



Troop Camp Basics

Revised 7/11



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Girl Scout Council of the Southern Appalachians

www.girlscoutcsa.org



Troop Camp Basics Part 1: Safety Guidelines

Revised 7/11

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Approaching Activities Safely

How can you, as a Girl Scout volunteer, determine whether an activity is safe and appropriate? Good judgment and common sense often dictate the answer. What is safe in one circumstance may not be safe in another. An incoming storm, for example, might force you to assess or discontinue an activity. If you are uncertain about the safety of an activity, call the council staff with full details and don't proceed without approval. Err on the side of caution and make the safety of girls your most important consideration. Prior to any activity, read the specific Safety Activity Checkpoints related to any activity you plan to do with girls.

When planning activities with girls, note the abilities of each girl and carefully consider the progression of skills from the easiest part to the most difficult. Make sure the complexity of the activity does not exceed girls' individual skills — bear in mind that skill levels decline when people are tired, hungry, or under stress. Also use activities as opportunities for building teamwork, which is one of the outcomes for the connect key in the Girl Scout Leadership Experience.

Health Histories (Including Examinations and Immunizations)

You are to maintain Health Histories and other necessary medical information records for your group. Please keep in mind that information from a health examination is confidential and may be shared only with people who must know this information (such as the girl herself, her parent/guardian, and a health practitioner).

For various reasons, some parents/guardians may object to immunizations or medical examinations. Councils must attempt to make provisions for these girls to attend Girl Scout functions in a way that accommodates these concerns.

It is important for you to also be aware of any medications a girl may take or allergies she may have.

Medication, including over-the-counter products, must never be dispensed without prior written permission from a girl's custodial parent or guardian. (Ask your council staff person if you need a form for this situation) Some girls may need to carry and administer their own medications, such as bronchial inhalers, an EpiPen, or diabetes medication.

Common food allergies include dairy products, eggs, soy, wheat, peanuts, tree nuts, and seafood. This means that, before serving any food (such as peanut butter and jelly sandwiches, cookies, or chips), ask whether anyone is allergic to peanuts, dairy products, or wheat! Girl Scout Daisies and Brownies should be aware of their allergies, but double-checking with their parents/guardians is always a good idea.

Girl Scout Activity Insurance

A portion of the individual annual membership dues pays for supplementary insurance for the member only. This insurance provides up to a specified maximum for medical expenses incurred as a result of an accident while a member is participating:

- in an approved Girl Scout Activity
- at a supervised Girl Scout activity
- after the individual's primary insurance pays out

Non-registered parents, tagalongs (brothers, sisters, friends), and other persons are not covered by basic coverage. This is one reason all adults and girls should be registered members.

This insurance coverage:

- Is not intended to diminish the need for or replace family health insurance
- Does not duplicate medical-expense benefits collected under other programs
- After approximately \$100 in benefits have been paid under this plan, the family's medical insurance takes over
- If there is no family insurance or healthcare program, a specified maximum of medical benefits is available

A separate plan of activity insurance is available for purchase (at a relatively small price) for Girl Scouts taking extended trips and for non-members who participate in Girl Scout activities. These plans are secondary insurance that individuals are entitled to receive while participating in any approved supervised Girl Scout activity. This type of insurance coverage is for any Girl Scout activity that involves non-Girl Scouts or lasts longer than three days and two nights. Contact the council staff to find out how to apply.

Providing Emergency Care

As you know, emergencies can happen. Girls need to receive proper instruction in how to care for themselves and others in emergencies. There are great awards that address emergency preparedness. They also need to learn the importance of reporting to adults any accidents, illnesses, or unusual behaviors during Girl Scout activities.

To this end, you can help girls:

- Know what to report. See "Procedures for Accidents" below.
- Establish and practice procedures for weather emergencies. Certain extreme-weather conditions may occur in your area. Please consult with the council for the most relevant information for you to share with girls.
- Establish and practice procedures for such circumstances as fire evacuation, lost persons, and building-security responses. Every girl and adult must know how to act in these situations. For example, you and the girls, with the help of a fire department representative, should design a fire evacuation plan for meeting places used by the group.
- Assemble a well-stocked first-aid kit that is always accessible. First-aid administered in the first few minutes can mean the difference between life and death. In an emergency, secure professional medical assistance as soon as possible, normally by calling 911.

Procedures for Accidents

Although you hope the worst never happens, you must observe council procedures for handling accidents and fatalities.

At the scene of an accident:

- If a child needs emergency medical care as the result of an accident or injury, first contact emergency medical services, implement procedures learned in CPR and First Aid courses, and then follow council procedures for accidents and incidents.
- Provide all possible care for the sick or injured person.
- Follow established council procedures for obtaining medical assistance and immediately reporting the emergency. To do this, you must **always** have on hand:
 - Names and telephone numbers of council staff
 - Names and telephone numbers of parents/guardians
 - Contact information for local emergency services such as the police, fire department, or hospital emergency technicians.
 - Your region's Regional Emergency Contact Information
- After receiving a report of an accident, council staff will arrange for additional assistance, if needed, at the scene, and will notify parents/guardians, as appropriate. Your adherence to these procedures is critical, especially with regard to notifying parents or guardians.
- If the media is involved, ALWAYS let council-designated staff discuss the incident with these representatives.
- In the event of a fatality or other serious accident, notify the police. A responsible adult must remain at the scene at all times.
- In the case of a fatality, do not disturb the victim or surroundings. Follow police instructions. Do not share information about the accident with anyone but the police, the council, and, if applicable, insurance representatives or legal counsel.

Regional Emergency Council Contact Information

Remember, this number is for serious emergencies only. You are to use your knowledge gained in First Aid / CPR Training for less serious incidences. For less serious situations, be sure to contact your council staff person as soon as you can the next business day to inform them of the incident.

All GSCSA Regions: (877) 550-1399

Group Camping: Safety Activity Checkpoints

Camping, a great Girl Scout tradition, is one of the very first activities that Girl Scouts founder Juliette Gordon Low encouraged for girls. The key to an enjoyable group-camping experience is being prepared by packing just enough gear, supplies, and clothing that are appropriate for the weather, sleeping situation, and cooking meals. Girl Scouts advocate for the [Leave No Trace](#) method of camping, which involves leaving a campground the way it exists in nature, free of garbage and human impact.

Caution: Girls are not allowed to use firearms unless 12 years and older and with council permission; girls are never allowed to hunt or go on high-altitude climbs. Girls are also never allowed to ride all-terrain vehicles or motor bikes.

Camping with Girl Scout Daisies: Under the leadership of an adult, a Daisy troop may participate in an occasional overnight camping experience. Daisies who have completed kindergarten may independently participate at day camp and in resident camp experiences lasting up to three nights. Daisies who have completed first grade may independently participate in resident camp experiences lasting four or more nights.

Know where to camp. Girl Scout camps, public, private, state, and national parks and sites deemed appropriate by local and state authorities. Connect with your Girl Scout council for site suggestions and for information on using a non-council-owned site. Search for campground locations by location at [Reserve America](#).

Include girls with disabilities. Communicate with girls with disabilities and/or their caregivers to assess any needs and accommodations. Learn more about the resources and information that [Global Explorers](#) and [Wilderness Inquiries](#) provide to people with disabilities.

Camping Gear

Basic Gear

- Clothing and rain jacket or poncho that can be layered
- Hat, gloves, and thermal underwear for cool temperatures
- Socks with sturdy shoes, hiking boots, or sneakers (no sandals, clogs, flip-flops, or bare feet)
- Waterproof sunscreen (SPF of at least 15)
- Hat
- Sunglasses
- Towels and basic personal hygiene supplies (shampoo, soap, comb, and so on)
- Daypack
- Insect repellent

Specialized Gear

- Flame-resistant tents or tarp (no plastic tents)
- Compass and map or map and global positioning system (GPS)
- Sleeping bag (rated for the anticipated temperature)
- Mosquito netting where necessary
- Cooking supplies (pots, pans, utensils, mess kit and dunk bag, and so on)
- Cooler for food storage
- Portable cook stoves and fuel whenever possible (to reduce the use of firewood)
- Flashlight and other battery-powered lights (no candles, kerosene lamps, portable cook stoves, heaters, or other open-flame devices are used inside tents)

- Lantern fueled by propane, butane, kerosene, or gas (for outdoor use)
- Water-purification kit

Prepare for Group Camping

- **Communicate with council and parents.** Inform your Girl Scout council and girls' parents/guardians about the activity, including details about safety precautions and any appropriate clothing or supplies that may be necessary. Follow council procedures for activity approval, certificates of insurance, and council guidelines about girls' general health examinations. Make arrangements in advance for all transportation and confirm plans before departure.
- **Girls plan the activity.** Keeping their grade-level abilities in mind, encourage girls to take proactive leadership roles in organizing details of the activity and to plan menus, rules for group living, and on-site activities.
- **Obtain camping credentials.** Ensure that the adult has been a part of council group or troop-camp learning on supervising group camping. Group camp education generally covers outdoor program activities, minimal-impact camping skills, safety procedures and standards, and methods of dealing with homesickness.
- **Arrange for transportation and adult supervision.** The recommended adult-to-girl ratios are two non-related adults (at least one of whom is female) to every:
 - 6 Girl Scout Daisies (See "Camping With Girl Scout Daisies" details in this checkpoint's introduction)
 - 12 Girl Scout Brownies
 - 16 Girl Scout Juniors
 - 20 Girl Scout Cadettes
 - 24 Girl Scout Seniors
 - 24 Girl Scout Ambassadors

Plus one adult to each additional:

- 4 Girl Scout Daisies (See "Camping With Girl Scout Daisies" details in this checkpoint's introduction)
 - 6 Girl Scout Brownies
 - 8 Girl Scout Juniors
 - 10 Girl Scout Cadettes
 - 12 Girl Scout Seniors
 - 12 Girl Scout Ambassadors
- **Compile key contacts.** Give an itinerary to a contact person at home; call the contact person upon departure and return. Create a list of girls' parents/guardian contact information, telephone numbers for emergency services and police, and council contacts—keep on hand or post in an easily accessible location. Also know the location of the nearest landline telephone in case cellular phones do not receive reception.
 - **Ensure the safety of sleeping areas.** Separate sleeping and bathroom facilities are provided for adult males; many councils make exceptions for girls' fathers. Ensure the following:
 - Each participant has her own bed. Parent/guardian permission must be obtained if girls are to share a bed.
 - Adults and girls never share a bed.
 - It is not mandatory that an adult sleep in the sleeping area (tent, cabin, or designated area) with the girls. If an adult female does share the sleeping area, there should always be two unrelated adult females present.

During family or "He and Me" events (in which girls share sleeping accommodations with males), ensure the details are clearly explained in parent/guardian permission slip.

- **Girls share resources.** Encourage girls to make a list of the gear and supplies, and determine what can be shared. Support girls in creating a checklist of group and personal equipment and distribute to group members.
- **Prepare for emergencies.** Ensure the presence of a waterproof first-aid kit and a first-aider with a current certificate in First Aid, including Adult and Child CPR or CPR/AED, who is prepared to handle cases from extremes of temperature, such as heat exhaustion, heat stroke, frostbite, cold exposure, hypothermia, as well as sprains, fractures, and altitude sickness. If any part of the activity is located 60 minutes or more from emergency medical services, ensure the presence of a first-aider (level 2) with Wilderness and Remote First Aid. A vehicle is available or an ambulance is on call at all times to transport an injured or sick person. See *Volunteer Essentials* for information about first-aid standards and training.

On the Day of Group Camping

- **Get a weather report.** On the morning of the camping trip, check weather.com or other reliable weather sources to determine if conditions are appropriate. If severe weather conditions prevent the camping trip, be prepared with a backup plan or alternate activity. Write, review, and practice evacuation and emergency plans for severe weather with girls.
- **Use the buddy system.** Girls are divided into teams of two. Each girl chooses a buddy and is responsible for staying with her buddy at all times, warning her buddy of danger, giving her buddy immediate assistance if safe to do so, and seeking help when the situation warrants it. If someone in the group is injured, one person cares for the patient while two others seek help.
- **Respect the environment and keep campsite clean.** Use the principles of minimal-impact camping described by [Leave No Trace](#). Store garbage in insect- and animal-proof containers with plastic inner linings, and cover it securely when there is a campsite garbage-pickup service. When there is no garbage-pickup service, remove garbage from campsite in plastic bags and discard, as appropriate. Recycle whenever possible. Do not bury food; carry out garbage, grease, and fuel canisters. Do not remove natural materials such as leaves or branches.
- **Be prepared for primitive campsites.** For sites that don't have electric lights and toilet facilities, observe these standards:
 - Choose and set up campsite well before dark.
 - Use a previously established campsite if available.
 - Make sure the campsite is level and located at least 200 feet from all water sources and below tree line.
 - Avoid fragile mountain meadows and areas of wet soil.
 - Avoid camping under dead tree limbs.
 - Use existing fire rings if a fire is necessary.
 - If a latrine is not available, use individual cat holes—holes for human waste that are at least 200 feet away from the trail and known water sources—to dispose of human waste (visit www.lnt.org for more information).
 - Do dishwashing and personal bathing at least 200 feet away from water sources.
 - Store food well away from tents and out of reach of animals. Where necessary, hang food at least 10 feet high from a rope stretched between two trees. If the site is in bear country, check with local authorities on precautions to take.
 - See that garbage, tampons, sanitary supplies, and toilet paper are carried out.

Group Camping Links

- **American Camp Association:** www.acacamps.org
- **Go Camping America:** www.gocampingamerica.com
- **Leave No Trace:** <http://www.lnt.org>
- **National Camp Association:** www.summercamp.org

Group Camping Know-How for Girls

- **Create a camp kaper chart.** Divvy up cooking duties and get creative about pre-planning [outdoor meals](#).
- **Be ready with camp entertainment.** Before you go camping, read about camping stories, [songs](#), activities, and [games](#).

Group Camping Jargon

- **Kindling:** Small pieces of dry wood used to start a campfire
- **Mummy bag:** A sleeping bag that is tapered at the ends to reduce air space and to conserve heat

Hiking: Safety Activity Checkpoints

Unlike short walks, hiking involves lengthy, cross-country walking trips and often requires sturdy boots to provide traction on rocks and unruly earth floors. With respect to the [Leave No Trace](#) philosophy, it's important for hikers to leave trails as (or better than) they found them. Although the action of one hiker may not strongly affect the environment, the effects of large groups of hikers can degrade trails.

Caution: Girls are not allowed to use firearms unless 12 years and older and with council permission; girls are never allowed to hunt or go on high-altitude climbs. Girls are also never allowed to ride all-terrain vehicles or motor bikes.

Know where to hike. Connect with your Girl Scout council for site suggestions. Also, to locate hiking areas near U.S. metropolitan areas, visit localhikes.com.

Include girls with disabilities. Communicate with girls with disabilities and/or their caregivers to assess any needs and accommodations. Contact national parks to inquire about their accommodations for people with disabilities, and learn more about the resources and information that [Global Explorers](#) and [Wilderness Inquiries](#) provide to people with disabilities.

Hiking Gear

Basic Gear

- Lightweight, layered clothing and outerwear appropriate for weather conditions
- Rain jacket or poncho
- Waterproof sunscreen (SPF of at least 15) and lip balm
- Hat or bandana
- Sunglasses
- Water bottle or hydration pack (each girl carries at least one quart)
- Nonperishable, high-energy foods such as fruits and nuts
- Insect repellent
- Flashlight
- Whistle

Specialized Gear

- Day pack
- Hiking/trail boots or footwear
- Map and compass or map and global positioning system (GPS)
- Pocket knife

Prepare for Hiking

- **Communicate with council and parents.** Inform your Girl Scout council and girls' parents/guardians about the activity, including details about safety precautions and any appropriate clothing or supplies that may be necessary. Follow council procedures for activity approval, certificates of insurance, and council guidelines about girls' general health examinations. Make arrangements in advance for all transportation and confirm plans before departure.

- **Girls plan the activity.** Keeping their grade-level abilities in mind, encourage girls to take proactive leadership roles in organizing details of the activity. Encourage girls to plan routes, activities, rules for group living, and guidelines for dealing with problems that may arise with other groups of hikers.
- **Arrange for transportation and adult supervision.** Ensure that the hiking adult or instructor has experience in teaching hiking techniques and trip planning. Ensure that one adult is in front of the group of hikers, and the other is in the rear of each group, and that both are familiar with the area. The recommended adult-to-girl ratios are two non-related adults (at least one of whom is female) to every:
 - 6 Girl Scout Daisies
 - 12 Girl Scout Brownies
 - 16 Girl Scout Juniors
 - 20 Girl Scout Cadettes
 - 24 Girl Scout Seniors
 - 24 Girl Scout Ambassadors

Plus one adult to each additional:

- 4 Girl Scout Daisies
- 6 Girl Scout Brownies
- 8 Girl Scout Juniors
- 10 Girl Scout Cadettes
- 12 Girl Scout Seniors
- 12 Girl Scout Ambassadors
- **Compile key contacts.** Give an itinerary to a contact person at home; call the contact person upon departure and return. Create a list of girls' parents/guardian contact information, telephone numbers for emergency services and police, and council contacts—keep on hand or post in an easily accessible location. Also know the location of the nearest landline telephone in case cellular phones do not receive reception.
- **Girls share resources.** Encourage girls to distribute a list of hiking gear and supplies, and to determine which resources can be shared.
- **Choose an appropriate hiking route.** Terrain, mileage, and hiking time are known to the hikers in advance. Hikes are restricted to a reasonable length as determined by age, level of experience, nature of the terrain, physical condition of the hikers, disabilities, weather conditions, and time of day. The hiking pace always accommodates the slowest hiker.
- **Assess safety of hiking routes.** The route is known to at least one of the adults or a report is obtained in advance to assess potential hazards such as poisonous plants, dangerous animals, unsafe drinking water, cliffs, and drop-offs. Ensure that a land-management or similar agency is contacted during the trip-planning stage to determine available routes and campsites, recommended group size, water quantity and quality, and permits needed.
- **Ensure that hikers have a comprehensive understanding of the trip.** Group members are trained to be observant of the route, surroundings, and fatigue of individuals. Instruction is given on the safety rules for hiking, such as staying together in a group, recognizing poisonous plants and biting or stinging insects and ticks, respecting wild animals, and behaving effectively in emergencies. Ensure that girls know how to read maps, use a compass, navigate a route, and estimate distance.
- **Take safety precautions.** Search-and-rescue procedures for missing persons are written out in advance, reviewed, and practiced by girls and adults. Methods of communication with sources of emergency care, such as hospitals, and park and fire officials, are known and arranged in advance.
- **Prepare for emergencies.** Ensure the presence of a waterproof first-aid kit and a first-aider with a current certificate in First Aid, including Adult and Child CPR or CPR/AED, who is prepared to handle cases from

extremes of temperature, such as heat exhaustion, heat stroke, frostbite, cold exposure, hypothermia, as well as sprains, fractures, insect stings, tick bites, snake bites, sunburn, and altitude sickness; a first-aider (level 2) with Wilderness and Remote First Aid is present for hikes of 10 miles or more and away from emergency assistance. If feasible, a vehicle is available to transport an injured or sick person. See *Volunteer Essentials* for information about first-aid standards and training.

On the Day of Hiking

- **Get a weather report.** On the morning of the camping trip, check weather.com or other reliable weather sources to determine if conditions are appropriate. If severe weather conditions prevent the hiking activity, be prepared with a backup plan or alternate activity. Write, review, and practice evacuation and emergency plans for severe weather with girls.
- **Use the buddy system.** Girls are divided into teams of two. Each girl chooses a buddy and is responsible for staying with her buddy at all times, warning her buddy of danger, giving her buddy immediate assistance if safe to do so, and seeking help when the situation warrants it. If someone in the group is injured, one person cares for the patient while two others seek help.
- **Respect the environment and keep trails clean.** Use the principles of minimal-impact camping. Store garbage in insect- and animal-proof containers with plastic inner linings, and cover it securely when there is a campsite garbage-pickup service. When there is no garbage-pickup service, remove garbage from campsite in plastic bags and discard, as appropriate. Recycle whenever possible. Do not bury food; carry out grease and fuel canisters. Do not remove natural materials such as leaves or branches. In addition, avoid eating wild foods, walking on or uprooting plants, interfering with or feeding wild animals, and littering.
- **Practice safe hiking.** Instructions are given on the safety rules for hiking, which include forbidding hiking off-trail and after dusk. Girls stay on the pathway to avoid trampling trailside plants and causing erosion. In addition, take adequate rest periods, with time to replenish fluids and eat high-energy food (such as fruits and nuts).

