spirit by promoting healthy rivalry between patrols, and help to keep interest and generate excitement.

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*
- Totin' Chip pocket certificate

Goals

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

- Use the round-robin method for organizing skills instruction.
- Explain the role of adult leaders in ensuring a safe environment for Scouting.
- Set up an ax yard.
- 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.
- Explain the use of the Totin' Chip in youth safety.

Advancement Requirements

- **S-5.** Demonstrate your knowledge of pocketknife safety.
- **T-3d.** Demonstrate proper care, sharpening, and use of the knife, saw, and ax. Describe when each should be used.

Overview

This activity can be used to demonstrate the round-robin method for teaching skills. Various stations are set up, one station per skill, and the patrols rotate through them, spending 15 minutes at each one. The skills could be taught by staff instructors or troop guides, but if troop guides teach the skills, they do not rotate with their patrol. Instead they remain at one station, teaching the same skill to each patrol as they rotate.

Based on the number of patrols you have, you might need multiple stations for each skill—knife, saw, and ax.

In addition, the Scoutmaster should be highly visible at this activity, reinforcing his role in overseeing the safety of all Scouts.

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, or 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.

OUTDOOR ETHICS TIPS

Outdoor Code:

Be Clean in My Outdoor Manners—Never carve your name or any other mark into a tree. Avoid leaving graffiti.

Be Conservation Minded—Avoid needlessly cutting through bark and damaging the cambium layer, or living tissue, of trees. This permanently damages and can kill the tree.

Leave No Trace/Tread Lightly!:

Leave What You Find/Do Your Part—

- Cutting into trees creates access points for insects to invade and possibly kill the tree.
- Use only dead and down wood, gathered over a dispersed area, for firewood.
- When bringing your own firewood, consider leaving your woods tools at home.

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.

- 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.
- Land managers may request trees to be cut as part of a conservation effort to thin the forest. However, standing trees, alive or dead, should never be cut for firewood or without permission.

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 performing trail work. The size and implementation of the ax make it an especially dangerous woods tool. Follow these safety tips for safe ax use.

- **SAFETOOL.** 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 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

The Scoutmaster could deliver a brief explanation/reminder of the role of adults in providing a safe environment for Scouting.

Also consider awarding each participant the Totin' Chip and have the Scoutmaster lead a brief discussion of its use in a troop.

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 6, Nature

Goals

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

- Develop strategies and means for teaching plant identification.
- 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.

Advancement Requirements

- **T-4b.** Describe common poisonous or hazardous plants; identify any that grow in your local area or campsite location. Tell how to treat for exposure to them.
- **FC-5a.** Identify or show evidence of at least 10 kinds of native plants found in your local area or campsite location. You may show evidence by identifying fallen leaves or fallen fruit that you find in the field, or as part of a collection you have made, or by photographs you have taken.

Before You Begin

Have troop guides develop a plant identification kit for this section of the course. There are times when weather, location, or other circumstances may make it difficult to obtain all of the things needed in your given location to teach the requirements. Having a good kit can save you valuable preparation time, ensure that you can teach the requirements completely, and provide a structure that allows Scouts to take part in the teaching. Troop guides should consider items that will go in the kit. The kit might include:

- A game or activity cards
- Flip book with pressed plants
- Tools for plant inspection and identification
- Books and brochures containing information about local trees, flowers, and other plant life

In preparation for this training, troop guides might also consider how this kit is assembled:

- Is the kit mobile?
- Weatherproof?

- Easy to use in an outdoor setting?
- Easy to maintain?
- Well-organized?

Troop guides will teach plant identification using the course outline and information found in the *Boy Scout Handbook*. As part of the training they can show how having kitted training materials shortens prep time and ensures good learning outcomes.

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.

The BSA does not encourage consuming plants found in the wild, even in a wilderness survival situation. However, Scouts should be able to identify common plants in their area that are poisonous when eaten, their symptoms, and which require medical attention. These plants may include types of wild mushrooms, American holly and other poisonous berries, water hemlock, and plants in the rhododendron family.

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 outdoor ethics 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.

OUTDOOR ETHICS TIPS

Outdoor Code:

Be Conservation Minded—Identifying and understanding the roles of plants in our environment and their relationship to our well-being help us respect the land and tread more cautiously through our landscape.