Hiking Links

- **American Hiking Society:** www.americanhiking.org
- **Appalachian Mountain Club:** www.outdoors.org
- **Appalachian Trail Conference:** www.atconf.org
- **Leave No Trace:** www.lnt.org

Hiking Know-How for Girls

- **Practice with maps and a compass.** Before heading out on a lengthy hike, learn how to read a map and use a compass. Look at a map to understand where you started, and where you plan to finish. What do you anticipate you'll see during your hike?
- **Learn about regional nature.** What flowers, trees, insects are unique to the area you're hiking in?

Hiking Jargon

- **Blaze:** A mark, often on a tree, that indicates a trail's route; most often, the blaze is painted with a bright color
- **Hot spot:** A place on the foot that is sore as a result of a shoe's rubbing and irritation, and where a blister will form; use moleskin to make a doughnut shape around the hot spot to prevent blisters

Outdoor Cooking: Safety Activity Checkpoints

Historically, wood fires were the primary source of heat for camp cooking, but the practice of cooking with large fires is no longer recommended, because of the detrimental effects on camping areas. Instead, use an established fire pit to ignite a small fire, or use alternative cooking methods such as a portable cook stove (electric or fuel-based). When cooking outdoors, it's important to pack the appropriate amount of food for the group, so as to avoid discarding unused food. To properly plan food supplies, consider the activities you'll be participating in, keeping in mind that girls will burn more calories and hence need to eat more when participating in rigorous activities. Also, more calories are needed during cold weather. Extensive outdoor cooking is not recommended for Girl Scout Daisies, but a less extensive activity, such as roasting marshmallows, is appropriate.

Know where to cook outdoors. Preferably at campsites with designated fire-pit areas. Connect with your Girl Scout council for site suggestions.

Include girls with disabilities. Communicate with girls with disabilities and/or their caregivers to assess any needs and accommodations. Learn more about the resources and information that [Global Explorers](#) and [Wilderness Inquiry](#) provide to people with disabilities.

Outdoor Cooking Gear

Basic Gear

- Pots and pans
- Portable water for drinking, cooking, and cleaning
- Biodegradable dishwashing soap
- Pot scrubber
- Hand sanitizer or soap and paper towels
- Mess kit with nonbreakable plates, bowls, mugs, and cutlery in dunk bag
- Knives
- Containers to store leftover food
- Can opener
- No plastic garments, such as ponchos, are worn around open flame
- Rubber band, barrette, or bandana to tie back hair

Specialized Gear

- Firefighting equipment, including fire extinguisher, water, loose soil or sand, and a shovel and rake
- Portable cook stove and fuel
- Long-handled cooking utensils such as ladles
- Pot holders and/or insulated gloves
- Insulated cooler and ice for food storage
- Water purification method (tablets or filter), if needed

Prepare for Outdoor Cooking

- **Communicate with council and parents.** Inform your Girl Scout council and girls' parents/guardians about the activity, including details about safety precautions and any appropriate clothing or supplies that may be necessary. Follow council procedures for activity approval, certificates of insurance, and council guidelines about

girls' general health examinations. Make arrangements in advance for all transportation and confirm plans before departure.

- **Girls plan the activity.** Keeping their grade-level abilities in mind, encourage girls to take proactive leadership roles in organizing details of the activity.
- **Arrange for transportation and adult supervision.** The adult supervising the outdoor cooking has taken council learning opportunities. The recommended adult-to-girl ratios are two non-related adults (at least one of whom is female) to every:
 - 6 Girl Scout Daisies (non-extensive cooking activities only)
 - 12 Girl Scout Brownies
 - 16 Girl Scout Juniors
 - 20 Girl Scout Cadettes
 - 24 Girl Scout Seniors
 - 24 Girl Scout Ambassadors

Plus one adult to each additional:

- 4 Girl Scout Daisies (non-extensive cooking activities only)
- 6 Girl Scout Brownies
- 8 Girl Scout Juniors
- 10 Girl Scout Cadettes
- 12 Girl Scout Seniors
- 12 Girl Scout Ambassadors
- **Compile key contacts.** Give an itinerary to a contact person at home; call the contact person upon departure and return. Create a list of girls' parents/guardian contact information, telephone numbers for emergency services and police, and council contacts—keep on hand or post in an easily accessible location.
- **Consult with council about permits where necessary, and prepare for fire safety.** Connect with your Girl Scout council to inquire about permits with the local fire district, land-management agency, or conservation office. Fires are not permitted when there is excessive dryness or wind. The adult volunteer also checks the fire index with local authorities. Local air-pollution regulations are followed.
- **Girls share resources.** Support girls in creating a checklist of group and personal equipment and distribute to group members. Girls learn to use a variety of cooking methods, including use of wood fire, propane, butane, and gas stoves, charcoal, canned heat, and solar energy. Repackage all food to minimize waste and the amount of garbage that needs to be removed from the campsite.
- **Be prepared for primitive campsites.** If cooking in primitive areas with little to no modern conveniences, observe these standards:
 - Choose and set up campsite well before dark.
 - Use a previously established campsite if available.
 - Make sure the campsite is level and located at least 200 feet from all water sources and below tree line.
 - Avoid fragile mountain meadows and areas of wet soil.
 - Avoid camping under dead tree limbs.
 - Use existing fire rings if a fire is necessary.
 - If a latrine is not available, use individual cat holes—holes for human waste that are at least 200 feet away from the trail and known water sources—to dispose of human waste (visit www.lnt.org for more information).
 - Do dishwashing and personal bathing at least 200 feet away from water sources.

- Store food well away from tents and out of reach of animals. Where necessary, hang food at least 10 feet high from a rope stretched between two trees. If the site is in bear country, check with local authorities on precautions to take.
- See that garbage, tampons, sanitary supplies, and toilet paper are carried out.
- **Take safety precautions.** Fire-safety rules, emergency procedures, and first aid for burns are reviewed with the group and understood. Procedures are established and known in advance for notifying the fire department or land-management agency officials in case of a fire. Fire drills are practiced at each site.
- **Prepare for emergencies.** Ensure the presence of a waterproof first-aid kit and a first-aider with a current certificate in First Aid, including Adult and Child CPR or CPR/AED, who is prepared to handle burns and other injuries related to the location, including extremes of temperature, such as heat exhaustion, heat stroke, frostbite, cold exposure, hypothermia, as well as sprains, fractures, and sunburn. If any part of the activity is located 60 minutes or more from emergency medical services, ensure the presence of a first-aider (level 2) with Wilderness and Remote First Aid. If feasible, a vehicle is available to transport an injured or sick person. See *Volunteer Essentials* for information about first-aid standards and training.

On the Day of Outdoor Cooking

- **Get a weather report.** On the morning of the outdoor cooking activity, check weather.com or other reliable weather sources to determine if conditions are appropriate. If severe weather conditions prevent the cooking activity, be prepared with a backup plan or alternate activity. Write, review, and practice evacuation and emergency plans for severe weather with girls.
- **Use the buddy system.** Girls are divided into teams of two. Each girl chooses a buddy and is responsible for staying with her buddy at all times, warning her buddy of danger, giving her buddy immediate assistance if safe to do so, and seeking help when the situation warrants it. If someone in the group is injured, one person cares for the patient while two others seek help.
- **Respect the environment and keep site clean.** Use the principles of minimal-impact camping. Store garbage in insect- and animal-proof containers with plastic inner linings, and cover it securely when there is a campsite garbage-pickup service. When there is no garbage-pickup service, remove garbage from campsite in plastic bags and discard, as appropriate. Recycle whenever possible. Do not bury food; carry out grease and fuel canisters. Do not remove natural materials, such as leaves or branches.

Tips for Cooking with Cook Stoves and Open Fires

- **Prepare for safe usage of portable cook stoves.** Portable cook stoves differ in size and in fuel use. Follow the manufacturer's instructions carefully, and closely supervise the girls when using any stove. Take an adequate amount of fuel, and store the extra fuel supply away from the cooking flame. Never use portable cook stoves inside a tent. Keep all stove parts clean. Check that lines and burners are not clogged. Do not refuel the cook stove or change canisters near an open flame. Take care not to spill fuel; if fuel does spill, relocate the stove before lighting it. Place portable cook stoves in safe, level, and stable positions, shielded from the wind and away from foot traffic. Do not pile rocks or other items around the cook stove for stability. Do not overheat the fuel tank. Use pots of appropriate size, so that the stove is not top-heavy. Do not dispose of pressurized cans in a fire, leave them in direct sunlight, or keep them in enclosed areas where the temperature is high. See the manufacturer's instructions on the label. Store and dispose of fuel canisters in the recommended manner. Be sure to check with local authorities to make sure cook stoves are permitted during times of extreme fire danger.

- **Cook safely with solar stoves.** If using solar cookware, remember that pots and food inside a solar oven are hot even if the stove does not feel hot. Use insulated gloves when removing pots and opening the lid.
- **Practice safe cooking with open fire.** If cooking over open flames, build fires in designated areas, and avoid establishing new fire sites. An established fire site is clear of overhanging branches, steep slopes, rotted stumps or logs, dry grass and leaves, and cleared of any burnable material, such as litter, duff, or pine needles. Where wood gathering is permitted, use only dead, fallen wood, and keep the cooking fires small. Store wood away from the fire area. Watch for flying sparks and put them out immediately. Before leaving the site, check that the fire is completely out by sprinkling the fire with water or smothering it with earth or sand, stirring, and then sprinkling or smothering again; finally, hold hands on coals, ashes, partially burned wood, or charcoal for one minute to ensure it is cool to the touch. Make a plan for disposing of cold ashes and partially burned wood. You may scatter ashes and burned wood throughout the woods away from the campsite. Do not put ashes and burned wood in a plastic pail; do not leave a pail with ashes or burned wood against the side of a building or on a wood deck. Obtain wood from local sources to avoid bringing pests and diseases from one location to another.
- **Practice safe cooking with charcoal fires.** If using charcoal, fires are started with fuels explicitly labeled as “charcoal starters”—never use gasoline as a fire starter. Never add charcoal lighter fluid to a fire once it has started.

Tips for Food Preparation and Storage

- **Prepare nutritious meals.** Meals are prepared with consideration of food allergies, religious beliefs, and dietary restrictions (such as vegetarianism and veganism) of group members. Whenever possible, buy food and supplies that avoid excess packaging, and buy in bulk. Review health considerations, including the importance of keeping utensils and food preparation surfaces sanitized, cleaning hands, cooking meats thoroughly, refrigerating perishables, and using clean water when preparing food. Do not use chipped or cracked cups and plates.
- **Cook with caution.** Girls learn about the safe use of kitchen tools and equipment, including knives. Maintain discipline in the cooking area to prevent accidents with hot food and sharp utensils. Do not overfill cooking pots, and do not use pressurized cans, soda-can stoves, or plastic basins, bottles, and cooking utensils near an open flame.
- **Avoid spreading germs.** Each person has an individual drinking cup. Cooks roll up long sleeves and tie back long hair. Wash hands before food preparation and eating. No person with a skin infection, a cold, or a communicable disease participates in food preparation.
- **Keep perishables cool.** Store perishables such as creamed dishes, dairy products, meats, and salads at or below 45 degrees Fahrenheit in a refrigerator or insulated cooler with ice. If this will not be possible, use powdered, dehydrated, freeze-dried, or canned foods. On extended trips, do not use foods requiring refrigeration. Use safe drinking water (see the “Water Purification Tips”) to reconstitute powdered, dehydrated, or freeze-dried food. Once reconstituted, eat perishable items within one hour or refrigerate them.

Water Purification Tips

- **Access a safe drinking water supply for cooking, drinking, and personal use.** Safe drinking water is defined as tap water tested and approved by the local health department. All other sources are considered potentially contaminated and must be purified before use. *Giardia lamblia* (a parasite) is suspected in all surface water supplies.
- **Use one of the three water-purification methods.** First, strain water through a clean cloth into a clean container to remove sediment, and then choose one of the following methods:
 - Boil water rapidly for a full minute and let cool.

- Disinfect water with water-purification tablets, following the manufacturer's instructions. Check the product's shelf life to make sure it has not expired.
- Pour water through a water purifier or specially designed [water-filtration device](#) that removes *Giardia*. These filters will also remove many other contaminants. Follow the manufacturer's instructions carefully.
- Important note: These methods will not remove chemical pollutants. In addition, only boiling the water or pouring it through a specially designed filter will remove *Giardia lamblia*.

Dishwashing Tips

- **Wash dishes in a prescribed area according to this procedure:**
 - Remove food particles from utensils and dishes.
 - Wash dishes in warm, soapy water.
 - Rinse dishes in hot, clear water.
 - Sanitize dishes by dipping in clear, boiling water or immersing for at least two minutes in a sanitizing solution approved by the local health department. Use long-handled utensil, tongs, or tool to remove sanitized dishes. (1 tablespoon of bleach per 1 gallon of cold clean water)
 - Air-dry and store dishes in a clean, covered area.
 - Dispose of dishwashing and rinse water according to the campsite regulations. In backcountry areas, scatter wastewater on the ground at least 200 feet beyond any water source or trail.

Outdoor Cooking Links

- **OutdoorCook.com:** www.outdoorcook.com
- **Leave No Trace:** www.lnt.org

Outdoor Cooking Know-How for Girls

- **Learn how to start a fire without matches.** What are the ways that you can get a fire going without using matches or a lighter? Read camping how-to books or [online sources](#) to learn how.
- **Plan outdoor recipes.** Vote for your favorite meals and plan how to cook them outdoors. For additional outdoor recipe ideas, read [Discover the Outdoors](#), netwoods.com, and outdoorcook.com.

Outdoor Cooking Jargon

- **Dunk kit:** A mesh bag used to hold dirty dishes; the bag is dunked into hot water or chlorine solution and then hung to dry with clean, sterilized dishes inside
- **Dutch oven:** A cooking kettle used for baking in an open fire (do not use soap on cast iron)

What to Do If You Get Lost or Separated From the Group

Everyone needs to safeguard against getting lost. Carrying a whistle is a good practice, as three blasts of a whistle is considered as a universal distress signal. The “Hug-a-Tree” program is an excellent prevention training for you and your girls.

In the event that buddies get lost or separated from the group and become disoriented, the best thing is for them to do is STOP and try not to panic. They should:

- Sit down and evaluate the circumstances.
- Try to determine the last location where they knew where they were.
- Orient themselves to the landscape by using a map (if they have one) or try to recognize familiar landmarks such as large boulders or a fallen tree.
- Listen carefully for noises, such as traffic or barking dogs that could lead them to a road. Sounds of moving water can lead to a river. Walking parallel to the river can be another way to reach a road.
- Make sure there is sufficient daylight to walk to the nearest trail, road, or campsite to obtain helps.

If the buddies cannot figure out where they are or need to go, moving about will waste energy and will confuse them even more. In that case, buddies should:

- Sit down and conserve energy.
- Find shelter to keep warm and dry as possible and out of the wind. (Make sure the shelter is not home to potentially dangerous animals or insects and leave some sort of sign, such as a piece of clothing, outside of the shelter to alert searchers).
- Find water (treat surface water before drinking by boiling, filtering or using chemical purifiers) or collect water from wet vegetation.
- Build a fire, if matches are available and the danger of a fire spreading out of control is low.
- Devise as many ways as possible to attract the attention of those searching for them. For example:
 - Tie a piece of brightly colored cloth to a high branch or rock.
 - Flash a mirror or other reflective surface at any passing aircraft.
 - Make a smoky fire in a safe, open place.
 - Draw large signs on the ground that could be seen from the air.
- Stay in the area. Don't wander.
- Yell or whistle if someone is heard nearby.

If a camper does become missing for more than an hour, notify authorities, and follow crisis communications procedures. Be sure to notify everyone concerned when the camper is found.

How to Predict the Weather without a Forecast

(Source: <http://www.wikihow.com/Predict-the-Weather-Without-a-Forecast>)

Long before technology was developed to predict the weather, people had to rely on observation, patterns and folklore to avoid being caught off guard by the elements. If your plans, livelihood or even your survival depend on the weather, it certainly wouldn't hurt to become familiar with some of these methods, especially since you never know when you might be out of touch with the local weather report. These methods aren't foolproof, but they have their usefulness, and if you don't have a forecast on hand, what do you have to lose by trying them?



- **Check the grass for dew at sunrise.** If the grass is dry, this indicates clouds or strong breezes, which can mean rain. If there's dew, it probably won't rain that day. However, if it rained during the night, this method will not be reliable.
- **Remember the rhyme: "Red sky at night, sailor's delight; Red sky at morning, sailors take warning."** Look for any sign of red in the sky (not a red sun); it will not be a bold orange or red the majority of the time, but that depends a little on where you live.



- If you see a red sky during sunset (when you're looking to the west), there is a high pressure system with dry air that is stirring dust particles in the air, causing the sky to look red. Since prevailing front movements and jet streams weather usually move from west to east (see Tips), the dry air is heading towards you.
- A red sky in the morning (in the East, where the sun rises) means that the dry air has already moved past you, and what follows behind it (on its way towards you) is a low pressure system that carries moisture.
- **Look for a rainbow in the west.** This is the result of the rising sun's morning rays from the east striking moisture in the west. Most major storm fronts travel west to east, and a rainbow in the west means

moisture, which can mean rain is on its way. On the other hand, a rainbow in the east around sunset means that the rain is on its way out and you can look forward to sunny days. Remember: *Rainbow in the morning, need for a warning.*

- **Detect which direction the wind is blowing.** If unable to immediately detect the wind's direction, throw a small piece of grass in to the air and watch its descent. Easterly winds can indicate an approaching storm front, westerly winds the opposite. Strong winds indicate high pressure differences, which can be a sign of advancing storm fronts. Deciduous trees show the undersides of their leaves during unusual winds, supposedly because they grow in a way that keeps them right-side up during typical prevalent winds.
- **Take a deep breath.** Close your eyes and smell the air.
 - Plants release their waste in a low pressure atmosphere, generating a smell like compost and indicating an upcoming rain.
 - Swamps will release methane just before a storm because of the lower pressure, which leads to unpleasant smells.
 - A proverb says "Flowers smell best just before a rain." Scents are stronger in moist air, associated with rainy weather.
- **Check for humidity.** Many people can feel humidity, especially in their hair (it curls up and gets frizzy). You can also look at the leaves of oak or maple trees. These leaves tend to curl in high humidity, which tends to precede a heavy rain. Pine cone scales remain closed if the humidity is high, but open in dry air. Under humid conditions, wood swells (look out for those sticky doors) and salt clumps (is that shaker working well?).
- **Watch the clouds.**
 - Clouds going in different directions (e.g. one layer going west, another layer going north) - bad weather coming, probably hail



- Cumulonimbus clouds early in the day and developing throughout the day - greater chances of severe weather



- Mammatus cloud (formed by sinking air) - thunderstorm is dissipating (not forming)



- Cirrus clouds high in the sky like long streamers - bad weather within the next 36 hours



- Altocumulus clouds like mackerel scales - bad weather within the next 36 hours. The old sailor's saying for these types of clouds is "Mares tails and mackerel scales, tall ships carry short sails."
- Cloud cover on a winter night - expect warmer weather because clouds prevent heat radiation that would lower the temperature on a clear night.



- Cumulus towers (cumulus castellanus) - possibility of showers later in the day.
- **Observe animals.** They are more likely to react to changes in air pressure than we are.
 - If birds are flying high in the sky, there will probably be fair weather. (Falling air pressure caused by an imminent storm causes discomfort in birds' ears, so they fly low to alleviate it. Large numbers of birds roosting on power lines indicates swiftly falling air pressure.)
 - Seagulls tend to stop flying and take refuge at the coast if a storm is coming.
 - Animals, especially birds, get quiet immediately before it rains.
 - Cows will typically lie down before a thunderstorm. They also tend to stay close together if bad weather's on the way.
 - Ants build their hills with very steep sides just before a rain.
 - Cats tend to clean behind their ears before a rain.
 - Turtles often search for higher ground when a large amount of rain is expected. You will often see them in the road during this period (1 to 2 days before the rain).
- **Make a campfire.** The smoke should rise steadily. Smoke that swirls and descends is caused by low pressure (i.e. rain on the way).



- **Look at the moon during the night.** If it is reddish or pale, dust is in the air. But if the moon is bright and sharply focused, it's probably because low pressure has cleared out the dust, and low pressure means rain. Also, a ring around the moon (caused by light shining through cirrostratus clouds associated with warm fronts and moisture) can indicate that rain will probably fall within the next three days. Remember: *Circle around the moon, rain or snow soon.*
- **Look for pine cones** Pine trees are an excellent indicator of the overall harshness of the coming winter. In fall, look to the pine trees in your area and note if the cones are high on the tree or low. Low hanging cones indicate a mild winter.

Emergency Procedures for Tent Camping During a Tornado

When you take a trek out into the backcountry, your goal is to get away from man-made structures and bond with nature. If you find yourself faced with severe weather - especially a tornado, it can be challenging to find a safe zone when in the wilderness or open plains. Even if you are far away from buildings that contain cut wood and metal, a tornado can still inflict damage and carry debris - including rocks, trees and dirt.

Always look for the lowest possible ground area to take shelter; this includes ditches, culverts and river banks. You can also take cover in caves or along one side of a large boulder or rock. When you find the lowest possible location, be sure to lie flat on your stomach and cover your hands over your head for protection.

EMERGENCY PROCEDURES FOR BEAR SPOTTINGS

Content in this section is most applicable to groups camping in Northeast Tennessee

Troop Leaders will notify TWRA (TN Wildlife Resources Agency) immediately:

- If an aggressive bear is spotted
- If a bear is spotted getting into food or trash

Contact TWRA in an emergency situation from 7:00 a.m. – midnight:

- Dial 1-800-332-0900
- When prompted enter 105 for Dispatcher

After midnight contact the Sullivan County Sheriff's Department – 423-279-7600 (*only applicable to groups camping in Sullivan County*)

Troop leaders will contact Council by calling the emergency number if TWRA or Sullivan County Sheriff's Department is called.

Non-emergency procedures:

- Troop Leaders will notify Council in a non-emergency situation, such as:
 - Bears continually seen in one general location.
 - Mother with cubs is spotted.

What to do when you spot a bear

- Make noises --- air horns, clapping, singing, yelling, etc
- Walk backwards away from bear
- DO NOT RUN!!!!
- Do not use direct eye contact, as bears see this as aggression
- Make sure to use the Buddy System at all times.

Black bear attacks are extremely rare; however, if you are attacked by a black bear, DO NOT play dead, fight back.

Insect Stings



Although insect stings can be irritating, symptoms usually begin to disappear by the next day and don't require treatment by a doctor. However, kids who are highly allergic to insect stings may have life-threatening symptoms and may require emergency treatment.

Signs of a Severe Allergic Reaction:

- swelling of the face or mouth
- difficulty swallowing or speaking
- chest tightness, wheezing, or difficulty breathing
- dizziness or fainting
- abdominal pain, nausea, or vomiting



What to Do:

1. Remove the child from the area where he or she was stung.
2. If the child was stung by a honeybee, wasp, hornet, or yellow jacket, and the stinger is visible, remove it by gently scraping the skin horizontally with the edge of a credit card or your fingernail.
3. Wash the area with soap and water.
4. Apply ice or a cool wet cloth to the area to relieve pain and swelling.
5. If the area is itchy, apply a paste of baking soda and water, or calamine lotion (do not apply calamine to the child's face or genitals).

Call the child's doctor if:

- there's swelling or redness beyond the sting site
- the site looks infected (increasing redness, warmth, swelling, pain, or pus occurring several hours or longer after the sting)

Seek emergency medical care if:

- the child shows symptoms of a severe allergic reaction
- the sting is anywhere in the mouth
- the child has a known severe allergy to a stinging insect
- injectable epinephrine was used

Think Prevention!

Try to have the child avoid: walking barefoot while on grass; using scented soaps, perfumes, or hair spray; dressing in bright colors or flowery prints; areas where insects nest or congregate; and drinking from soda cans. Also make sure that: outside garbage cans have tight-fitting lids; there are no stagnant pools of water (in rain gutters, flower pots, birdbaths, etc.); and food is covered when eating outside.

Note: All information is for educational purposes only. For specific medical advice, diagnoses, and treatment, consult a doctor. Review this with a doctor prior to use.

Reviewed by: John Bernardi, MD, and Deborah Mulligan-Smith, MD Date reviewed: April 2004

Spider Bites



Most spider bites cause only mild reactions in children and can be safely treated at home. Occasionally, though, a severe allergic reaction to spider bites can be life-threatening if left untreated. And some spider bites (such as those from the poisonous black widow and brown recluse spiders) need immediate care.

Signs of a Severe Allergic Reaction:

- swelling of the face or mouth
- difficulty swallowing or speaking
- chest tightness, wheezing, or difficulty breathing
- dizziness or fainting
- abdominal pain, nausea, or vomiting



Signs and Symptoms of Brown Recluse or Black Widow Spider Bites:

- deep purple or blue area around the bite, surrounded by a whitish ring and a larger outer red ring
- swelling or redness around the bite
- joint stiffness or pain
- muscle spasms, tightness, and stiffness
- body rash
- fever
- headache
- abdominal pain
- pink or reddish urine
- general feeling of sickness
- lack of appetite

If the child was bitten by a spider (other than a brown recluse or black widow) and doesn't seem to be having an allergic reaction:

1. Wash the bitten area with soap and water.
2. Apply an ice pack or a cool wet cloth to the bite to relieve pain and swelling.
3. Elevate the area to slow the spread of venom.

Seek emergency medical care if:

- the child has any signs of an allergic reaction
- the child develops any kind of rash after a bite
- the area begins to look infected (increasing redness, pain, swelling, warmth, or pus)
- you think the child was bitten by a brown recluse or black widow spider

Think Prevention!

Insect repellents are useful, but use one containing 10% to 30% DEET. Make sure that garages, attics, and woodpiles are free of spider webs, and that children wear long sleeves and pants when playing around these areas.

Note: All information is for educational purposes only. For specific medical advice, diagnoses, and treatment, consult your child's doctor. Review this with a doctor prior to use.

Reviewed by: John Bernardi, MD, and Deborah Mulligan-Smith, MD Date reviewed: April 2004

Poison Ivy/Oak/Sumac



Contact with poison ivy/oak/sumac plants can cause an allergic rash. Mild rashes can be treated at home and mostly cause discomfort from itching, burning, or blistering. Severe, widespread rashes require medical treatment.

Signs and Symptoms:

- An itchy or burning rash appears within 2 to 3 days as small red bumps that usually blister. Blisters can be different sizes and may ooze clear fluid.
- The bumps and blisters may look like straight lines or streaks on the child's skin.
- The rash may begin to look crusty as it heals.

What to Do:

1. Wash skin and scrub under fingernails immediately with soap and water.
2. For itching, use calamine lotion (avoid using on the face, especially near the eyes, or on the genitals) or an oral antihistamine such as diphenhydramine (avoid antihistamine-containing creams or lotions which can worsen the rash and itching).
3. Cut fingernails short to keep the child from breaking the skin when scratching.
4. Place cool compresses on the child's skin as needed.
5. Wash all clothing that the child has recently worn, plus any items or outdoor pets that may have come into contact with the plant.

Call a doctor or seek medical attention if:

- the rash covers a large portion of the body, or is on the genitals or the face
- the rash is getting worse despite home treatment
- the skin looks infected (increasing redness, warmth, pain, swelling, or pus)

Seek emergency medical care if the child:

- has a known severe allergy to poison ivy/oak/sumac
- develops swelling around the nose or mouth
- complains of chest tightness or difficulty breathing
- sounds hoarse or is having trouble speaking
- develops redness or swelling widespread over the body
- becomes dizzy or lightheaded
- was given a dose of injectable epinephrine



Think Prevention!

Teach children what poison ivy/oak/sumac look like, and how the plants' appearances can change during different times of the year. Make sure kids always wear long-sleeved shirts and pants whenever playing close to these plants.

Note: All information is for educational purposes only. For specific medical advice, diagnoses, and treatment, consult a doctor. Review this with a doctor prior to use.

Reviewed by: Kate Cronan, MD, and Mary Mondozi, MSN, RN, CPNP Date reviewed: November 2003

Animal Bites

Animal bites and scratches that break the skin can cause infection. Rarely, animal bites (particularly from wild animals) can cause rabies, a dangerous, life-threatening disease.

Fast Fact

Bats, raccoons, skunks, and foxes transmit most cases of rabies.



What to Do:

1. Wash the area with soap and water, and apply pressure with sterile gauze or a clean cloth if the child is bleeding. (Do not apply an antiseptic or anything else to the wound.)
2. Cover any broken skin with a bandage or sterile gauze.

Seek emergency medical care if the child:

- has a bite that punctured or broke the skin
- was bitten by a wild or stray animal, or any animal that hasn't recently had rabies shots or is acting strangely
- was bitten on the face, neck, or hand, or near a joint
- has a bite or scratch that's becoming red, hot, swollen, or increasingly painful
- is behind on immunizations (shots) or hasn't had a recent tetanus shot

When seeking treatment, have the following information on hand:

- the kind of animal that bit the child
- the date of the animal's last rabies vaccination, if known
- any recent unusual behavior by the animal
- the animal's location (address, if known)
- if the animal was wild or a stray, or was captured by a local animal control service
- the child's immunization (shots) record

Think Prevention!

Many animal bites are preventable. Always supervise young children around animals, even pets. Teach kids to handle pets gently and to never tease them. Also teach kids to stay away from – and to never feed – wild or stray animals.

Note: All information is for educational purposes only. For specific medical advice, diagnoses, and treatment, consult a doctor. Review this with a doctor prior to use.

Reviewed by: Kate Cronan, MD Date reviewed: November 2003

Tool Craft Safety

Always establish a safety circle around you (a ring about an arm's length in all directions around, above and below) before using any sharp object (i.e. knife, saw, ax/hatchet).

KNIVES

- Always use a safety circle.
- Keep fingers out of the way when opening and closing a jackknife.
- Hold the knife securely with the whole hand.
- Always cut away from the body.
- Keep jackknives closed when not in use.
- Do not walk around with a kitchen knife or an open jackknife.
- Use jackknives responsibly (do not use vandalize a site by carving on picnic tables, inside cabins/shelters or on live trees).
- Always close a jackknife before you pass it.
- To pass a kitchen knife, grasp the knife blade along the dull edge and pass the handle to the other person. This way, you have control of the sharp edge of the knife. Make sure the other person has the knife before letting go. You should ask, "Do you have it?" and release the knife when the receiver responds, "I have it". The receiver of the knife should be careful not pull the knife out of the other person's hand. Instead, she should move the knife only after the other person has released the knife from her grip.

AXES/HATCHETS

- Always use a safety circle.
- Stand up when using an ax or hatchet.
- If right-handed, put the right foot forward and cut on an angle to the left.
- If left-handed, put the left foot forward and cut on an angle to the right.
- You don't need to swing an ax! It is heavy enough to cut without swinging.
- Lift the ax and guide it down into the wood.
- Always make sure no one is standing or sitting close to you when you are cutting.
- Carry an ax or hatchet to the side of your body with the handle facing down and your hand around the top. The blade should be facing to the backside of you.
- Lay the ax or hatchet on the ground for another person to pick-up and use rather than passing it to them in mid-air.
- Keep the ax or hatchet in its case (if it has one) when not being used.

SAWS

- Always use a safety circle.
- Place the piece of wood that is going to be cut on the ground
- If you are right handed, put your right knee on the ground (if left-handed, vice versa).
- Hold the wood down securely with your left hand.
- Keep fingers, hands, legs, and feet away from the blade at all times.
- Cut with long straight strokes.
- Carry the saw safely to the side of your body with the blade pointing toward your back.
- If you must pass the saw, place it on the ground or pass it by the handle with the blade down.



Troop Camp Basics Part 2: Girl-led Planning & Progression

Revised 7/11

Contents

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Progression in the Outdoors by Activity Type
Progression in the Outdoors by Grade-Level
Kapers

Girl Scout Council of the Southern Appalachians
www.girlscoutcsa.org

Outdoor Philosophy

Outdoor education occurs when Girl Scout programs are held outside. The most important outcomes we want to accomplish include are:

- A change in how the girl feels about herself & relates to others
- Girls develop values that relate to the environment
- Potential contribution to the community

The goal is to allow each girl opportunities to explore and develop an understanding of the outdoors and find a comfortable relationship that works for her. It is the girls ability to feel good about herself and her contribution to the success of the group that is important, not her ability to name twenty birds or tie ten kinds of knots.

Travel Progression Checklist

If your group is thinking about travel, consider first whether the girls are mature enough to handle the trip. In determining a group's readiness for travel or camp, assess the group's:

- Ability to be away from their parents and their home
- Ability to adapt to unfamiliar surroundings and situations
- Ability to make decisions well and easily
- Previous cross-cultural experiences
- Ability to get along with each other and handle challenges
- Ability to work well as a team
- Skills and interests

Determining the Trip's Focus

Making the choice to explore the outdoors should be girl's decision in your troop. Whether the trip is a day hike or a cross-country trek, basic steps of trip planning are essentially the same. It's true that as the locale gets farther away, the itinerary more complex, and the trip of greater duration, the details become richer and more complex, but planning every trip—from a day-long hike to an international trek—starts by asking the following of your troop so that the girls lead the process:

- What do we hope to experience?
- Who will we want to talk to and meet? What will we ask?
- Where are we interested in going?
- When are we all available to go?
- Will everyone in our group be able to go?
- Are there physical barriers that cannot be accommodated?
- What are visiting hours and the need for advance reservations (if any)?
- What are our options for getting there?
- What's the least and most this trip could cost?
- What can we do now to get ourselves ready?
- How will we earn the money?
- What's the availability of drinking water, restrooms, shelter, and food?
- Where is emergency help available?
- What safety factors must we consider?
- What will we do as we travel?
- What will we do when we get there?
- How will we share the Take Action story?

As girls answer these questions, they begin the trip-planning process. In time, girls begin to make specific arrangements, attend to a myriad of details, create a budget and handle money, and accept responsibility for their personal conduct and safety. Younger girls may not be capable to be as intimately involved in the details, however as the girls grow older, their responsibility level should increase. Ask the girls to stretch themselves to become leaders within their own troop, therefore practicing their leadership skills. And later, after they've returned from a successful camp-out or trip, girls also have the chance to evaluate their experiences and share them with others.

PLANNING STEPS FOR AN OVERNIGHT

Ensure the girls are involved in each of these steps!

- Step # 1 Is the troop ready to do an overnight?
- Step # 2 Why are we going, (Program)?
- Step # 3 Where will we go?
- Step # 4 How we will get there, (budget & transportation)?
- Step # 5 When will we go?
- Step # 6 What will we need, (equipment, food planning checklist)?
 - # of volunteers
 - Transportation
 - Sleeping arrangements
 - Food/cooking considerations
 - Clothing requirements
 - Paperwork / Approval of Parents & Council Staff
 - Equipment
 - Kaper Chart
 - Safety – Wise: Safety Activity Checkpoint
- Step # 7 What will we do?
 - Plan activities
 - learn skills (before camping or during camp)
- Step # 8 Establish behavior and expectations to also include:
 - Safety skills
 - Buddy system
 - Simple First Aid
- Step # 9 Go on the trip, have fun!
- Step # 10 Evaluate afterward with the girls.
 - Would they do it again?
 - What would they do differently next time?
 - WAS IT FUN?

HINT: Planning takes time! Many girls are used to having things done for them. Be patient! Don't over plan! It's OK if the activity didn't turn out perfect!

Sample Progression in Girl Scout Outdoor Program, by Activity Type

Meet Out

Use senses to look, listen, feel, smell
Earn Brownie awards related to outdoor experiences
Earn Junior awards related to outdoor experiences

Move Out

Learn the 8 Basic Skills
Visit an outdoor spot
Record your observations

Explore Out

Go with a purpose
Take a snack to eat outdoors
Take a short trip walking, biking, or rowing

Cook Out

Whittle a fuzz stick
Light a fire and put it out

Sleep Out

Prepare for an overnight
Make needed equipment: bedroll, stuff bags, dunk bags, sit upon
Plan: What to take, what to eat
Make a Kaper Chart
Choose a good safe spot for sleeping

Camp Out

Plan what to wear and take
Know safety rules and first aid
Handle dishwashing, garbage and grease disposal in environmentally sound ways.

Pack Out

Plan meals, menus, purchase and provide storage for food
Earn Finding Your Way, Hiker Badges
Plan a trip extending over several days Earn a Red Cross First Aid Certificate

Progression in 8 Outdoor Skills

Progression in camping skills is an essential part of troop camping. At the Daisy & Brownie levels the basic skills are simple and improved upon by practice. Each succeeding program level should increase proficiency and build upon skills already required. Consult Volunteer Essentials or the handbooks for more information on grade-level-appropriate skills and abilities.

8 OUTDOOR SKILLS

1. Know and practice good outdoor manners in town and in the country.
2. Know how to dress for the outdoors in your locality, in relation to expected weather.
3. Know how to tie, use, and release a square knot & a clove hitch.
4. Know how to handle and care for a knife.
5. Know how to use & put out a fire for outdoor cooking.
6. Know how to cook something for yourself, something for patrol or troop.
7. Know simple first aid for cuts, insect bites, and skinned knees.
8. Know how to protect the natural world.

Example Progression by Grade-level

DAISY GIRL SCOUTS

- Buddy system. Appreciation of nature-use all senses to explore. Safety/Manners for short hikes near home.
- Discuss what they should bring/wear plus note to parents.
- May need help tying shoes/bows.
- Leader uses and explains safety precautions.
- Leader builds fire. Safety around fires.
- Simple cooking activities away from fire. One pot meals- leader handles. Fireless foods.
- Personal safety. What to do in case of emergencies when hurt or scared.
- Short hikes/discovery. Explore the out-of-doors. Encourage questions.

BROWNIE GIRL SCOUTS

- Learn how to be considerate of others and living things in nature. Leave places cleaner than you found them. Safety/Manners for overnight.
- Discuss proper attire and why, especially for new experiences like camping. Learn camping equipment needed.
- Learn square knot, half hitch, clove hitch.
- Learn to use knives safely, open, close, clean, simple use/passing, Use cardboard knives to teach.
- Wood piles, Simple fire building: fire starters, foundation fire, A frame, tepee. Putting out fires.
- One pot meals, Nosebag/trail meals, Skillet meals.
- Simple first aid, see handbook, first aid kits, Emergency procedures, Health & Safety practices in all troop activities.
- Hikes with purpose/ nature hikes. Practice conservation- plant /water trees, flowers, litter pickup, gardening, recycling. Hurt no living things, look for tracks and traces of animals.

JUNIOR GIRL SCOUTS

- Review & Elaborate. Safety/Manners for camping simple maps & compass.
- Girls should be able to help make equipment lists.
- Bowline, sheet bend, taut line hitch, sheepshank, slip knot, Lashing Tents
- Review Knives, do some whittling; sharpening
- Hard vs. Soft wood. Different types, uses, hunter's/ trench fire criss-cross, buddy burner, charcoal, safe use of tools.
- Stick cooking, tin can cookery, dutch oven, ember cooking, Safe cooking, eating, food storage procedures. Camp stoves (2 burner)
- Simple first aid-see handbook, Emergency procedures, Health & Safety Practices.
- Observe impact on environment, pollution. Service projects- trails, erosion dams, etc. Explore nature in action & discover why's. Proper dishwashing/garbage disposal.

CADETTE, SENIOR, AND AMBASSADOR GIRL SCOUTS

- Low impact camping, plan routes, transportation and make necessary arrangements, Safety/Manners for extended trips, Orienteering.
- May need help for more advanced experiences--backpacking canoeing, bike tripping. How to pack for extensive trips.
- Review & elaborate uses of knots. Lashing campsite furnishings.
- Review Knife safety.
- Alter fire for reflector oven, pit, fire, bean pot hole. Develop and dismantle fire scar, wet weather fires.
- Reflector oven, Bean hole, Planking, Backpacking meals, dehydrating foods, camp stoves, back packing, edible foods.
- Certified first aid, lifesaving, survival camping, emergency shelters/procedures, hypothermia weather.
- Minimal impact camping. Rebuild trails/erosion control, pollution environmental concern awareness projects. learn about ecology of certain areas, Wildlife/plant identification.

KAPER CHARTS

In Girl Scouting, a job is called a kaper. The list of kapers and who does them is called a kaper chart. More information can be found in all levels of handbooks. Kapers should be included in the planning process and will be a part of the girl's progression. However, even a Daisy Girl Scout can clean up after herself!