The Land Ethic—“The land ethic simply enlarges the boundaries of the community to include soils, waters, plants, and animals, or collectively: the land. ... In short, a land ethic changes the role of Homo sapiens from conqueror of the land-community to plain member and citizen of it. It implies respect for his fellow-members, and also respect for the community as such.”

—Aldo Leopold

SKILLS SESSION

ANIMAL IDENTIFICATION

Time Frame

45 minutes

Materials

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

Resources

- *Boy Scout Handbook*—chapter 6, Nature

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.

Advancement Requirements

- **SC-4.** Identify or show evidence of at least 10 kinds of wild animals (such as birds, mammals, reptiles, fish, or mollusks) found in your local area or camping location. You may show evidence by tracks, signs, or photographs you have taken.

Overview

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.

Scoutmasters need to know a lot of information as they work with boys in the Scouting program. That said, they're not expected to know everything. Where a Scoutmaster finds himself teaching a discipline he's less familiar with, he should consider using a subject matter expert. Using subject matter experts accomplishes several things. First, it can relieve the Scoutmaster of trying to prepare and get up to speed on a topic that can be easily covered by an expert, allowing the Scoutmaster to direct his attention toward more important aspects of his role, such as focusing on the boys. Second, it provides meaningful association with other adults, giving the boys the opportunity to learn from other positive role models. Finally, it can make the learning process more interesting and fun by allowing other adults to teach with their own style, stories, and activities.

If it makes sense, invite a subject matter expert to teach this session. If someone else is not readily available to teach, then discuss the concept of using subject matter experts for various topics, when needed, as part of this skills session.

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

Chapter 6 of the *Boy Scout Handbook* tells about the different kinds of 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 or 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 outdoor ethics and respect wildlife.

OUTDOOR ETHICS TIPS

Outdoor Code:

Be Considerate in the Outdoors—Think about others as well as yourself; allow everyone the joy of discovery.

Leave No Trace/Tread Lightly!:

Leave What You Find/Respect the Rights of Others—

- Leave feathers, antlers, shells, etc., where you found them for the next visitor to enjoy.
- Removing souvenirs detracts from the experience of others and they often lose their significance once taken home where they are put in a drawer or thrown away.

Respect Wildlife/Avoid Sensitive Areas—When tracking an animal, observe from a distance; do not approach it.

- You are too close to an animal if it alters its normal behavior.
- Avoid wildlife during sensitive times of year such as breeding, nesting, and birthing seasons.

SKILLS SESSION

FINDING YOUR WAY — MAP AND COMPASS READING

Time Frame

1 hour 15 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), for each 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 11, Navigation

Goals

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

- Gain familiarity with navigation content in the *Boy Scout Handbook*.
- Gain strategies for effectively teaching navigation.
- Define what a map is, explain 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.

Advancement Requirements

- **SC-3a.** Demonstrate how a compass works and how to orient a map. Use a map to point out and tell the meaning of five map symbols.
- ***SC-3b.** Using a compass and map together, take a 5-mile hike (or 10 miles by bike) approved by your adult leader and your parent or guardian.
- **SC-3d.** Demonstrate how to find directions during the day and at night without using a compass or an electronic device.
- ***FC-4a.** Using a map and compass, complete an orienteering course that covers at least 1 mile and requires measuring the height and/or width of designated items (tree, tower, canyon, ditch, etc.).
- **FC-4b.** Demonstrate how to use a handheld GPS unit, GPS app on a smartphone, or other electronic navigation system. Use GPS to find your current location, a destination of your choice, and the route you will take to get there. Follow that route to arrive at your destination.

** Not covered or not covered completely in this course.*

Before You Begin

Map skills may be introduced to participants almost immediately. 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; 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 key 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 as 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