HOW TO MAKE A KAPER CHART:

- Write down the jobs to be done and a brief description of what each job includes.
- Plan how to divide the work: individual, buddies, group or troop.
- Combine some jobs if necessary, keeping an equal amount of work in each if possible.
- Have girls make a chart, which shows the group, who does what, and when.
- Let the girls be creative! The chart can be big or small, square like a table or round like a wheel. It can even be 3-D or have moving pieces that represent each girl.

Sample Kapers for Troop Camping

Grounds: Picks up all litter within her unit, tends drains under all spigots, tends dishwater drain (if they are required for that outing)

Unit house: Sweeps floor and at the closing day, follow clean up guidelines of the camp, cleans refrigerator in her unit house, general cleaning and checking of equipment, takes charge of hand washing system

Lanterns: Cleans and fills lanterns, picks up in morning and sets out at night, fixes lanterns (if needed and possible), reports to leader all wicks, globes, kerosene needed

Woodpile: Sorts and replenishes, covers woodpile

Restroom: Sweeps and disinfects toilets and showers, responsible for emptying cans, cleans sink and shelves, responsible for replacing toilet paper when needed, picks up litter in her area

NOTE: Program activities such as Scout's Own, flag ceremony, campfire program should be incorporated into the general kaper chart.

Sample Kapers for Meals

Hostess: Invite guests, Set table, Prepare centerpiece, Select, teach, and lead the grace, Serve guests and leaders first, Are responsible for good table manners and conversation, Wash dishes of guests and leaders

Fire Builders: Build, care for and extinguish cooking fires, Are responsible for fire safety during meal preparation, May be responsible for fireplace and woodpile kaper jobs

Cooks: Prepare, cook, and serve food, Responsible for kitchen health and safety, Put food away after meal, Dispose of all food not to be used again, Get all food preparation dishes and pots ready to be washed, Put dish water on to heat during the meal

Clean-Up: Set up dishwashing area, Watch to see that garbage is sorted properly for disposal, Supervise individual dishwashing, Wash all cooking dishes and pots, Clean up cooking area and wash tables, Sweep, Dispose of garbage and trash

NOTE: Program activities such as Scout's Own, flag ceremony, campfire program should be incorporated into the general kaper chart.



Troop Camp Basics Part 3: Camp Site Selection

Revised 7/11

Contents

Front-country vs. Back Country Camping
Site Selection Considerations
Campsite Set-up
Tents
Temporary Shelters
Platform Tents
Cabins

Girl Scout Council of the Southern Appalachians
www.girlscoutcsa.org

Site Selection

Front-country camping (“car camping”) consists of camping at a developed campground. Developed campgrounds typically have restrooms and sites with fire rings, grates and picnic tables. We recommend you choose to camp at one of GSCSA’s camps. The following types of camping are made available to Girl Scouts through GSCSA. Some camps or camping types are unavailable in certain seasons. GSCSA currently operates 5 Girl Scout Camps: Camp Wildwood (Johnson City, TN), Camp Windy Knob (Greenville, TN), Camp Sky-Wa-Mo (Bluff City, TN), Camp Tanasi (Andersonville, TN), Camp Adahi (Cloudland, GA)

Resident Camping is one of the most well-known Girl Scout camp experiences. Campers live at an established site for a period of several days. Girls and their counselors/leaders enjoy activities that take advantage of resources available at the camp. The Girl Scout Council of the Southern Appalachians offers resident camp at select locations during the summer months of June and July.

Troop/Group Camping is a camping experience of 24 or more consecutive hours and often takes advantage of council-owned/established camp sites. A group of girls and their advisors/leaders usually plan and carry out this type of camping. The Girl Scout Council of the Southern Appalachians offers summer troop/group camping year-round by registration at select camp sites. Girls and their leaders may also camp at council-approved sites around the region. Call your service center for more information.

Day Camping is a favorite with Girl Scouts who want to experience camp in shorter sessions, or are not ready for progression into an overnight. Girls participate in activities for a day. If sponsored by the Council Staff or a Service Unit, girls may register as individual campers or go with buddies. A day camp event may be at a council-owned site or a site contracted by the council.

Travel Camping/Trip Camping is a camping experience planned and carried out by a group of experienced participants and their advisors or staff. Travel/trip campers may camp at established camping sites. Travel camping usually involved motorized transportation. Trip camping usually involves self or animal-assisted transportation, i.e., walking or riding horseback.

Minimal Impact Camping is a method that encourages each person to leave no trace of their outdoor or camping experience. It covers everything from the planning stages to the outdoor experience itself. The concept of minimal impact can apply to any outdoor activity or camping environment.

The Girl Scout Council of the Southern Appalachians is committed to establishing a camping experience that will protect and maintain the well-being of every Girl Scout by providing Program Standards and safety guidelines for camping activities. GSCSA is affiliated with the American Camp Association (ACA), a private, nonprofit educational organization that provides members with educational and accreditation services. An ACA accreditation indicates that a camp has met ACA standards. The Girl Scout Council of the Southern Appalachians meets Girl Scout standards as well as national and state standards set by law.

Research other places to camp:

www.recreation.gov – Reservations

www.nps.gov – National Park Service

<http://www.fs.fed.us/> - USDA Forest Service

<http://www.tennessee.gov/environment/parks/> - Tennessee State Parks

http://gorp.away.com/gorp/resource/us_nra/ace/tn.htm - U.S. Army Corps of Engineers

<http://www.trails.com/activity.asp?area=13564>

<http://www.thecampingsource.com/>

<http://www.koakampgrounds.com/> - KOA Campgrounds

Backcountry camping usually requires hiking several miles to a site located in a wilderness area.

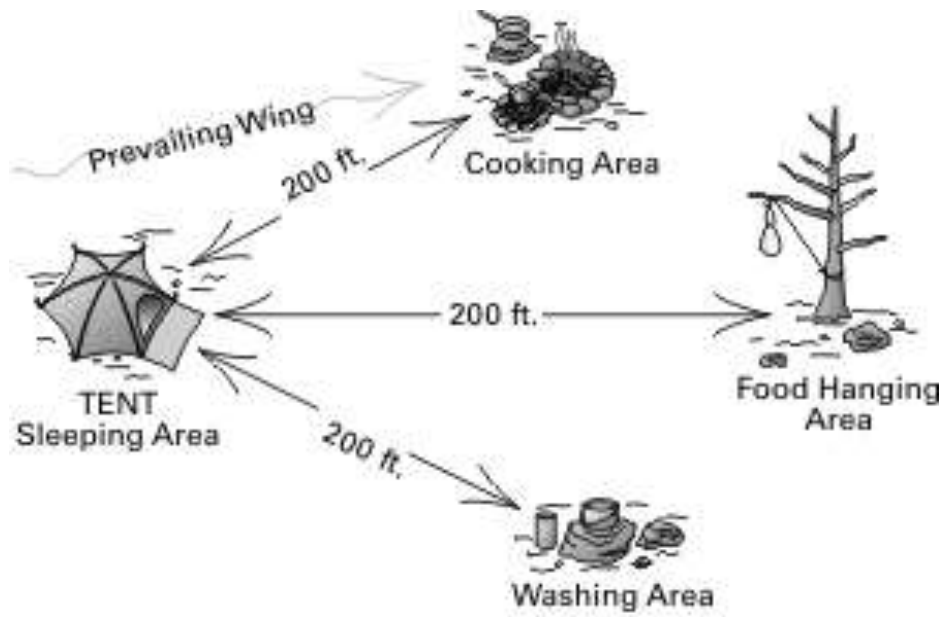
Site Selection tips for backcountry camping:

- Know in advance where campsites can be found.
- If possible, make advance reservations.
- Obtain your site permit as early as possible on the day of your departure (or the day before).
- Learn what the rules and regulations are in the area you will be camping.
- Arrive at your chosen campsite at least 2 hours before sunset to allow enough time to set-up the campsite before dark.
- Try to use a previously used campsite as opposed to opening up a new one, but avoid using an overused site.
- If you are off-trail and must camp in a rarely traveled area, avoid mountain meadows and areas of wet soil. Camp on a durable surface such as a smooth rock or bare ground so your impact will be barely noticeable to future visitors.
- Choose a spot 200 feet away from the trail and water and below tree-line.
- Avoid camping under dead tree limbs.
- Consider the feelings of others when selecting your site: try to blend in.
- If mosquitoes are a problem where you want to camp, try to select a site where there is a breeze.
- Don't leave your tent up at for more than a couple of days at a time. Take it down or move it during the day so the plant growth under it won't die.
- Choose a site that offers a sufficient amount of shade during the day to minimize the amount of time your tent is exposed to the sun. A tent's nylon canopy will begin to deteriorate when left in direct sunlight for an extended period of time.
- If it is windy, try to select a campsite where boulders or trees provide a windbreak.
- Be mindful of low spots. Low spots tend to collect water. In additions, because cold air sinks, low spots are chillier.
- Check over your campsite before you leave; minimize any trace of your visit.

Items to consider when selecting your site (front-country or backcountry)

- Cost
- Reservation / permit needed?
- Size
- Location
- Privacy
- Safety
- Noise
- Established or primitive site?
- Sleeping surface (smooth, rocky, slanted, flat, grassy, bumpy, etc.?)
- Availability/location of water source(s)
- Bathrooms/showers
- Garbage disposal system
- Direction of wind / sun
- Cooking / picnic area – away from sleeping & bathroom area
- Durability of surface
- Overhang of tree branches
- Emergency plan, shelter available to utilize during inclement weather?
- Evacuation route?

Setting-up the Campsite



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Image Source: <http://www.princeton.edu/~oa/images/manual/12camp.gif>

Tents

Important features of a tent to consider are:

- Flame retardant.
- Weight.
- Capacity.
- Portability.
- Ease of set-up.
- Ventilation.
- Floor design.
- Netting for doors and windows.
- Headroom.
- Waterproof tent fly, Waterproof material and design.
- Pole construction (should be strong and lightweight).
- Strong zippers.
- Accessory interior pockets for small items and loops to hang a flashlight.
- Stakes and poles packed in a separate bag from the tent.
- Fabric (breathable).
- Color (should blend in with the environment).

Choose a tent that suits the type of camping activity and the needs of the troop. Consider the following questions during planning:

- How many girls are going on the trip and how many girls can share a tent?
- How much room is necessary for each person and her gear? Is it important to have standing room?
- How will the tents be transported?
- What styles of tents are needed? Dome? A-frame?
- What types of weather conditions are possible?

If you are front-country camping it does not matter how big the tent is, as long as you have enough people to help assemble it. However, if you're doing any backpacking or backcountry camping, you will want a small, light weight tent. Remember to consider how much gear will need to go in the tent along with the number of girls. A "dome"-style tent will allow plenty of movement inside the tent, and can be quite spacious in inclement weather. An A-frame tent has very little headroom, but uses less material in the tent design therefore; it is usually a lighter style tent. In addition, A-frame tents typically cost less than other designs and are suitable for summertime troop camping.

Tips:

- Never place a candle, camp stove, lantern, heater, open flame or uncovered mirror in or near a tent.
- Pitch tents far enough away from any cooking area so that the wind cannot blow a spark onto the tent.
- Never use plastic as a sleeping shelter because it is highly flammable.
- Prior to the trip, check the condition of all tents, poles, ropes, pegs, etc.
- Apply seam sealant to new tents as instructed by the tent manufacturer.
- Use a plastic sheet or ground cloth under the floor of the tent to give added protection from stones and sharp sticks and to keep the tent dry.
- Keep the interior clean by sweeping or shaking it out each day and before packing it.
- Make sure the tent is completely dry before storing it.
- Place stakes and poles in a separate bag.
- Bring materials to repair holes or rips in tents with you on the trip (needle and nylon thread, special tapes, or self-adhesive fabrics).
- Bring spare parts on the trip including tent stakes, guy rope and poles.

Pitching a Tent:

- Practice pitching the tent with your troop before the trip.
- To make set-up easier, assemble the matched poles and color code them with tape, paint, or permanent markers.
- Locate your tent on high, level ground (but below tree-line). If it rains, water will tend to flow away from your tent rather than gather under it, and you won't be rolling downhill in your sleeping bag.
- Remove any loose stones, twigs or branches from the ground before pitching your tent, but keep pine needles and dead leaves for added cushion.
- Put a plastic ground cloth/tarp under the tent floor to protect it from moisture.
- Roll out your tent on the ground cloth and assemble the poles.
- Run the poles through the loops or hooks on the tent and secure; set the tent upright.
- Drive tent stakes into the ground at a 90-degree angle to the guy ropes.
- Once the tent is upright and staked down, place the rain fly over the tent and secure it to the tent structure.
- Securely anchor down all key points of the tent with tent stakes and guide ropes.
- Line the ground cloth up with the edge of the tent floor by rolling the excess ground cloth *downward* under the tent floor to avoid water from being able to flow under the tent.
- To avoid the buildup of condensation in the tent, open the roof vent and zip a door or window partially open. If you have no roof vent, crack two doors or windows open. Either way will create a slight cross breeze that will help to remove body moisture and prevent condensation inside your tent.

Temporary Shelters

Uses of tarps while camping:

- Ground cloth for under your tent
- Rain shelter
- Sun shades
- Wind barrier
- Coverings for your gear, campfire, or firewood
- Sleeping shelters

What you will need to create a shelter, sun shade or wind barrier:

- A tarp (a large plastic/polyethylene tarp with aluminum grommets is sufficient and inexpensive)
- Rope (50-100 feet of approximately 3/8-inch nylon cord or clothesline rope)
- A few light weight tent stakes
- Duct tape (to repair rips in the tarp)
- Bungee cords (optional)

Tips:

- It is very important to think about drainage when you are setting up your tarp. Naturally, if the site has a slope, you need to consider the slope when setting up the tarp. Ideally, you want to have the tarp drain on the downhill side of the site.
- Angle the tarp with the low edge facing the wind. The wind will be forced over the campsite instead of through it, more importantly water can run off the tarp instead of collecting in a pool. If water collects on top of your tarp, raise the top corner with a stick or pole to allow the water to run off the sides.
- To create a lean-to, orient the tarp so that the low end is towards the prevailing weather. Tie the high end to a rope stretched from tree to tree. Peg down the low end at or close to the ground to help deflect the wind. It is important to stretch the tarp tight. If it is not tight, it will flap in the wind.
- If your tarp loses a grommet, find a small stone, in the corner where the grommet is missing, wrap a small amount of tarp fabric around the stone, then tie it off with a piece of cord. You can then use that nub as an attachment spot for a guy line.

Platform Tents

Several of GSCSA's camps offer large tents on wooden platforms for troops/groups to use, called platform tents. It is important that girls understand how to take care of platform tents.

- Never use a heater or any open flame in or near a tent.
- The guy ropes along the sides may need to be loosened in rain. When they are wet, they tighten and put undue strain on the canvas.
- Do not hang anything on the ropes. This pulls the tent out of line.
- Roll side walls and door flaps up toward the inside of the tent, so they can be let down *from* the inside. This prevents water from catching in the roll when it rains. Be sure to roll side walls and door flaps back down, and secure them when leaving site.
- Never roll up the side walls or door flaps unless they are completely dry. Damp canvas will mildew when not open to the air.
- Drop the side walls periodically. Mice sometimes nest in the rolled-up flaps.
- Never touch the inside of the tent during a rain. Touching the fabric can cause the canvas to leak.
- Do not use insect sprays or other kinds of sprays inside a tent. The chemicals can dissolve the water-repellent treatment.
- Do not pin anything to the tent, since this can cause tears and leaking.
- Tie the tapes with a half bow so they can be untied when wet.
- Keep mirrors under cover. Sunlight reflected in a mirror can be hot enough to burn a hole in a tent or start a fire.
- Report small tears and missing ropes or tapes so that they can be replaced.

Cabins

Several of GSCSA's camps offer cabins or indoor camping spaces. Current rules and regulations vary based on the space reserved.



Troop Camp Basics Part 4: Packing Considerations

Revised 7/11

Contents

Packing Checklist
Ten Essentials for Backcountry
Sleeping Bags
Sleeping Pads
Packs
Footwear

Girl Scout Council of the Southern Appalachians
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Packing

Below is a possible packing list for hikes and camping trips. Some items are not needed on every trip. Refer to the Safety Activity Checkpoints for the activities you plan to participate in for further guidance on equipment required. Also check the rules and regulations of the place you plan to camp for a list of prohibited items.

Essentials

- Drinking Water
- Water Bottles
- Waterproof Matches
- Fire Starters
- Swiss Army Knife
- First Aid Kit
- Insect Repellent
- Map of the Area
- Compass Flashlight w/ fresh bulb
- Extra Batteries
- Sunglasses
- Sunscreen
- Whistle
- Trash Bags
- Park, Fire, and Camping Permits

Food and Cooking Gear

- Energy Bars
- Trail Mix
- Raw Veggies or Fruit
- Crackers
- Cheese
- Oatmeal
- Hot Chocolate, Tea, Instant Coffee
- Freeze-dried Meals
- Re-sealable Storage Containers or Bags
- Camping Stove and Fuel
- Lightweight Cooking and Eating Utensils
- Cup and Bowl
- Cooking Pots and Pans
- Pot Holders
- Dish Scrubber
- Biodegradable Dishwashing Soap

Clothing and Outerwear

- Warm Hat
- Sun Hat or Baseball Cap
- Raingear
- Gloves
- Long Underwear
- Extra Underwear
- Quick-drying Swimsuit
- Fleece Shirt and Pants
- Change of Clothes
- Footwear
- Hiking Socks
- Extra Socks
- Hiking Boots or Shoes Suited to the Terrain

Personal Items

- Toilet Paper
- Biodegradable Soap
- Feminine Hygiene Products
- Washcloth
- Toothbrush and Toothpaste
- Comb
- Deodorant
- Shampoo
- Small Towel
- Bandana
- Lip Balm w/ SPF

Camping Gear

- Tent
- Rain Fly
- Tent Stakes
- Ground Tarp

- Sleeping Bag
- Sleeping Pad
- Tent Repair Kit

Extras

- Watch
- Moleskin
- Camera

- Duct Tape
- Cord or Rope
- Binoculars

The "Ten Essentials" for Backcountry Packs

Source: (http://www.mra.org/training/General_Backcountry_Safety.pdf)

Every backcountry user, even on seemingly insignificant day hikes, should carry the most basic equipment; commonly referred to as the "Ten Essentials." The survival equipment, clothing and other resources you carry will increase your chances of surviving an emergency. Technically skilled and highly experienced rescue mountaineers never go into the field on search or rescue missions without these ten essentials. Carefully selected, these items can easily fit within a small backpack. This list of "Ten Essentials" assumes your trip is a summer excursion. At any other time of the year, be sure to bring more of the right kind of clothes. When choosing your equipment, remember that the body's ability to maintain its core temperature is critical to your survival in the backcountry.

1. Topographic map and magnetic compass

Too often, backcountry users venture deep into the backcountry without a map and compass. The fact that they are able to safely venture back out is usually pure dumb luck. With a map and compass, it is much easier to identify your location and direction of travel. This is especially important in the event that you become lost.

2. Flashlight (with extra batteries and bulb)

How far do you suppose you could safely travel at night in the backcountry without a flashlight? Could you signal others, if you saw a campsite far away? A flashlight makes travel at night possible and aids in signaling when lost.

3. Extra clothing (including mittens, hat, jacket and rain gear)

Hypothermia is the most common killer of backcountry users. Inability to maintain body heat can quickly rob an unsuspecting victim of all energy and common sense. Since severe weather may present itself very quickly in the backcountry, extra clothing should be carried to help maintain body heat.

4. Sunglasses

Especially in the winter, ultraviolet glare from the sun can cause blindness. Worst of all, the backcountry user may not realize this is happening until it is too late. A good pair of sunglasses, designed to limit ultraviolet light, will eliminate this risk.

5. Extra food and water

These items will maintain energy levels in the case of an emergency and help maintain body temperature in cold weather. While you can survive three days without water and three weeks without food, your energy levels will be seriously depleted without these.

6. Waterproof matches in waterproof container

Waterproof matches, available from most backcountry supply stores, are capable of igniting in high winds and/or blinding rain. Building a fire may be impossible without these. Fires are critical since they not only provide heat, but also make the job of search and rescue teams easier by providing a visible signal.

7. Candle/Fire starter

A candle burns much longer than does a match. This is helpful when trying to start a fire, especially if your firewood is wet.

8. Pocket knife

There are a multitude of applications for a pocketknife in emergencies. The common Swiss Army Knife is so-called because it is standard issue for the Swiss Army, which has devised 246 uses for their standard 7-instrument knife.

9. First aid kit

Proper first aid care is difficult, if not impossible, without a good first aid kit. Backcountry shops carry several brands of small, lightweight first aid kits including small first-aid manuals.

10. Space blanket or two large heavy-duty trash bags

These items can help provide shelter in an emergency situation and can be used as a raincoat or a windbreak. The additional warmth they provide far outweighs their minimal weight.

Sleeping Bags

Sleeping bags come in a wide range of designs, shapes and fills. The main function of a sleeping bag is to keep you warm on chilly nights. It should also be comfortable and breathable.

Sleeping bags work by trapping warm air created by the body and prevent it from cooling off. The smaller the airspace is inside the bag, the warmer the bag will be. There are three main styles of sleeping bags: mummy bags, rectangular bags and tapered bags (semi-rectangular). Tapered bags and mummy bags are tight-fitting bags that can keep you very warm. However, if you plan to camp only when it is warm, the rectangular bag may be more suitable. The down-side to rectangular bags is that they are often heavy and bulky which makes them less practical on backpacking trips. The warmth and insulating properties of the sleeping bag are also related to what it is filled with. Down-filled bags are lightweight and last long but are more expensive than synthetic-filled bags. Synthetic-filled bags are also more resistant to wetness than the down-filled bags.

Care and Cleaning Tips:

- Sleeping bags should be removed from their carry sacks and shaken out periodically.
- Store sleeping bags flat or hang them up in a large bag. Storing bags for long periods of time in their traveling bags compresses the fibers and results in a loss of insulating properties.
- Occasionally, wash synthetic and down-filled bags in a washing machine (commercial machines with no agitator) with mild soap.
- Dry the bag on low and tumble dry with a number of tennis balls to encourage the bag to loft.

Sleeping Pads

Sleeping pads are essential to tent camping; not only do they provide comfort; they provide insulation and protection from the ground.

- Closed-cell foam sleeping pads offer the most insulating value for their weight and are the least expensive choice. These camping mats don't roll up very compactly, though, and they're usually fairly thin, so they offer the least amount of cushioning.
- Self-inflating open-cell pads are compact and expensive, but are ideal for backpacking.
- Make sure the length fits you, your tent and your sleeping bag.
- For backpacking, consider weight vs. comfort.
- Look for non-slip pads to help you keep from sliding off in the night.
- Don't use plain air mattresses without any foam inside. As the air gets colder during the night, these mattresses often deflate until they're not providing enough padding. They don't offer very much insulation to protect you from the cold ground.
- If you do opt for an inflatable sleeping pad, make sure you bring a repair kit on your trip.

Packs

The type of pack depends upon the requirements of the trip. There are three major styles:

Frameless/Daypack: Day packs are small packs designed to carry raingear, a lunch, water bottle, map, and a few extra items. Some people take a daypack with them on an extended trip in order to use it for day hikes during the trip. A daypack should have padded shoulder straps.

Internal-Frame Pack: Internal-frame packs are worn close to the body and have a low center of gravity (transfers the weight of the pack to the hips). The frame is integrated into the pack, making it flexible to movement and manageable to carry, but hotter to wear than the external-frame pack. This pack is best when hiking on uneven or brushy terrain, rock-climbing, or cross-country skiing.

External-Frame Pack: External-frame packs are distinguished by three components: the frame, the pack bag, and the suspension system. The frame distributes the load to the wearer's hips to eliminate weight on the back muscles and allows the wearer to stand straighter when walking. The frame also holds the load away from the wearer's back, which allows air to circulate, making it cooler to wear than an internal-frame pack. This pack is best for carrying heavy loads and traveling on established trails.

Before choosing a type of pack, consider the following:

- Age and body size of the person.
- Type of trip (day hike or overnight).
- Amount of gear needed.
- Amount of weight the person can reasonably carry.
- Kind of activity that will take place.
- Ways to organize gear.
- Cost of the pack.

Packing a Backpack:

- Practice packing your backpack, lifting properly, adjusting the straps, and carrying the loaded pack before your trip.
- A backpack should weigh no more than 15 to 20 percent of the backpacker's body weight. This figure may vary, however, depending on the individual's body strength and fitness.
- Line the inside of the pack with a garbage bag (to keep items dry).
- Roll-up clothing and place items inside of plastic baggies (sorted by day or clothing type) and then release all of the air inside the baggies. Not only will this keep your clothing items dry and clean, it will conserve space in your pack.
- Place your soft things (clothing, sleeping bag, tent, etc.) in the lower part of your pack.
- Place heavier items (stoves, food, pots, pans, extra boots, etc.) in the middle to upper part/center of the pack (above the hips and below the shoulders).
- Place toiletries and things you may need to use during the day (toilet paper, insect repellent, first aid kit, rain gear, etc.) where they can be easily accessed, such as in a side pocket or on the top of your pack.
- Tie items such as tent poles (in a stuff sack), tarp, and sleeping mat to the outside of the pack.
- Lift pack properly by bending at the knees and using your legs to lift the backpack placing one shoulder strap on at a time.
- Adjust straps. Note: the hip belt should be positioned about an inch above the hip bone.
- If the backpack tugs at your shoulders or pulls you backwards, repack the heavier items lower.

Footwear and Care

Factors to consider before selecting footwear:

- What will the terrain be like?
- How heavy a load will be carried?
- How much support do the hiker's feet and ankles require?
- Are the hiker's feet still growing?
- How much do the boots or shoes cost?

Sturdy walking shoes, running shoes or lightweight hiking boots are usually adequate for light to moderate loads, on-trail hiking and for hikes less than 2-hours in duration. Heavy boots are tiring to walk in and may tear up fragile vegetation. Don't choose a pair heavier than you need!

Boots should fit snugly but not constrict the feet. The heel should be seated firmly with no side-to-side movement and only a slight up-and-down motion. On a flat surface, the toes should be about a thumb's width from the front of the boot. On a steep slope, the foot should slide toward the front of the boot – just enough to allow a finger to fit between the ankle and the collar of the boot. The arch ball of the foot should correspond to the shape of the boot.

New hiking boots should be worn inside for the first few days to assure a comfortable fit and to break them in before the trip/hike.

Foot Care:

Proper foot care is very important. A painful blister can ruin your hike!

- Do not wear cotton socks or cotton liners! They will soak up foot perspiration, stay damp, and cause blistering.
- Wear socks that wicks perspiration away from your feet and allows it to evaporate.
- Wear socks that are comfortable and provide extra padding.
- Wear a polypropylene, Capiline or Thermax liner under wool or a wool/synthetic blend sock (even in hot climates).
- Change socks several time a day.
- Wash and dry feet at the end of the day.
- During the first hour of the hike, allow time to stop and readjust shoes or boots and socks.
- If rubbing or a red spot occurs, stop and place moleskin or molefoam padding over the site. Do not wait until a blister forms!
- Never put moleskin directly on a blister that has already formed, instead, place the moleskin or molefoam padding around it. If possible, put an antiseptic on the affected area and allow it to dry before applying the moleskin.



Troop Camp Basics Part 5: Menu Planning, Recipes, & Equipment

Revised 7/11

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Water Sources & Purification
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Foil Cooking
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Wine Box Oven

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www.girlscoutcsa.org

Shopping for Food

Shopping for the trip is an important experience for the girls. Encourage girls to comparison shop. Read labels, determine the nutritional value, weight, cooking time, and cost of items. Terms such as "instant," "quick-cooking," "pre-cooked," partially pre-cooked, or just add water, indicate that the food item may be prepared quickly. Food selection can be more varied in weight and cooking time are not important factors. If the girls are camping at an established site, greater varieties of foods can be chosen, including fresh foods and refrigerated items

Packaging Food

The food purchased for a trip can be repackaged into meal- or patrol-sized servings and packed by the meal and day. Reduce the weight by leaving excess packaging at home and repacking some foods into plastic bags that seal across the top. Be sure to include the directions for cooking.

Sample Outdoor Cooking Ingredient and Equipment List

Menu item	To serve	Ingredients	Amount for one	Amount to buy	Equipment	staples

Food Storage

When staying inside a building or cabin, store food in a refrigerator, or in containers, and rodent-proof cabinets so that mice or other small animals cannot chew through packaging. Mice will even nibble on a bar of soap. At an established campsite, store food inside rodent-proof areas, if available, or in a vehicle. Girls must be cautioned not to keep any food in their tents, duffel bags, or packs. Mice and other animals will chew through clothing and packs to get to we food. Careful cleanup will help to keep away unwanted ants and other insects.

- Most black bear and human encounters involve food.
- Food to a bear = food, garbage, as well as scented items such as: soap, lip balm, sunscreen, deodorant, toothpaste, etc.
- Store food and scented objects inside your car if you are front-country camping. Dispose of waste in the designated garbage bins in the campground. Use the public bathhouses provided by the park.
- When camping in the backcountry, be sure to hang all food, garbage, and scented items in a sealed, plastic bag at least 10-12 feet up in the air and at least 8-10 feet from a tree trunk. Remember, black bears can climb!
- Lightweight nylon stuff sacks are often used for bear bags, but they can be made simply of a large square or rectangular piece of cloth or tarp with the food, garbage, and scented items placed in the center of the tarp and the corners brought up and tied around with rope.

Tips on How to Hang a Bear Bag:

- Find two trees (a minimum of 200 feet away from your campsite) that are about 20 feet apart with minimal tree or shrubby growth between them.
- The two trees should also have a branches that are approximately 12-14 feet high (facing each other) that are that are strong enough to support your bear bag(s), but not strong enough to support the weight of a bear.
- Tie one end of the rope to the base of one of the trees.
- Tie a 4-6 inch long stick to one end of a 75-100 yard nylon line rope (approx. 1/4-1/8 inch in diameter) and toss it over the branch of the first tree.
- Put your bear bag on top of the rope (in the middle of the two trees) to hold the rope down while you toss the other end of the rope up to the second branch.
- Once you are able to hook the rope up over the second tree branch, tie the bear bag onto the middle of the rope using a constrictor knot or clip it on with a keychain carabineer, using a lark's head knot. Pull on the loose end of the rope to hoist the bear bag up until it is at least 10-12 feet high and at least 8-10 feet away from each tree trunk. (This may take two or more people to do depending in the size of the bag).
- Tie off the end of the rope to the second tree using a using two or three half-hitch knots

Water Sources

While planning an outdoor activity, check on the available water supply at the site. Even for a day hike each girl should carry an adequate supply of water. Only water from a tap that has been tested and approved by the local health department can be considered safe to use. Other sources of water such as lakes, streams, or ponds must be purified. Even a sparkling clear river in the wilderness can be contaminated by bacteria, viruses, protozoa, chemicals, dead animals, or unsanitary conditions upstream out of view.

Water Purification

Portable water purification is used to treat water for drinking purposes. Large rivers, streams, springs, and wells may contain bacterial or protist contamination originating from human and animal waste, pathogens, such as *Giardia lamblia* and *Cryptosporidium* spp., both of which cause diarrhea, among other forms of contamination.

Portable drinking water systems or chemical additives are available for hiking, camping, and travel in remote areas.

The most common systems for purifying water while camping are:

- **Boiling water** on a portable stove to kill bacteria and viruses. This is the oldest method of purifying water. The formula for length of time to boil water is: three minutes at sea level plus one minute for every additional thousand feet of elevation. For example, if you are camping at 7,000 feet you would need to boil your water for ten minutes (3 minutes for sea level plus 7 additional minutes for the additional 7,000 feet of elevation).
- **Portable pump filters** are commercially available. Water purifiers or filters can be carried. Be sure the filter is small enough to trap the harmful microorganisms.
- **Add iodine to water**, as a solution or in tablet form, to kill many, but not all of the most common pathogens present in natural fresh water sources. Carrying iodine for water purification is an imperfect but lightweight solution for those in need of field purification of drinking water. Directions for iodine tablets: Place one tablet in a quart of water and allow time for it to dissolve. Shake the bottle to make sure the iodine is distributed throughout, making sure to include water that might be on the cap and threads of the bottle. Allow approximately 30 minutes for the process to take place. Iodine kits are available in camping stores that include an iodine tablet and a second pill (vitamin C or ascorbic acid) that will remove the iodine taste from the water after it has been disinfected. Iodine alone is not considered effective against *Cryptosporidium*, and is limited in its effectiveness against *Giardia*.

Cooking/Eating Area

Many areas have tables available which can be used for food preparation. If a table is not available, portable tables may be brought from home, or lashed. Keep the area organized and clean, and provide instruction, supervision and discipline in safe cooking, fire building, and use of kitchen tools and equipment.

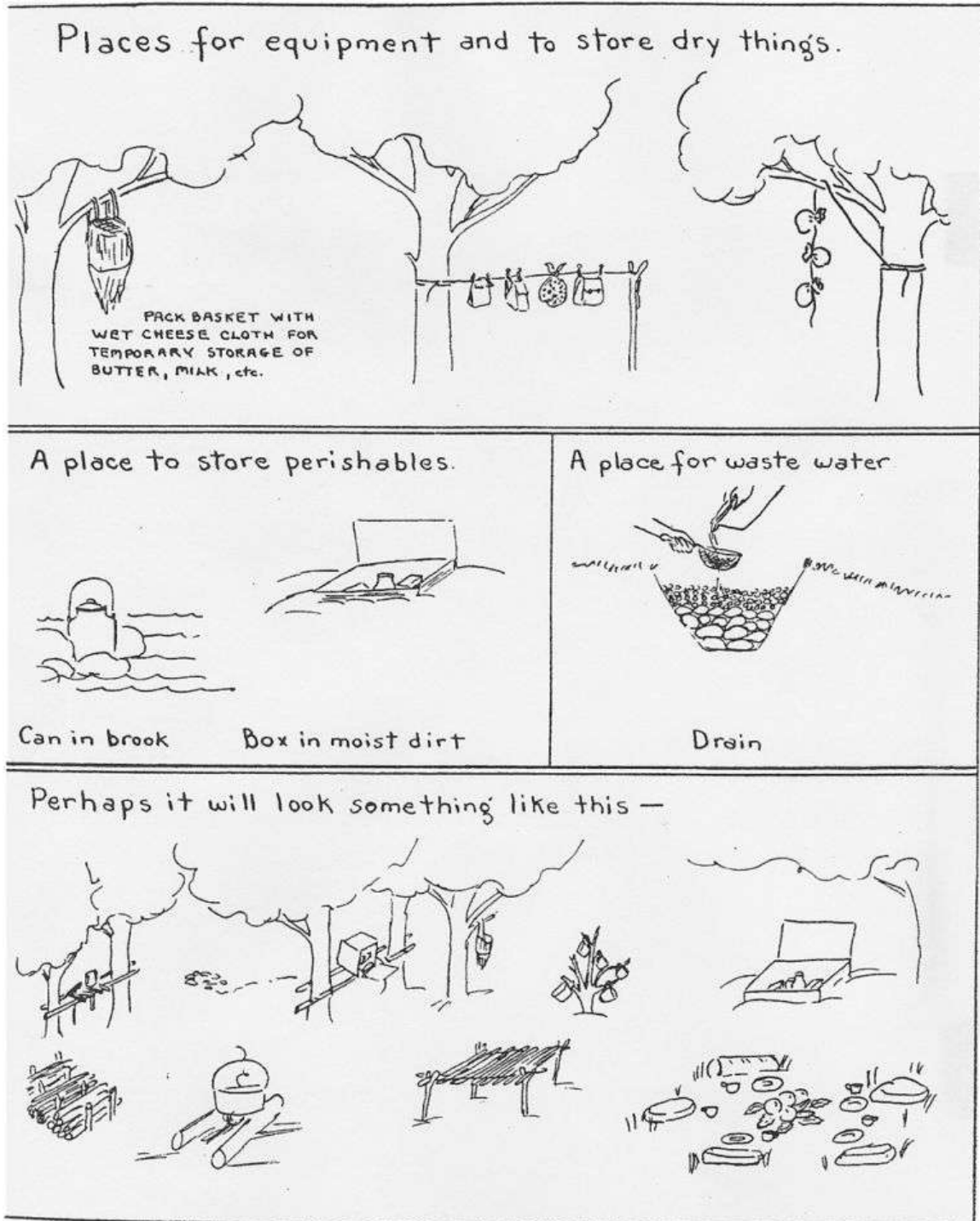
The method used for cooking will be determined by the activities planned, the experience of the campers, availability of resources, and regulations pertaining to the types of fires permitted for the area. The camp site may have established fire areas such as built in fireplaces, barbecue units, sheepherder (shepherd) stoves, fire rings or be limited to the use of portable cook stoves. Be sure that appropriate permits, where applicable have been secured.

Garbage Area

Efficient plans for garbage disposal should be made in advance. If garbage cans are used, line them with plastic bags and be sure that they are kept tightly covered at all times. Do not allow trash to overflow and spill onto the ground. If no pickup is available, carry all garbage out with you. Garbage may be burned only if it can be entirely consumed by fire and only if local regulations permit.

Equipment area

Every piece of camping equipment needs to have a designated place for its storage. Campers need to be instructed in proper care and usage as well as responsibility for safe storage of equipment after usage. Saws, axes, hatchets, and knives present a safety hazard if handled negligently. Always be sure that the equipment is appropriate for the activity, and suitable for the girls with regard to age, size, maturity, and ability. Equipment should be maintained in good repair to prevent unnecessary injury – a safety check prior to an activity is advised.



Dishwashing at Established Site

Dishwashing for a group in an established setting works most efficiently with a little planning. Water can be conserved by using the following hints.

- To make pots used for cooking over a fire easier to clean, rub soap over the bottom and sides of the outside of the pots before placing them on the fire. A bar of soap or liquid dishwashing soap can be used.
- Scrape plates and presoak pots before washing.
- Heat dishwater on the camp stove or cooking fire so it will be ready when the meal is finished.
- Keep the dishwater clean as long as possible by washing the least dirty items such as cups and silverware first, and pots last.

Use three buckets or deep pans for dishwashing. The first bucket contains hot, soapy water; the second bucket contains clean water for rinsing; and the third contains boiling water, or cool water containing a sanitizing solution approved by the local health department (1 tablespoon bleach for every gallon of clean cool water). Sanitize dishes by immersing them in clear boiling water for one minute or by immersing them in the bleach solution for two minutes.

Each individual is responsible for bringing and washing her own dishes, silverware, except when these items are provided on site. The dishes are kept in a "DISH BAG" or "DUNK BAG." These individual net bags to hold dishes during the final sterilizing rinse. Hang up the net bags to air dry. If a clothesline is put up for the net bags, be sure that it is away from dust and areas where someone might walk into it and be injured. When dry, dishes and eating utensils should be stored away from dust.

The dishwashing line is set up as follows:

- SCRAPE – Use rubber scraper and large can or pan.
- WASH – dishpan with soap, cloth or mop – hot water (110-112 degrees F)
- RINSE – dishpan with hot water (keep it hot) (110-112 degrees F)
- STERILIZE – place all dishes in the "DUNK BAG" and hold in kettle of hot water (170 degrees F) for 1 minutes or rinse thoroughly in a chemical solution for 2 minutes.
- HANG ON TREE OR LINE TO DRY

Used dishwater should be filtered to remove any food particles. Place the filtered food particles in the garbage. At an established site, follow the rules and regulations of that site to dispose of waste-water. Some sites prohibit draining wastewater into sinks, due to age or condition of plumbing.

CHEMICALS

Use 1 tablespoon of chlorine bleach for each gallon of water.

Dishes should be completely submerged in this solution for 2 minutes for proper sanitation.

Basic Menu Planning

In order to plan the “right” menu, girls will need to find the answers to the following questions for each meal:

- What is the purpose of the outing?
- How much time will we have for cooking this meal?
- Will we be cooking indoors or out?
- Will we be using familiar cooking techniques – or do we want to try out new method?
- What kind of stove and type of fuel or fire will we be using?
- What kind, and how much, cooking equipment will we have available?
- Will each patrol cook for itself, or will one patrol cook for all?
- Are there any concerns about spoilage, weight, cost, season of the year that have to be considered?
- What food preferences or dietary restrictions need to be considered?

With the answers to all these questions in hand, your girls are ready to plan their menus. They will find these menu planning tips helpful:

- Include some no-cook foods in every meal - to save time and to be sure girls won't go hungry if there is a cooking failure.
- Include something from each of the basic food groups in every meal.
- Plan some extra – for snacks or “filler-uppers”.
- For meals that are to be cooked, concentrate on one-pot dish meals, keep ingredients simple and equipment at the minimum.

To involve all of the girls in menu planning, have them work in patrols or committees. If cooking is to be done in patrols, have each patrol plan its own food. This variety will be stimulating and the fun of sampling another patrol's food will add to the adventure.