Because 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. The troop guide uses questions to explain the use of compasses and maps. He solicits participants to explain the content—listening carefully to assess gaps in knowledge and filling in details. This discussion should cover general map usage, orienting a map, map symbols, and using a compass.
The troop guide can involve other participants who may not be contributing by asking follow-up and clarifying questions. The troop guide should at some point debrief on this facilitation technique. (20 minutes)
2. The troop guide breaks the patrol into pairs or small groups to have them read about using the stars, moon, and sun to navigate (see chapter 11 of the *Boy Scout Handbook*). Each team/group prepares and demonstrates to the rest of the patrol the method of orienting assigned to them. (20 minutes)
3. The troop guide uses the material in chapter 11 of the handbook and the EDGE method to help participants learn to use a GPS unit. The goal of the activity is to have them demonstrate how to use a handheld GPS unit, GPS app on a smartphone, or other electronic navigation system to find their current location, a determined destination, and the route they will take to get there. (20 minutes)
4. If time allows, the troop guide can lead the compass game found in chapter 11 of the handbook or use any of the other activities provided in this module to further the instruction.
5. Identify a prominent topographic feature and then locate it on the map. If possible, take turns with the group having individuals call out landmarks and the others trying to find that landmark on the map.
6. 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.
Note: This activity could be embedded into the initial Q&A covering map and compass usage.
7. Reinforce an understanding of contour lines by explaining the term and having participants use the method of drawing lines on their fist as described in the *Boy Scout Handbook*. The handbook tells how to compare the contour lines drawn with those shown on a topographic map.

OUTDOOR ETHICS TIPS

Leave No Trace/Tread Lightly!:
Plan Ahead and Prepare/
Educate Yourself—

- Studying the map before you begin an orienteering course can help you prevent becoming lost or disoriented.
- Prepare for your course by learning how to use your navigation equipment.
- Ensure you have proper clothing for the weather, terrain, environmental conditions, and emergencies.

Travel and Camp on Durable Surfaces/Travel Responsibly and Avoid Sensitive Areas—

- When navigating off trail, use the box method to navigate around fragile areas.
- Practice using attack points in order to travel on roads and trails as much as possible.
- When setting up an orienteering course, do not place points in sensitive areas such as fragile vegetation or soils, critical wildlife habitat, wetlands, or alpine areas.

Leave What You Find/
Travel Responsibly—

- If using GPS off trail, use the “track-back” feature rather than flagging or marking your path.
- When setting up an orienteering course, avoid placing points in historic or cultural sites.

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-frame and external-frame 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
 - Outdoor Essentials checklist
 - Personal overnight camping gear checklist
 - Patrol or group overnight camping gear checklist

Resources

- *Boy Scout Handbook*—chapter 8, Hiking; chapter 9, Camping

Goals

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

- Explain the techniques of safe hiking and its benefits for enjoying nature, developing 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.

Advancement Requirements

- ***T-5a.** Explain the importance of the buddy system as it relates to your personal safety on outings and in your neighborhood. Use the buddy system while on a troop or patrol outing.
- **T-5b.** Describe what to do if you become lost on a hike or campout.
- **T-5c.** Explain the rules of safe hiking, both on the highway and cross-country, during the day and at night.

- **SC-3c.** Describe some hazards or injuries that you might encounter on your hike and what you can do to help prevent them.

** Not covered in this course.*

Before You Begin

Present this session 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. You may want to ask participants to bring their packs as they packed them for this overnight event. You can then use items from their packs as part of the session.

Discuss how younger Scouts may 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 also on 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 choosing 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

- 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 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.

Activities

1. 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.
2. If time allows, troop guides may ask their patrols to plan and go on a hike in order to reinforce and practice safe hiking techniques.

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

If yes, which ones? _____

What do you need to know? _____

4. Could you see and hear the presenters? Yes No

5. How did you hear about this training? _____

6. Would you encourage others to attend? Yes No

APPENDIX

SAMPLE CAMPFIRE PROGRAM

Campfire events can be conducted at the council, district, or troop level. The ingredients are mostly the same for all levels. Below is a suggested format of what a campfire program can include. It has been designed to demonstrate the “flow” of an effective campfire program, which follows the rise and flow of a campfire. If desired, a narrator can be assigned to explain each step as it is delivered.