The *Grab (or Grub) Bag* is a fun way to plan menus. Use several large grocery bags. Label the bags: breakfast, lunch, dinner, and snacks OR main dish, salad, dessert, beverage OR grain group, meat group, fruit and vegetables, and milk group. Have the girls write on 3x5 cards their favorite food for each meal. Once they have finished all three meals, they place their cards in the appropriate bag. Now have the girls tally the results, with the majority of the “food selections” being your menu.

Advanced Nutrition

An average person will usually need to consume about 2,500-3,500 calories per day during an active camping trip or more if it includes hiking.

- 60% of the diet/menu should consist of carbohydrates.
- 20-25% of the diet/menu should consist of fats.
- 15-20% of the diet/menu should consist of proteins.

Example (3,500 calorie diet):

2100 calories = carbohydrates (60%)

875 calories = fats (25%)

525 calories = proteins (15%)

Total Food Planning (For Backcountry Trips/Backpacking)

WEIGHT:

Average = 2 pounds/person/day

People X # days X # pounds/persons/day = pounds of food to bring

CALORIES:

Average = 3,500/person/day

People X # days X # calories/persons/day = minimum calories needed for trip

COST:

Average = \$3.25/person/day

People X # days X cost/persons/day = amount to be spent on food

EXAMPLE:

12 people x 2 days x 2 pounds = 48 pounds

12 people x 2 days x 3,500 calories = 84,000 calories

12 people x 2 days x \$3.25 = \$78.00

Carbohydrates: 84,000 x .6 = 50,400 cal / 1,700 calories per pound = 29.6 pounds

Fats: 84,000 x .25 = 21,000 cal / 3,000 calories per pound = 7 pounds

Proteins: 84,000 x .15 = 12,600 cal / 2,000 calories per pound = 6.3 pounds

Outdoor Cooking Progression

1. Nosebag lunch
2. Nosebag plus one pot (soup, cocoa, somemores)
3. One-pot Meal (stew)
4. Group fry pan cookery in large pan (scrambled eggs)
5. Toasted sandwiches, hot dogs, etc.
6. Charcoal Cookery
7. Dutch Oven or Coffee-Can
8. Foil Cookery (chicken, stew, apples)
9. Stick Cookery (doughboys)
10. Tin Can Stove or Buddy Burner
11. Cooking for large groups
12. Spit Cookery, BBQ
13. Bean Hole or Emu (don't dig new pits)
14. Reflector Oven (gingerbread)

If the girls can't do it alone, it is too advanced for them.
Cooking success is determined by fire building ability.

Fireless Foods

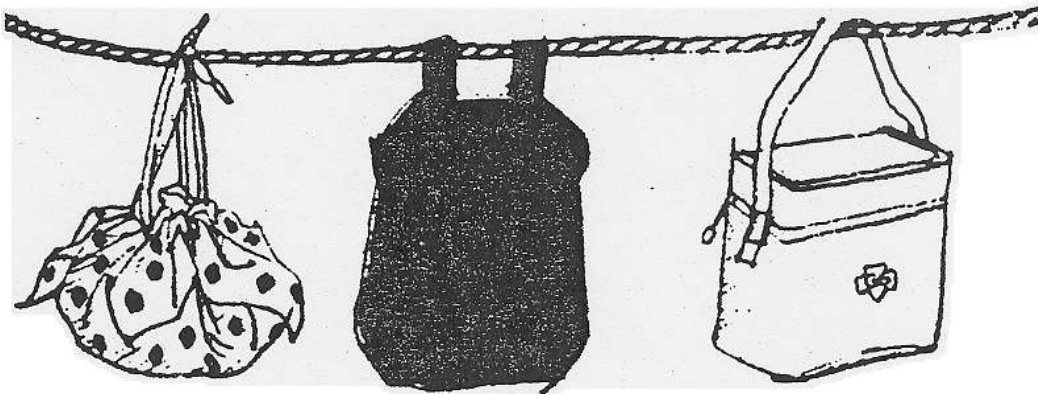
You may find yourself needing a fireless meal many times: for a quick meal on a hike; where fire bans prevent cooking; with a group of girls who have not yet learned to build a fire; during the heat of the day when no added heat is wanted; on a bus trip or a train; for the first meal at a camp site before there's time to build a fire.

In planning a cookout or camp meal smart beginners cook only one menu item and accompany it with fireless dishes--salads, desserts, sandwiches, etc. Sometimes, you want to snack in a fireless place. The no-cook puddings and other convenience foods and mixes are good under these circumstances, particularly if you can carry all the ingredients. Canned fruits are also a welcome treat. Some of these recipes travel well and are good in the nosebag.

Nosebags

When a horse is to be away from his quarters or, grazing area, a thoughtful owner provides a bag of feed to hang conveniently on his bridle. You can carry your own personal "nosebag" made of a red bandana, denim, plastic or paper bag. This holds the sandwiches, thirst quenchers, and dessert. Remember to pack heavy things at the bottom and light, crushable ones on top. Each person can eat what she herself brings. Of course, a greater variety and choice is possible if everyone pools sandwiches, fruit, vegetables, cookies, etc. This would be a good time to check the contents of each "nosebag" to see how many contained a balanced meal with:

- Egg, meat, fish, or cheese
- Milk if possible
- One vegetable at least (carrot sticks, cucumber sticks, celery, radishes, banana); The "walking salad" is good here
- Fruit (oranges, apples, peaches, pears (good thirst quenchers), dried raisins)
- Enriched bread (in sandwiches or as bread and butter if you have a hard-cooked egg (carried in the shell) or chunk of cheese for number 1); Cookies and cake of enriched flour fit here too



Walking Salad

- Cut the top off an apple and core it, leaving the bottom skin over the hole.
- Scoop out the pulp of apple and chop.
 - Mix with peanut butter (cottage cheese or cream cheese may substitute) raisins, nuts and granola cereal
- Stuff mixture back into apple shell and replace top.

G.O.R.P. "Good Old Raisins & Peanuts"

Yield 12 cups

Combine:

- 2 cups peanuts
- 2 cups raisins
- 2 cups chopped apricots or other dried fruit
- 2 cups M&M's
- 4 cups bite-sized shredded wheat or rice cereal

Super Peanut Butter Spread

Combine:

- 1 cup peanut butter
- ½ cup honey
- ½ cup wheat germ
- 1 cup well-drained crushed pineapple

If necessary, add pineapple juice until spread is right consistency.

Ants on a Log

Spread peanut butter on celery and decorate with raisins on top. Cream cheese or soft yellow cheese may substitute for peanut butter. Rye Crisp or other whole grain crackers can substitute for celery.

The Edible Campfire (Recipe 1)

To learn to fire building indoors, make an edible fire! You can have a party and go over the procedures for laying a safe fire all at the same time.

You will need: napkins, paper cups to fill with water, candy corn or cheerios, shredded coconut, pretzels, cheezies, cinnamon hearts (red hots), and one toothpick/girl.

Each girl should unfold her napkin and lay it nice and smooth to represent the clearing that has to be done in an area to make it safe to build a fire. Here you may go into as much detail as you feel your girls are ready for. Discuss safe places to build fires. Then make a fire ring of cheerios. Again you may pause and talk about safety. Next you make three piles of firewood: coconut for the tinder, pretzels for the kindling and cheezies for logs. Before you lay the fire you need a cup of water to represent the firefighting equipment that should be on hand.

Now you are ready to lay your fire: Lay an A or V of logs after you decide what direction the wind is blowing. Lay your tinder against the crossbar of the A or in the cross of V. As each girl is ready, she gets a toothpick for a match to hold in under the largest pile of tinder and you drop a few red hots on top to show that the fire is burning brightly, using just one match! Then she places on more kindling and logs as the fire burns brighter. After her fire has been approved by the leader she eats it all!!

The Edible Campfire (Recipe 2)

You will need: pretzel "logs" (or cheetos) for the logs around the fire circle, pretzel sticks for kindling, potato sticks for tinder, red hots (or candy corn) for fire, twizzler for match, fork for rake, small dixie cup for water bucket, pixie stick for fire stick, paper plate for fire circle. Follow instructions for Recipe 1 using alternate ingredients.

One Pot Meals

One Pot Master Plan

Feeds 12

Base:

- 3 pounds hamburger, browned
- 1 package onions, dehydrated*
- 1 package sweet peppers, dehydrated*
- 2 cans tomato soup
- Salt and pepper to taste

Put all into one pot.

*May substitute fresh

Additions to create variation:

American Chop Suey

- 4 cans spaghetti

Spanish Rice

- 1 large package of minute rice, cooked separately

Spaghetti

- 1 large package spaghetti, cooked separately

Macaroni Beef

- 1 large package of macaroni, cooked separately

Chili

- 4 cans red kidney beans
- 2-4 tsp. chili powder

Yoki Special

- 3 cans of spaghetti
- 2 cans of peas

Squaw Corn

- 3 cans of corn
- ½ pound diced cheese
- 3 cans chicken soup
- 3 cans of water
- 4 cups uncooked macaroni

Gumbo

- Omit tomato soup
- 3 cans chicken gumbo soup

Campfire Stew

- 4 cans of vegetable soup

Hunter's Stew

- Omit tomato soup
- 1 pound regular rice
- 3 cans vegetable soup
- 3 cans beef broth

Hungarian Hot Pot

- 4 cans pork and beans

Day Camp Special

- Omit tomato soup
- 2 cans chicken gumbo soup

To Complete Meal:

Bread & Butter, Milk, Fruit, Cookies

Charcoal Cooking

Have available all needed supplies and equipment:

- Fire container and grill
- Charcoal (stored in plastic bag)
- Fire starter
- Charcoal ring (starter)
- Long handled tongs
- Shovel
- Matches (waterproofed/stored in waterproof container)
- Oven mitts (protects hands)
- Baking soda (grease fires)
- Bucket (full of water to extinguish coals)

Fire safety

- Make sure area is clear of overhanging branches.
- Have fire bucket of water or sand ready before lighting first match.
- Tie back long hair and loose clothing. (use bandana)
- Do not wear plastic or synthetics around the fire (i.e. nylon windbreaker jacket)
- Have adult supervision at all times.
- Guard fire, keep it small, and avoid overcrowding.
- Never reach over a fire
- Be sure stove is sturdy enough to support pots.

Procedures

- Line stove with foil or lay sheet of foil on the ground (for easy clean-up).
- Place a fire starter in the center. Paraffin, sawdust, or milk carton fire starters, or trench candles may be used.
- Place charcoal ring around fire starters
- Stack charcoal inside charcoal ring. About 30 briquettes are enough for an average fire, unless you are cooking a large quantity of foil-wrapped food. In a cardboard box oven use 1 briquette for every 40° of temperature required (10 briquettes - 400°).
- Light the starter and allow it to burn undisturbed for 30-45 minutes or until the briquettes begin to turn ash grey. Vigorous fanning with a piece of heavy cardboard will speed up the process.
- Cooking should not begin until all briquettes are grey over most of their surface. When fire is ready for cooking, the coals should be arranged to the type of cooking desired.

Types of Charcoal Cooking

Pot cooking - a flat-topped pile just the size and shape of the bottom of the pot is best. Pot should be placed directly on the coals. Soaping pot is not necessary.

Foil cooking - spread the coals so there is ½ - 1 inch space between them, and lay foil-wrapped food directly on them with tongs.

Broiling - arrange coals flat over an area large enough to provide heat for the food which is cooked on a rack above.

Stick cooking - a flat topped heap of coals is best for this.

Skillet cooking - a flat topped pile of coals just the size of griddle or skillet will prevent overheated hands and wrists. Support the skillet on small rocks at each corner so that the bottom of the skillet is ¼ inch above the coals. This allows some air circulation in the fire and keeps it hotter.

Dutch Oven Cooking – see instructions

Dutch Oven Cooking

The Dutch oven is the utensil that can make it possible for you to enjoy the same type of foods in camp that you have at home. To a large extent, it is true that if you can cook it at home, you can cook it in a Dutch oven at camp.

Dutch ovens are made of cast iron or cast aluminum. Cast iron ovens are easier to find than cast aluminum. The thickness of the metal helps to distribute the heat around the entire dish that is being cooked. With the Dutch oven set over coals and with coals on the lid, the temperature within the Dutch oven can be varied by increasing or decreasing the number of coals.

Dutch ovens come in various sizes. Diameters of 10, 12, 14 and 16 inches are common, with depths of 4 or 6 inches. For cooking for groups of 8 persons, a number 12 oven is fine. A number 10 oven is fine for pies and cakes. The lid to the Dutch oven is important. A Dutch oven that is used in one's kitchen usually has a dome lid, but this type of lid is not suitable for camp cookery. For camp cookery the lid should have a flanged or raised lip around the rim. With the top recessed, coals can be placed on the lid to increase the heating efficiency of the Dutch oven.

A new cast iron Dutch oven needs to be broken in before it is used. This involves covering the inside of the Dutch oven with a coating of shortening. The inside of the lid is also coated. The oven is then placed over low heat and the shortening is allowed to melt. This should be done several times prior to using it for the first time. Any surplus shortening in the oven after it has been conditioned should be drained out. When you are through with the cast iron oven, you have the problem of cleaning it. Some people will tell you never to wash out a Dutch oven. Some prefer to wash the Dutch oven if needed and recondition it immediately after washing it. If the cast iron Dutch oven is not going to be used for some time make certain that there is a heavy coating of shortening worked into it. If it has been stored for a long time, it is always a good idea to recondition it before it is used again. This sounds like a lot of work, but actually it takes little time after YOU have broken the Dutch oven in.

After placing food in the Dutch oven, cover the top with aluminum foil. This will help prevent ashes getting into your food when you check your food's progress.

Use charcoal briquettes to cook in the oven. For a 12" oven:

300 degrees - 14 on top and 7 bottom
325 degrees - 15 on top and 7 bottom
350 degrees - 16 on top and 8 bottom
375 degrees - 17 on top and 9 bottom
400 degrees - 18 on top and 9 bottom
425 degrees - 19 on top and 10 bottom
450 degrees - 21 on top and 10 bottom
500 degrees - 23 on top and 11 bottom

A pair of kitchen tongs is fine for handling hot coals

For stews and soups, most of the heat should be on the bottom. Meat, poultry, and vegetable dishes can be cooked with even heat. To bake biscuits or bread in the Dutch oven, you will want at least two-thirds of the heat on top of the lid, and even then it's wise to lift the oven off the coals after part of the cooking time, to avoid blackening the biscuit bottoms while the tops brown.

It is important to have a small air space between the coals and the bottom of the oven. This can be as little as 1/4 inch. If there is no air space when you set the oven over the coals, set the legs on flat thin rocks to get this space.

Placing the charcoal on a piece of aluminum foil will cut down on heat loss if the ground is wet or cold. Aluminum foil can also be used as a windbreak, either by placing it over the coals on the lid or around the oven. When foil is used as a windbreak, more frequent checks are needed to make certain that you do not burn the food.

Although many types of foods can be cooked right in the Dutch oven, it is usually better to have the food in a pan that is set in the Dutch oven. If the pan is set on some type of rack, more uniform heat circulation around the entire dish results in more even cooking. The rack can be one from the kitchen or it can be made out of three or four small stones.

You will want to check the progress of your food within 10 minutes of putting the coal on. This can be done simply by lifting the lid enough to see your dish - Remember to use foil to cover top so that when checking you do not get ashes into the dish. Do this quickly so you do not lose too much heat. (I use a pair of pliers to lift the hot lid - I also have a heavy oven mitt on my hand).

If you are baking a cake or bread, you can test it by pushing a straw into the dough and pulling it out. If it comes out dry or with crumbs on it, the dish is done. If it has a golden brown crust, you can remove it from the oven. If you want to brown it some more, you can remove the coals from under the oven and place additional coals on the lid. If it is not done, keep the oven on the coals and possibly place additional coals on the lid if the top needs to be browned more. You can also obtain a quickly golden crust when the dish has been completely cooked by placing a piece of aluminum foil over the coals on the lid. In one or two minutes you should have the brown you want.

Extinguishing charcoal

- With tongs, place each briquette one- at a time into metal pail of water.
- When water has cooled, dump water out of pail, leaving coals in bucket.
- Sprinkle ashes in stove with water and stir.
- Gather up foil lining together with ashes and dispose in trash bag.
- Coals may be reused when dry.

Cherries and Chocolate Cake

1 can (20 oz) cherry pie filling ¾ cup brown sugar
½ cup chopped walnuts 1 stick butter or margarine
1 box chocolate cake mix and needed ingredients

Mix cake mix according to directions on package. Melt butter or margarine in bottom of oven, carefully coating sides. Add brown sugar, cherry pie filling and walnuts. Top with cake mix. Bake for 25 minutes with 14 coals on top and 8 on bottom.

Serves 10-12.

Ham & Potatoes Au Gratin

1 1/2 cups cooked ham (diced) margarine
2 cups milk 3 cups potatoes, diced
Seasoned salt & pepper to taste
1/2 cup grated cheese (cheddar) 1 onion (minced)
2 TBS fine bread crumbs 3 TBS flour

Layer potatoes and ham in oven. Melt margarine and sauté onion. Blend in flour to make a light roux. Gradually add milk and cook; stirring until thickened. Add pepper and seasoned salt. Pour over ham and potatoes in oven. Sprinkle cheese and bread crumbs over top. Bake at 400 degrees for 20 minutes or until done.

Broccoli Casserole

2 cups cooked rice 2 pkgs. frozen broccoli 1 cup milk
1 can cream of chicken soup 1 small jar Cheese Whiz 1 tsp. Salt
1/2 cup chopped onion 1 Tbsp. vegetable oil 1 sleeve Ritz crackers

Pre-heat Dutch Oven (lid off) with 10 charcoal briquettes under the oven. In hot oven, sauté onion in oil. Add 1 can cream of chicken soup, 2 cups cooked rice and broccoli that has been thawed and drained. Add 1 teaspoon salt, cheese whiz and milk. Stir well. Crumble sleeve of Ritz crackers over top. Cover with oven lid. Place 10-12 charcoal briquettes on top of oven. Bake for 30 minutes. Check at least 1 time.

Pepperoni Casserole

1 lb. Spaghetti, uncooked 2 Jars (28oz) spaghetti sauce
1 cup grated parmesan cheese 8 oz. shredded cheddar cheese
8 oz. shredded mozzarella cheese 8 oz. sliced pepperoni

Layer all in oiled oven, beginning with 1/2 inch of spaghetti sauce. Spaghetti sauce should coat both sides of spaghetti pasta as the pasta will cook while absorbing the flavor of the sauce. Bake 1 hour with 14 coals on top and 10 on bottom.

S 'mores Bars

8 to 10 whole graham crackers (about 5 inches x 2-1/2 inches)

1 pkg. fudge brownie mix (13 x 9 inch pan size pkg)

2 cups miniature marshmallows

1 cup (6 oz) semisweet chocolate chips

2/3 cup chopped peanuts

Arrange graham crackers in a single layer in a greased 13 x 9 x 2 baking pan. Prepare brownie batter according to package directions. Spread over crackers. Bake at 350 for 25-30 minutes or until a toothpick inserted near the center comes out clean. Sprinkle with marshmallows, chocolate chips and peanuts. Bake 5 minutes longer or until marshmallows are slightly puffed and golden brown. Cool on a wire rack before cutting. Yield: 2 dozen

Biscuit Pizza Bake

1 pound ground beef

1 can (15 oz) pizza sauce

1 cup chopped green pepper

1/2 cup chopped onion

1 pkg (3 1/2 oz) sliced pepperoni

1 cup (4 oz) shredded mozzarella cheese

1 cup (4 oz) shredded cheddar cheese

1 can (4 oz) mushroom stems and pieces, drained

2 tubes (12 oz. each) refrigerated buttermilk biscuits

In a skillet, cook beef over med. heat until no longer pink. Meanwhile, quarter the biscuits; place in a greased oven. Top with pizza sauce. Drain beef, sprinkle over biscuits and sauce. Layer with green pepper, onion, mushrooms, pepperoni, and cheeses. Bake at 350 degrees for 25-30 minutes or until cheese is melted. Let stand for 5-10 minutes before serving.

Cheeseburger Pie

2 lbs. ground beef

2 medium onions, peeled and chopped

1 Tbs. salt

2 cups (8 oz) shredded cheddar cheese

1 large green pepper, cored and chopped

2 cups Bisquick

1 cup milk

3 eggs

1 Tbsp cooking oil

In a frying pan, brown the ground beef, chopped onions, and chopped pepper. Drain if necessary. Stir in salt. Meanwhile, thoroughly blend Bisquick, eggs, and milk. (You can use a ziplock plastic bag to do this - saves a dirty bowl). Grease the oven with cooking oil. Spread the beef mixture evenly in bottom. Pour Bisquick mix evenly over top. Do not stir in. Sprinkle cheese over top, evenly. Do not stir in. Bake for 30-40 minutes or until knife in center comes out clean. Suggestion: Save some campsite preparation time by browning the beef, onions and pepper the night before the outing, place in a freezer bag and freeze; wrap in newspapers to keep cool until oven time.

Quick Biscuits

While you are preheating the oven (10 charcoal briquettes underneath), make rolled (or drop, if you're camping) biscuits, using the recipe off a Bisquick box. Powdered milk works just fine. Put the biscuits into the oven and cover. Let sit for 5-7 minutes (this browns them on the bottom). Lift the oven off the bottom coals and put 25 coals on top. Cook another 8-10 minutes (check 5 minutes to make sure they aren't burning). Key - oven needs to be HOT!!

German Pancakes

1 ½ cups milk 9 eggs 6 Tbs. Butter
1 ½ cups flour ¾ tsp salt Lemon juice
Powdered sugar

In a mixing bowl whisk together milk, eggs, flour, and salt to form a thin batter. Heat a 14" oven using 14-16 briquettes bottom and 18-20 briquettes top until very hot. Add butter to oven and let melt. Pour batter into oven and cook for 25-30 minutes until pancake is fluffy and light brown. Sprinkle pancake with lemon juice and dust with powdered sugar. Serves: 6

Mountain Man Breakfast Omelet

1 lb country sausage 2 cups chopped mushrooms 1 lb bacon
18 eggs 1 large yellow onion, diced ¾ cup milk
3 cloves garlic, minced 1 green bell pepper, chopped
3 cups grated Cheddar cheese 1 red bell pepper, diced
Picante sauce
Salt and pepper to taste

Heat a 12" oven using 20-22 briquettes bottom until hot. Add sausage to oven and fry until brown. Remove sausage from oven. Cut bacon into 1 inch slices. Add to oven and fry until brown. Add sausage, onions, garlic, bell peppers, and mushrooms. Sauté until vegetables are tender. Whisk together eggs and milk. Season with salt and pepper. Pour eggs over vegetable mixture. Cover and bake using 8 briquettes bottom and 14-16 briquettes top for 20 minutes until eggs are set up. Cover top with cheese and replace lid. Let stand until cheese is melted.

Serve topped with picante sauce.

Serves: 8-10

Blackberry Cobbler

2 sticks butter 1 egg
1 Tbsp. Baking powder 4 cups fresh blackberries or 2 bags frozen (thawed)
1 tsp salt 1 ½ tsp fresh grated lemon zest
1 ½ cup milk 1 tsp cinnamon
2 cups flour 2 ½ cups sugar

Melt butter in a 12" oven using 10-12 briquettes bottom heat. Wash fresh blackberries and drain. In a large bowl combine blackberries, sugar and lemon zest; stir to coat blackberries. Let rest. In separate bowl combine flour, sugar, baking powder, salt, milk, and egg; mix until smooth. Pour batter over melted butter -- do not stir. Carefully spoon blackberries over top of the batter -- do not stir. Sprinkle cinnamon over top. Cover and bake using 10-12 briquettes bottom and 18-20 briquettes top for 35 to 45 minutes rotating the oven and lid 1/4 turn in opposite directions every 10 minutes until crust is golden brown. Serve topped with whipped cream or serve with vanilla ice cream. Serves: 10

Foil Cooking

One of the simplest ways of cooking in camp is with aluminum foil. You wrap the raw foodstuffs in foil, place the package on hot coals, turn them several times during the cooking, and serve directly in foil. No dishes to wash and no pots to scrub. What could be easier?

The fire is important in foil cookery. A shallow bed of glowing coals is needed, that will last for the time required for cooking. Use a log cabin type fire and let it burn down to embers.

The important thing to remember is to make the wrapping airtight to keep the moisture in. Tear off a sheet large enough to go around food and allow for crimping the edges. Place food on one half of sheet. Fold other half over it; crimp edges.

COOKING TIME

Hamburgers	8-12 minutes
Frankfurters	5-10 minutes
Chops	20-35 minutes
Carrot sticks	15-20 minutes
Corn	6-10 minutes
Potatoes, sliced	10-15 minutes
Apple	20-30 minutes
Biscuits	6-10 minutes
Chicken	25 minutes

With some practice, you will be able to judge cooking time and come up with some new recipes of your own.

Hints:

- For biscuits--grease sheet and allow room for rising.
- Poached eggs--make little cups. Place in fry pan, drop egg in each cup. 2" of water in fry pan. Cover.
- Meat, sliced potatoes and vegetables---make a meal in one.
- Minute rice--foil in shape of bowl, add rice and water. Seal top with a twist. Place on grill over fire. Use heavy duty foil.
- Thin sliced potatoes-use plenty of butter, add a little water. Turn often.
- Corn on the cob--remove husks. Rub with butter. Wrap.
- Frankfurters-split lengthwise, add cheese, wrap with a slice of bacon. Wrap.

Pocket Stew

Put stew beef, carrot, onion, spices, and potato in foil. Note: Using 2 pieces of foil INDEPENDENTLY hastens the cooking time by acting as a small scale pressure cooker. Place packages on hotbed of coals and begin timing. Allow 10 minutes for each side. Be careful NOT to puncture foil when turning. Use tongs, shovel, and/or gloves.

Banana Boat

Slice lengthwise an unpeeled banana, place marshmallows and chocolate inside. Bake in coals.

Pi-Che-Hams

Ingredients: Sliced Ham, Cheese, Pineapple, Hamburger Bun

1. Drain pineapple thoroughly. 2. Place a slice of ham on bottom half of hamburger bun, followed by cheese slice, then pineapple slice, then bun top. 3. Wrap in foil and heat well in coals.

Toasted Cheese Sandwiches

Make cheese sandwiches. Butter outside of bread. Wrap in several layers of foil and turn frequently to prevent burning.

Fried Chicken in Foil (per person)

1-2 pieces of frying chicken

Pat of butter, salt, pepper

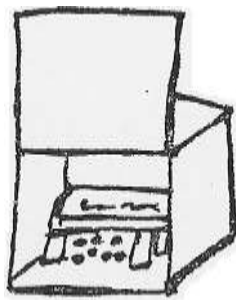
Place butter and seasoning with chicken inside foil. Use drug store wrap. Wrap each piece in foil twice. Place on coals, never in flame. Remove test piece in 10 minutes with tongs. Check and rewrap. Turn over each foil package without puncturing as steam will escape. Takes about 20 minutes.

Foil Sundaes

Cut cinnamon bread in slices about 1" thick; put pie filling on top; wrap in foil and lay on coals. One can makes 8 sundaes. Use any kind of pie filling.

Wine Box Oven

1. Obtain a strong cardboard box, such as a book or wine box or one for canned goods, about 10" x 12" x 14" with the lid attached (if possible). Bottle boxes are best as they have partitions.
2. Cut 6 pieces of cardboard or use the partitions to line the box, forming double walls and a triple floor.
3. Wrap all pieces of cardboard with HEAVY DUTY foil, shiny side out. Also line the box including the lid with foil. Slide the foil wrapped lining into place.
4. Place the box on its side so the edge where the lid is attached is at the top and it now hangs down to form a lift up door. The hinge is at the top to prevent heat loss. See Figure.
5. Use 4 empty soup, pop or beer cans to serve as a rack to hold the baking pan above the charcoal. (The cans must be the same height.)
6. Start charcoal burning in a tin can chimney or over a small wood fire. For a box 10" x 12" X 14" six whole briquettes will produce 350 of. oven and each additional piece of charcoal will add about 400 to the oven temperature. For a box that is larger add another briquette for every 2" in any dimension. (Above 411 you will have to experiment to find the number of briquettes needed to get the desired temperature.)
7. While the charcoal is getting started, prepare the food to be baked. This oven does not require preheating. Charcoal that is left in the oven without food to absorb the heat will char the oven and shorten its use life. Remove the charcoal when done baking. With care, oven should last 75-100 more uses.
8. Place cans in oven and distribute the glowing charcoal pieces among them. Then place baking pan with food on top of the cans. (There should be at least 1" clearance between the sides of the pan and the oven walls.)
9. Close oven door and use a rock to adjust and hold the door in place. A small crack MUST be left open so that the charcoal does not smother and go out.
10. If the full sized charcoal pieces are going well, the baking time will be the same as in a home oven or even slightly shorter, especially in a dry climate. (When baking on a very humid day, heap the charcoal pieces together rather than distributing them through the oven to keep them from going out.)





Troop Camp Basics Part 6: Respect for the Environment

Revised 7/11

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Minimal Impact
Leave No Trace Activities

Girl Scout Council of the Southern Appalachians
www.girlscoutcsa.org

Minimal Impact

“Leave Nothing But Footprints . . . Take Only Pictures”

In Girl Scouts, we have long advocated leaving a place better and cleaner than when you found it, but even seemingly innocent outdoor practices can inflict serious harm on the environment. It is important that Girl Scouts of all ages learn and practice minimal impact outdoor skills.

Minimal impact is also known as low-impact or no trace. Such practices help to preserve the physical landscape of the campsite, as well as the solitude and spirit of the wilderness. Girls should be encouraged to live lightly on the land and leave no trace of their presence after an activity. Everyone needs to adopt a code of behavior that reflects a commitment to preserving the natural quality of our lands. We should begin to incorporate the concepts of a minimal impact approach with the first, simple activities the troop does. Girls need to understand that their daily actions have an effect on the environment. In all Girl Scout program activities, girls can learn and practice simple practices that will lead to an understanding and application of minimal impact outdoor skills.

Leave No Trace Activities

(Source: <http://www.int.org/training/activities/index.html>)

Leave No Trace is a national outdoor skills and ethics education program. The activities found here were created to help share the value and importance of Leave No Trace principles with young people; many can be adapted for adults. The following information describes how the activities are designed and how to fit them to your personal needs.

Why Leave No Trace? Between 1965 and 1980, backcountry visits jumped from 4 million visitor days per year to 10 million per year. (A visitor day is a 12 hour stay by one person.) In 1984 the number grew to 15 million visitor days up 275 percent in less than 20 years. The numbers of backcountry (and front-country) visitors continue to grow at a fast pace. As cities grow and populations encroach upon wild lands and recreation areas, we must do more than just pick up litter and extinguish campfires; we must learn how to maintain the integrity and character of the outdoors for all living things. However, Leave No Trace is not simply a program for visiting the backcountry, it is a way of life, and learning Leave No Trace concepts begins at home.

The knowledge and concepts enabling visitors to Leave No Trace are easily taught both before and during outings. With a little preparation, you can teach people the value of our reviving natural areas and methods to preserve them for future generations.

- Incorporating Leave No Trace skills contributes to a safe and fun outdoor trip.
- Leave No Trace methods help preserve limited recreational resources for today and tomorrow.
- Helps to ensure a positive outdoor experience for all those who spend time outside.

ACTIVITY # 1: Our Natural World - Quick Activity

Grabbing Your Groups Attention

Your group will be going on a Nature Scavenger Hunt. Rather than collecting objects, they will be listing ideas on paper. The hunt will help participants discover how much they have in common with the natural world and how the natural world influences their survival. This activity sets the stage for learning and embracing Leave No Trace principles.

Begin the activity by conducting one of the following:

- an excursion to an outdoor setting such as a park, canyon, river, or desert.
- an excursion to a natural setting via a slide show, color photographs, or posters.
- a mind excursion where participants imagine their favorite natural setting
- a mind excursion where participants close their eyes while you describe a natural setting.

The Activity

Give each participant a piece of paper and a pencil. Have them make three columns with the titles, Things in Nature, Things We Have in Common, How It Helps Me. Participants are to observe their environment physically if they are outdoors, or mentally if they are indoors. They must find objects in nature and tell how they are like that object. Make sure they consider less noticeable things such as air, soil, sun. For example:

Things in Nature, Things We Have in Common, How It Helps Me

- Tree. We both have an outer layer to protect us (bark/skin). A tree gives me oxygen.
- Soil. We both contain minerals. Soil helps grow my food.
- Ant . We both need shelter. They are fun to watch.

The Discussion

Have participants share one or more of their connections. Help them to discover that this personal connection is where a commitment to land stewardship begins. Land stewardship is the goal of Leave No Trace. Outline for them what they will be learning about Leave No Trace in the future.

ACTIVITY #2: Plan Ahead & Prepare - Quick Activity

Note: Tell your group you are going to take an imaginary hiking trip and ask each person to pack a small backpack for your meeting. Don't tell the participants their imaginary destination or what to bring. Before your meeting, find pictures or posters depicting a local or regional environment (high alpine, desert, river). You will use these pictures to serve as your imaginary destination.

Grabbing Your Group's Attention

Break participants into small groups of three to five when they arrive. Build suspense by asking them to guess the destination of their imaginary trip.

The Activity

Show the destination pictures and describe the location you have selected (weather, terrain, etc.). Explain the goal of the trip: wildlife viewing or fishing. Ask the groups to unpack their packs and discuss their answers to the following questions (the leader must read the back ground information in order to facilitate discussion.)

Note: Because participants packed their packs without proper information, it is unlikely they will be adequately prepared for their destination. This activity demonstrates the importance of planning before packing.

- Do the contents of your pack properly prepare you for this trip?
- Do the contents of your pack ensure your safety?
- Do the contents of your pack ensure you will Leave No Trace that you will not damage natural or cultural resources?
- Do the contents of your pack ensure your trip will meet your goal for example, wildlife viewing or fish safely and enjoyably?

The Discussion

Facilitate a discussion with all participants about the results of the activity. Ask groups to briefly share their answers to the above questions and add:

- How would the contents of your pack differ with different destinations?
- What other information do you need to pack properly for a trip?
- What is the value of knowing these pieces of information before packing?

ACTIVITY #3: Travel and Camp on Durable Surfaces - Quick Activity

Grabbing Your Group's Attention

Gather your group outside a home or in a park. Ask them why we construct sidewalks. Focus the resulting discussion on the need to provide durable surfaces for travel by many people. Explain that concentrating activity on one durable surface can protect the surviving land. Define the concept of durability for the group.

The Activity

Break your group into pairs and give them the following assignment: Imagine you are looking for durable surfaces to travel over or set up camp. Find five different surfaces in the immediate area and rate them from one to five for durability, one being the most durable surface and five being the least durable surface. Give the group approximately 5 to 10 minutes to explore the area.

The Discussion

Have each pair share their findings with the group. Using the Background Information, conduct a discussion to help group members develop an understanding of how to identify durable surfaces and the cumulative effects of many visitors to any one area. Relate the surfaces they find to the rocks, trails, meadows, and other areas they may find in the backcountry. Refer to the Background Information for details.

ACTIVITY #4: Pack It In & Pack It Out - Quick Activity

Find a location that is littered with garbage. For example, a park, or a high school parking lot right after school. If you can not find a littered area near you, simulate one at or near your meeting site.

Grabbing Your Group's Attention

Have your group observe the littered site and record in writing what they think of this situation and how it makes them feel. Present each member of the group with a garbage bag and with the challenge to make the area look more pleasant.

The Activity

Have a contest to see who can collect the most garbage in 5 to 10 minutes. Instruct the group to use care when picking up sharp, rusty, or unsanitary waste. You may wish to have participants bring light gloves for this activity.

The Discussion

Discuss what litter is and the effects of litter in general. Discuss the effects of litter in the backcountry. Divide participants into pairs and have them devise a plan for packing out their garbage on their next trip into the backcountry. Discuss each plan. How do one-pot meals contribute to the creation of less bulk and therefore less garbage? What, if anything, can an individual do about the litter of other backpackers?

ACTIVITY # 5: Leave What you Find - Quick Activity

Grabbing Your Group's Attention

Ask participants how scientists know what dinosaurs looked like. (They find fossils and reconstruct the skeletons.) It is important for scientists to find the pieces in their original positions (relative to one another) so that they can see how the pieces fit back together. The same is true for cultural human made artifacts.

The Activity

Use three simple picture puzzles. Break the puzzles into their pieces. In a yard, sandlot, or playground, scatter all the pieces of one puzzle in a small area. In another location scatter just two or three pieces, and in another location leave just one piece. Split your group into three teams and have one group at each location recover the pieces. Ask each group to try and reconstruct the puzzle or describe the picture based on the pieces they found.

The Discussion

Ask each group how easy it was to reconstruct the puzzle. Discuss the importance to scientists of finding fossils or artifacts where they were originally deposited. Discuss the impacts of intentional vandalism or theft of fossils or artifacts. Discuss the effects of unintentional impacts, i.e.; driving off-road, hobby collecting, campsite construction. Ask the group if they can think of other ways in which fossils and artifacts can be lost or damaged. Discuss ways in which these resources can be viewed and enjoyed on-site without damage. Remind the group that it is against the law to remove or destroy these resources! Refer to the Back ground Information for more details about this discussion.

Note: Although this Quick Concept deals with fossils and artifacts, the principle of leaving what you find applies to all things that should remain undisturbed in the backcountry. Wildlife, petrified rock, and nests are examples of other discoveries to leave for people to enjoy.

ACTIVITY #6: Minimize Use and Impact of Fire - Quick Activity

Grabbing Your Group's Attention

Share this scenario with your group. Imagine you are camping in the mountains. The air is a bit chilly as your group begins preparation for the evening meal. You plan to build a fire to cook hot-dogs and heat up cans of chili. The fire will also take the chill out of the night air. As you begin to pile sticks inside the fire ring, a ranger approaches your group and informs you that there is a ban on fires due to dry weather. You will not be able to build a fire.

The Activity

How will your group solve this problem? What will you do about dinner? How will you deal with the chilly air? How will not having a fire change your night time activities?

The Discussion

It is recommended that all visitors to natural areas minimize their use of fires, even when there is not a fire ban. Create a plan for your next outing which does not include fires. You may wish to discuss different types of food, food repackaging, and the value of using lightweight foods instead of canned goods. Discuss the value of contacting land managers to learn about local regulations. Refer to the Back ground Information for details to assist your decision.

ACTIVITY #7: Respect Wildlife - Quick Activity

Grabbing Your Group's Attention

Travel to a city park containing wildlife, a wildlife viewing area, or show pictures or slides of wildlife. Ask the group why loud noises and quick movements are stressful to wildlife. Ask if there are particularly sensitive times of the year for wildlife. Have someone explain how they can tell if they are too close to wildlife. Have someone explain how wildlife survive very cold winters or very hot summers.

The Activity

Have the group observe the wildlife in the area and list things that might disturb each type of wildlife. Have them list the things they could do to minimize their impacts to wildlife

The Discussion

Have each of the participants share their observations and things they would do to minimize disturbing wildlife and or wildlife habitat. Discuss the negative effects if they did not observe these precautions with wildlife. Discuss ways to view wildlife without harming them. Encourage the group to observe wildlife from a distance (to include the use of binoculars) so the wildlife are not scared or forced to flee. Remind them to always be kind to wildlife.

ACTIVITY # 8: Be Considerate of Other Visitors - Quick Activity

Grabbing Your Group's Attention Tell the group that while traveling along a trail, they will likely pass others hiking and or camping near the trail. Ask what things they can do to respect these other users. Also ask what else they might do to show respect for others if they were to pass individuals on horseback or on mountain bikes.

The Activity

Have 1/3 of the group sit down on the trail and 1/3 move off the trail where an adjoining campsite is located. Have both groups be somewhat loud and rowdy. Have the remaining 1/3 pass along the trail where the group is sitting and near the campsite. Once this group has walked by those on the trail and observed the actions of those at the campsite, have the entire group meet at the campsite.

The Discussion

Have the participants who passed by those sitting in the middle of the trail and at the camp, express how they felt when they encountered these groups. Discuss what affect it had on their experience. Ask what they feel would improve their experience on the trail and at the campsite. Ask if the loud and rowdy behavior would have had any additional impacts on those using horses or mountain bikers along the trail.

Visit: <http://www.lnt.org/training/activities/index.html> for more Leave No Trace activity plans!



Troop Camp Basics Part 7: Fires

Revised 7/11

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Fire Safety
Minimize Impact
Fire Starters
Laying a Fire
Fire Alternative

Girl Scout Council of the Southern Appalachians
www.girlscoutcsa.org

Fire safety

- Make sure area is clear of overhanging branches.
- Have fire bucket of water or sand ready before lighting first match.
- Tie back long hair and loose clothing. (use bandana)
- Do not wear plastic or synthetics around the fire (i.e. nylon windbreaker jacket)
- Have adult supervision at all times.
- Guard fire, keep it small, and avoid overcrowding.
- Never reach over a fire
- Be sure stove is sturdy enough to support pots.