- 1. Opening:** The master of ceremonies should conduct the opening.
- 2. Light the fire** (if one isn't already lit): Lighting the fire is a good way to show effect and acts as a time-keeper/gauge for the program. As the fire diminishes and dies down, so should the intensity of the program.
- 3. Icebreaker:** Sing a song, usually fast and short (upbeat, funny, or happy). See *Group Meeting Sparklers* or the *Boy Scout Songbook* for examples.
- 4. Greeting:** The senior patrol leader or other assigned staff member greets participants.
- 5. Skits:** When conducted at the council or district level, each troop can be responsible for a skit, song, or story. For the Introduction to Outdoor Leader Skills course, staff members should prepare five or six skits. These skits can be punctuated with run-ons and/or songs. Skits can involve the crowd, staff members, or fellow troop members.
- 6. Story:** Stories can be fun or scary, but all stories must be age appropriate, so adult oversight helps to keep things in order. A serious story is a wonderful way to begin the closing of a campfire. Serious stories can be patriotic, heroic, or inspirational. The story of the beginning of the BSA, “Lost in the Fog,” is a good one.

In 1909, a Chicago publisher named William D. Boyce was visiting London. These were the days of horse-drawn carriages and gas-powered street lamps. In those days a dense fog was often created by cool air moving across the River Thames, and one foggy evening Boyce became lost in the winding streets and alleyways of the city.

A boy came to his aid and guided him back to his hotel. Upon reaching the hotel, Boyce pulled out some coins, but the boy refused a tip. The boy explained that he was a Boy Scout and would not accept a reward for doing a Good Turn. Instead, this unknown Boy Scout turned and disappeared back into the London fog.

So impressed was Boyce that he organized a meeting with Robert Baden-Powell, the British Army general who had founded the Boy Scouts. Boyce learned all he could about the mission and methods of the Boy Scouts. Upon returning to the United States, William Boyce petitioned Congress to incorporate a new organization for young men. It was called the Boy Scouts of America. Perhaps you've heard of it ...

- 7. Serious or moving song:** Perhaps in theme with the serious story, a serious song can be patriotic or spiritual in nature such as the “Battle Hymn of the Republic.”
- 8. Scoutmaster's Minute:** The Scoutmaster provides a brief message such as the example “Footprints” below.

One night a man had a dream. He dreamed he was walking along a beach with the Lord. Across the sky flashed scenes from his life. For each scene, he noticed two sets of footprints in the sand: one belonging to the Lord and one belonging to him. When the last scene of his life flashed before him, he looked back at the footprints in the sand. He noticed that many times along the path of his life there was only one set of footprints. He also noticed that it happened at the very lowest and saddest times in his life. This really bothered him, and he questioned the Lord about it. “Lord, you said that once I decided to follow you, you would walk with me all the way. But I have noticed that during the most troublesome times in my life, there was only one set of footprints. I don't understand why, when I needed you the most, you would leave me.” The Lord replied, “My son, my precious child, I love you and I would never leave you. During your times of trial and suffering, where you see only one set of footprints, it was then that I carried you.”
- 9. Closing song:** The closing song should be sung low and quieter than the other songs, as it's meant to bring down the excitement and cue the end of the day. A great example of a closing song is “Scout Vespers.”

APPENDIX

2016 ADVANCEMENT REQUIREMENTS

(Effective January 2016)

Note: Some requirements listed may not be covered in their entirety during this course.

S = Scout T = Tenderfoot SC = Second Class FC = First Class

OUTDOOR ETHICS

S-1e. Repeat from memory the Outdoor Code. In your own words, explain what the Outdoor Code means to you.

T-1c. Tell how you practiced the Outdoor Code on a campout or outing.

SC-1b. Explain the principles of Leave No Trace and tell how you practiced them on a campout or outing.

FC-1b. Explain each of the principles of Tread Lightly! and tell how you practiced them on a campout or outing.

CAMPSITE SELECTION

T-1b. Spend at least one night on a patrol or troop campout. Sleep in a tent you have helped pitch.

SC-1c. On one of these campouts, select a location for your patrol site and recommend it to your patrol leader, senior patrol leader, or troop guide. Explain what factors you should consider when choosing a patrol site and where to pitch a tent.

FIRE SITE PREPARATION AND BUILDING

SC-2a. Explain when it is appropriate to use a fire for cooking or other purposes and when it would not be appropriate to do so.

SC-2d. Explain when it is appropriate to use a lightweight stove and when it is appropriate to use a propane stove. Set up a lightweight stove or propane stove. Light the stove, unless prohibited by local fire restrictions. Describe the safety procedures for using these types of stoves.

COOKING

T-2a. On the campout, assist in preparing one of the meals. Tell why it is important for each patrol member to share in meal preparation and cleanup.

T-2b. While on a campout, demonstrate an appropriate method of safely cleaning items used to prepare, serve, and eat a meal.

T-2c. Explain the importance of eating together as a patrol.

SC-2e. On one campout, plan and cook one hot breakfast or lunch, selecting foods from MyPlate or the current USDA nutritional model. Explain the importance of good nutrition. Demonstrate how to transport, store, and prepare the foods you selected.

FC-2a. Help plan a menu for one of the above campouts that includes at least one breakfast, one lunch, and one dinner, and that requires cooking at least two of the meals. Tell how the menu includes the foods from MyPlate or the current USDA nutritional model and how it meets nutritional needs for the planned activity or campout.

ROPES—WHIPPING, TYING, AND LASHING

S-4a. Show how to tie a square knot, two half hitches, and a taut-line hitch. Explain how each knot is used.

S-4b. Show the proper care of a rope by learning how to whip and fuse the ends of different kinds of rope.

T-3a. Demonstrate a practical use of the square knot.

T-3b. Demonstrate a practical use of two half hitches.

T-3c. Demonstrate a practical use of the taut-line hitch.

SC-2f. Demonstrate tying the sheet bend knot. Describe a situation in which you would use this knot.

SC-2g. Demonstrate tying the bowline knot. Describe a situation in which you would use this knot.

FC-3a. Discuss when you should and should not use lashings.

FC-3b. Demonstrate tying the timber hitch and clove hitch.

FC-3c. Demonstrate tying the square, shear, and diagonal lashings by joining two or more poles or staves together.

FC-3d. Use lashings to make a useful camp gadget or structure.

WOODSTOOLS—KNIFE, CAMP SAW, AND AX

S-5. Demonstrate your knowledge of pocketknife safety.

T-3d. Demonstrate proper care, sharpening, and use of the knife, saw, and ax. Describe when each should be used.

PLANT IDENTIFICATION

T-4b. Describe common poisonous or hazardous plants; identify any that grow in your local area or campsite location. Tell how to treat for exposure to them.

FC-5a. Identify or show evidence of at least 10 kinds of native plants found in your local area or campsite location. You may show evidence by identifying fallen leaves or fallen fruit that you find in the field, or as part of a collection you have made, or by photographs you have taken.

ANIMAL IDENTIFICATION

SC-4. Identify or show evidence of at least 10 kinds of wild animals (such as birds, mammals, reptiles, fish, or mollusks) found in your local area or camping location. You may show evidence by tracks, signs, or photographs you have taken.

FINDING YOUR WAY—MAP AND COMPASS READING

SC-3a. Demonstrate how a compass works and how to orient a map. Use a map to point out and tell the meaning of five map symbols.

SC-3b. Using a compass and map together, take a 5-mile hike (or 10 miles by bike) approved by your adult leader and your parent or guardian.

SC-3d. Demonstrate how to find directions during the day and at night without using a compass or an electronic device.

FC-4a. Using a map and compass, complete an orienteering course that covers at least 1 mile and requires measuring the height and/or width of designated items (tree, tower, canyon, ditch, etc.).

FC-4b. Demonstrate how to use a handheld GPS unit, GPS app on a smartphone, or other electronic navigation system. Use GPS to find your current location, a destination of your choice, and the route you will take to get there. Follow that route to arrive at your destination.

PACKING AND HIKING TECHNIQUES

T-5a. Explain the importance of the buddy system as it relates to your personal safety on outings and in your neighborhood. Use the buddy system while on a troop or patrol outing.

T-5b. Describe what to do if you become lost on a hike or campout.

T-5c. Explain the rules of safe hiking, both on the highway and cross-country, during the day and at night.

SC-3c. Describe some hazards or injuries that you might encounter on your hike and what you can do to help prevent them.

APPENDIX

TECHNIQUES FOR TEACHING OUTDOOR SKILLS

The role of the Scoutmaster is to help the boys be well prepared with the tools and methods to successfully deliver the instruction.

There are a number of things the Scoutmaster can do to help a boy conduct a skills session.

1. **BOY SCOUT HANDBOOK**—The *Boy Scout Handbook* is one of the best resources. For instance, the hiking section (chapter 8) includes information on preparing food and water, making a trip plan, and bringing appropriate clothing. While there are other sources that are more comprehensive, the *Boy Scout Handbook* is simple to use and its concepts are age appropriate. Using the *Boy Scout Handbook* as the primary resource will help boys deliver simple, concise, and effective training.
2. **RESOURCE KIT**—Provide a resource kit or a materials checklist for a given skill. As discussed in the plant identification session, having a premade kit can simplify training preparation and provide good scaffolding that may allow a boy to teach a topic he might not otherwise be able to effectively prepare for.
3. **EDGE**—Always coach boys on how they can employ the EDGE method in their training.
4. **OTHER TEACHING METHODS**—Coach boys to include various teaching methods in their skills instruction.

The teaching methods the boys can use during a skills instruction session are numerous. Some of the best ones include the following:

- **BRAINSTORMING**—Brainstorming can be a great way to engage participants in any topic. Brainstorming is best used when trying to generate a large volume of ideas. It can be used in conjunction with whiteboarding. When brainstorming, remind participants that the goal is to generate as many ideas as possible, there are initially no wrong ideas, and ideas should not be judged as good, better, or best. For brainstorming to work effectively, participants need to feel safe when contributing ideas. Let the fun begin!
- **BRAIN SQUEEZERS**—Memorization always squeezes the brain. Using riddles, rhymes, acronyms, and other mnemonics can help boys retain important concepts.

Example: When teaching boys about proper outdoor clothing, use the slogan: “Cotton kills, wools the way.” This simple expression is easily remembered because of its alliteration and becomes the memory activator for a much larger discussion on the properties of cotton, wool, and synthetic materials.

- **BUZZ SESSIONS**—Buzz sessions can be used to generate conversation and get participants thinking about and exploring concepts. Conduct a buzz session by organizing participants in small groups of two to four; the larger the group, the less likely some will be to engage. Keeping groups small encourages everyone to participate. Be specific about the topic and desired outcome. Keep the time frame for discussion short and the topic narrowly focused. Consider group dynamics when organizing participants—skill level, beliefs, experiences, age, etc. Consider writing the topic on a board or giving groups a sheet with the discussion topic on it.
- **FIRECRACKERS**—These are the only fireworks used in Scouting! Firecrackers are attention getters that help promote interest in a topic and can include a funny (appropriate) YouTube video, object lesson, story, game, object, piece of memorabilia, etc. The goal is to capture or hold the participants’ attention as you conduct the training.

- **INSPECT TO DETECT**—This method starts with boys being asked to look for, inspect, or observe an object or area. These reflective activities put the learner in the driver’s seat and provide instant engagement. This method can be used as an activity starter to promote thinking or it can be used after an explanation or demonstration to assess understanding.

Example: Pack a backpack improperly, then ask the boys to pull it apart and conduct a pack inspection. Ask boys to identify the items in the pack that are not needed and the items that are missing that should be there. Provide a recommended packing checklist and discuss the importance of using a packing checklist to prepare for campouts.

- **PORCH SITTERS**—What do people do when they sit on the porch in the evening? They tell stories. Stories can be a powerful way to communicate ideas, help participants retain concepts, and engage your audience. Some stories to consider using when teaching include personal stories, current stories in the news, and historical accounts.
- **GAMIFICATION**—Any kind of activity that makes the learning a game can help to hold the attention of participants. Matching and guessing games can be easily adapted for all sorts of content.
- **ROLE-PLAYING**—Role-playing can give participants an opportunity to practice for situations they may experience in the future. Role-playing exercises are great when using the EDGE method to help guide participants in learning a particular skill. Role-playing works best where there is a clear expectation set for each person playing a role in the practice session. Observers should have clear expectations on what they should be evaluating so that they learn even though they are not directly participating.
- **SKILL SHEETS**—Nobody likes to work, so avoid WORK sheets. Instead use skill sheets as appropriate to help participants actively participate and retain information being shared.
- **SPIT(TING)**—This is hopefully the only spitting you’ll see a Scout do. This is the use of a song, poem, or skit to teach an idea or concept. Typically this is a good attention getter to promote engagement at the beginning of the instruction, but it can also be used to promote concept retention.
- **WHITEBOARDING**—Use a whiteboard or chalkboard to visually communicate information. This can help participants visualize concepts and may make it easier for them to take notes or reference ideas during a discussion.



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