Minimize Impact

If fires are allowed in pristine wilderness areas, the sites must be selected with utmost care to minimize the impact to the environment. Look for mineral soil, less than two to three inches of duff (decaying leaves and other matter), and areas away from trees, overhanging branches or rock ledges, grassy vegetation or root systems. A small shallow pit may be established by digging down to mineral soil or by looking for a spot with exposed sandy or mineral soil. Do not ring the area with rocks. Select a site away from trails or traffic patterns. In areas where conditions make it unwise to build a fire pit, the flat rock method is an alternative. Gather mineral soil from locations without vegetation. Spread several inches of mineral soil on top of a flat rock to keep it from becoming blackened, and build the fire on top of the soil. Plan a fire just big enough to do the job so fuel will not be wasted. Make sure there is enough dead wood to sustain a fire. Walk at least 300 feet from the campsite together downed, dead wood. Collect only the wood needed. Before leaving the site, restore any area where a fire pit has been built or a fire has been burned on a flat rock. If there are multiple fire pits, leave the most obvious, heavily used fire pit and dismantle the others.

Fire Starters

Trench candle

One handy fire starter is made from newspaper. Take one section of a newspaper, and cut it into one-inch wide strips. Roll up a strip tightly, and tie with a piece of string. Holding the string, you can now dip the starter into melted paraffin. This starter may be placed in fire tinder and lit.

Egg Carton Lint

To start your fire easily, before your trip fill the cups of a cardboard egg carton with lint from a clothes dryer or with small pieces of paper. Then fill each cup half-full with melted wax. As you build your fire, break off one cup and nestle it in your tinder. When you're ready, simply light the "fire starter." These may be stored in a Ziploc bag to keep them dry and handy.

Egg carton charcoal

Place charcoal briquette in each section of a cardboard egg carton. Fill with hot paraffin.

Egg carton sawdust

Fill sections of carton with sawdust. Fill with hot paraffin.

Candy Kiss

Place chunks of old candle in twists of wax paper.

Nail Polish Matches

Cover the heads of a tied bundle of matches with nail polish.

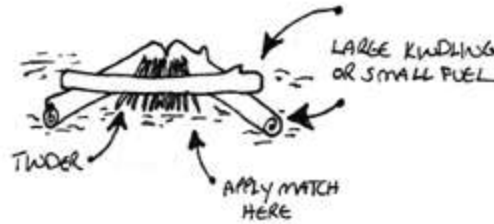
Sawdust cupcakes

Fill cupcake paper with sawdust. Cover with hot paraffin.

Another sure way to start a fire, especially handy when the wind is blowing, requires only two flashlight batteries and some fine steel wool (double 00 or finer). Line up the batteries in the same order that they go into a flashlight. Hold a long coil of fine steel wool to the bottom of the batteries; then brush the other end across the steel knob at the top of the batteries. A spark will appear in the steel wool like magic. Nestle steel wool in tinder and blow gently.

Laying a Fire

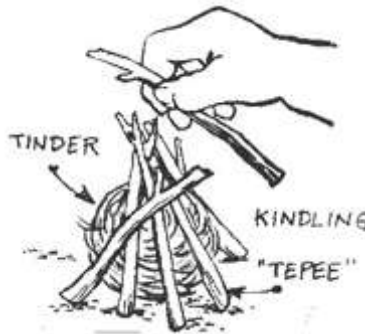
The A Frame



Make the letter “A” out of large kindling or small fuel in the center of your fire pit. The wood you choose should be about 12" long and about 1"-2" in diameter. The sides of the “A” can rest directly on the floor of the fire pit; the “crossbar” should rest on top of the sides.

Place tinder inside the top triangle of the “A” so that one end of each twig is resting on the floor of the fire pit and the twigs are all leaning against the crossbar of the “A”. The result should be a sort of miniature lean-to of twigs. Don’t pack your tinder too closely—make sure you’re leaving enough space for good ventilation.

The TeePee



The picture below shows how to build a small teepee of tinder and kindling to use in lighting a larger fire. It uses a ball of fibrous tinder, which is just another tinder option.

To make a cooking or bonfire sized teepee, start by making a small a-frame in the center of your fire pit. Take small fuel and create a teepee of wood around the a-frame (the picture below will show you the general idea—just upsize the scale significantly). Make sure you leave at least one opening large enough for you to reach the a-frame inside, and make sure that the sides of your teepee are close enough to the a-frame to catch when you light the fire.

The Log Cabin



Start by making a small a-frame or teepee in the center of your fire pit. Build a miniature log cabin of small or medium-sized fuel around the a-frame or teepee. The size of wood you choose will be determined by the size of the fire you wish to have. Gradually lay the logs toward the center as you build the cabin. Remember to leave plenty of space for good ventilation. In the end, it will have the appearance of a pyramid.

Fire Alternative

The use of portable camping stoves is strongly suggested for trips. A one-burner stove is needed for each cooking group of two to four people. To reduce the need for fuel, plan nutritious meals that need little cooking time. Before departure, become well versed in the use of the camp stove to be taken on the trip. If water is to be purified by boiling, be sure to carry additional fuel supplies.

Backpacking Stoves

Cooking on a backpacking stove is most preferable in the backcountry. Remember, many wilderness areas ban fires to reduce the risk of forest fires. Camp stoves are designed to burn at least one type of gas (ex: white gas, kerosene, butane or propane). Butane and propane cartridge stoves are handy and light-weight and are a good choice for warm-weather campers and hikers. Always test the stove and become familiar with its operation before using it on a trip.

Safety tips:

- An adult must be present to supervise the use of any stove while girls are cooking.
- In preparation for working near any open flame, tie back long hair, roll up loose sleeves, and do not wear clothing with dangling ends. Plastic or synthetic garments are extremely flammable and can cause severe burns, as they often melt rather than burn.
- Take an adequate amount of fuel. Store extra fuel supply away from the cooking flame.
- To avoid an accident, a stove must be used on a level surface and out of the way of foot traffic. Do not pile rocks or other items around the cook stove for stability.
- When using butane or propane, be sure to carefully thread the canisters to the stove coupling so there is no leakage.
- A liquid fuel stove should not be refueled in the cooking area. Carry the stove away from any flammable equipment and the cooking area before refueling it.
- Refuel the stove on a level surface after it has cooled down.
- When using liquid fuels, use a funnel to transfer the fuel from the container to the stove.
- To avoid a flare-up when lighting the stove, do not overfill it.
- If the stove has a refillable tank, before each meal make sure that the tank has enough fuel to cook the meal.
- No flame should be present in any site where fuel may have spilled.
- Never open a refillable fuel tank while the stove is ignited, even if the tank is running low.
- Liquid fuel must be carried in a clearly marked bottle with a tight-fitting gasket. Avoid contamination of food or spillage on clothing by carrying the stove and fuel upright in plastic bags separated from food and clothing.
- Never cook inside a tent or indoors.
- Keep all parts of the stove clean. Check that lines are not clogged.
- Do not dispose of pressurized cans in a fire, place them in direct sunlight, or keep them in enclosed areas where the temperature is high.



Troop Camp Basics Part 8: Knives

Revised 7/11

Contents

Knives

Girl Scout Council of the Southern Appalachians
www.girlscoutcsa.org

Knives

Knives can be an indispensable tool to use in the outdoors when used properly and safely. The main emphasis should be on the safety aspect. Here are some safety rules to consider:

Make sure that the girls have a three foot safety circle. This is an imaginary circle drawn around them with a three foot radius with them in the center. It is their responsibility to respect each other's "circle of safety" and to warn others when that three foot safety circle is being compromised.

Jackknives (Swiss Army Knife) are the only appropriate knives to bring on a camping trip (other than kitchen knives).

Never walk with an open jackknife.

Whittling should be done in a sturdy, seated position with feet planted and legs apart. This way, arms can be rested on the knees and whittling will occur away from any body parts.

Be sure to hold the knife firmly without placing the thumb on the blade (a common "bad habit").

Always whittle away from you, never toward you.

Make sure to open and close the knife with the blade facing up. Never "snap" a blade closed.

When passing any knife, never release your grip until the receiver acknowledges receipt (eg., says "thank you"). This way, a knife does not get dropped while in transit.

A good progression for the use of knives is to start with cardboard knives carving soap and progress to real ones whittling wood.



Troop Camp Basics Part 9: Knots

Revised 7/11

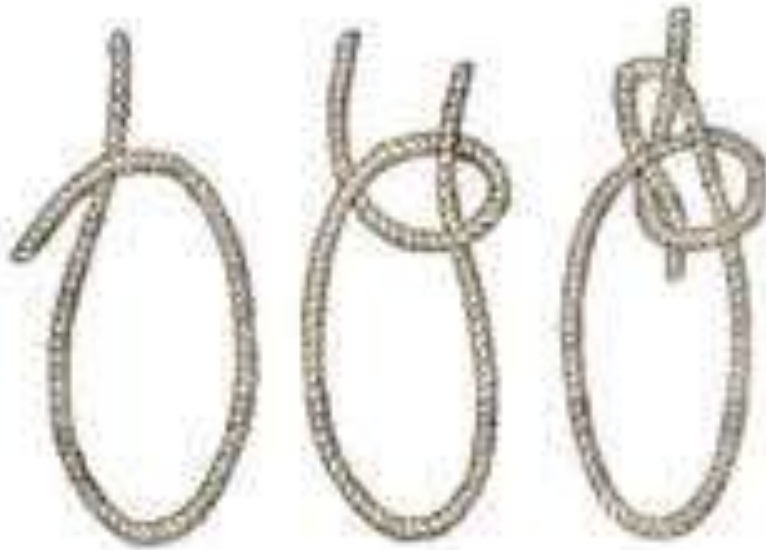
Contents

Bowline
Clove Hitch
Constrictor
Half Hitch
Lark's Head
Sheepshank
Sheetbend
Square Knot
Tautline Hitch

Girl Scout Council of the Southern Appalachians
www.girlscoutcsa.org

Bowline

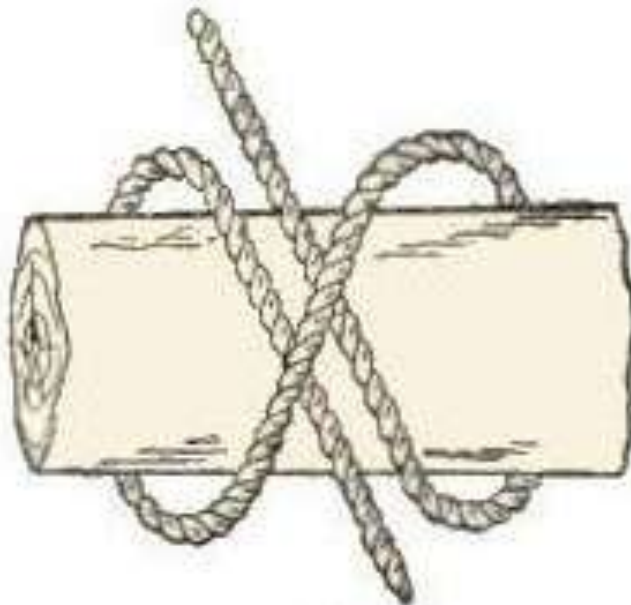
A very useful and common knot which forms a loop that can not slip.



(Image source: <http://www.28thcambridgescouts.org.uk/images/bowline.jpg>)

Clove Hitch

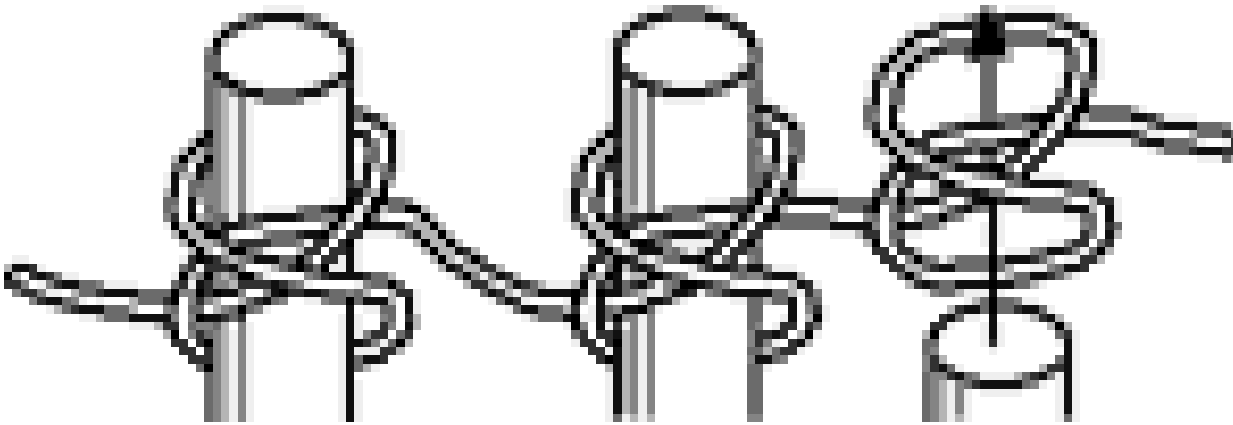
Used to fasten one end of a rope to a tree or post.



(Image source: <http://www.28thcambridgescouts.org.uk/images/clovehitch.jpg>)

Constrictor Knot

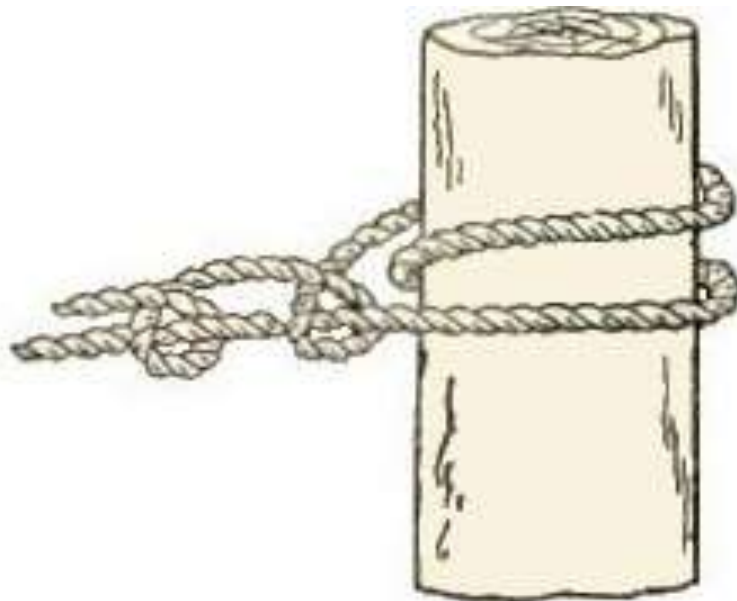
Used to tie a knot in the middle of a rope; commonly used to hang a bear bag.



(Image source: <http://www.realknots.com/knots/constric.htm>)

Half Hitch

Used to fasten a rope to a ring or tent stake. (Image shows a round turn and two half hitches).



(Image Source: <http://www.28thcambridgescouts.org.uk/images/roundturn.jpg>)

Lark's Head

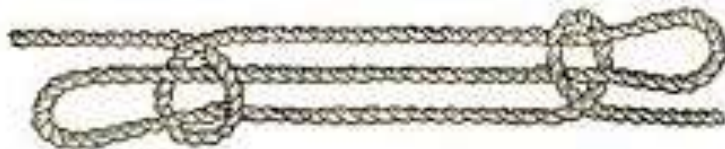
To loop cord or rope around a ring or hang your dish bag to a clothesline.



(Image source: http://home.att.net/~troop50/images/larks_head.gif)

Sheepshank

Used to shorten a rope.



(Image source: <http://www.28thcambridgescouts.org.uk/images/sheepshank.jpg>)

Sheetbend

Used to tie a thin rope to a thicker rope.

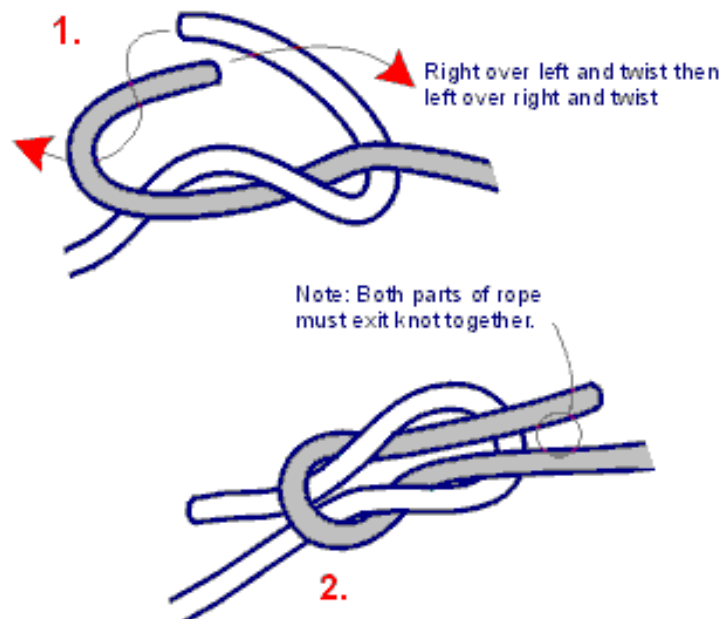


(Image source: <http://www.28thcambridgescouts.org.uk/images/sheetbend.jpg>)

Square Knot

Used for many situations; most commonly used to tie two ropes of the same thickness together at their ends.

SQUARE KNOT



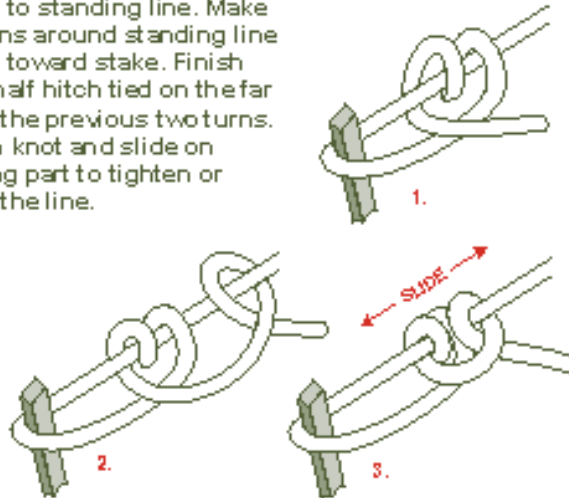
(Image Source: http://letsgooutdoors.com/fav/howto/tautline_329x282.gif)

Tautline Hitch

Used to make a loop that will slip when you want it to.

TAUTLINE HITCH

Secure one end of rope. Pass other end around stake and run parallel to standing line. Make two turns around standing line turning toward stake. Finish with a half hitch tied on the far side of the previous two turns. Tighten knot and slide on standing part to tighten or loosen the line.



(Image source: http://letsgooutdoors.com/fav/howto/tautline_329x282.gif)



Troop Camp Basics Part 10: Compass Skills

Revised 7/11

Contents

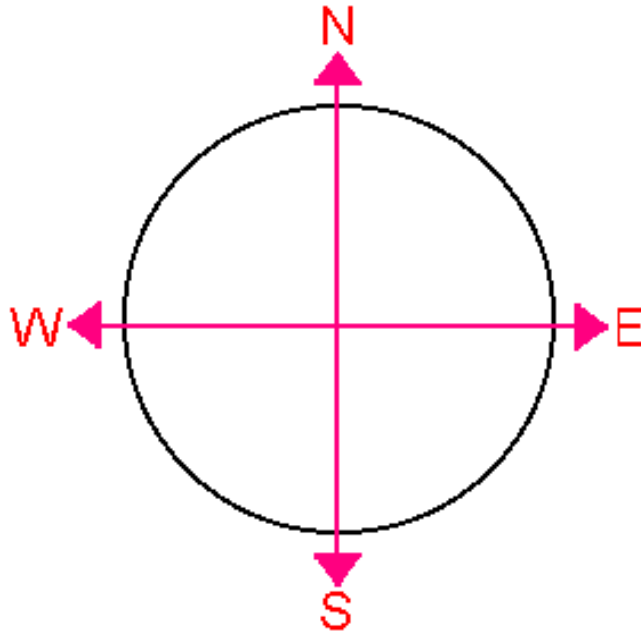
- Compass Skills
- How to Use a Silva Compass
- A Sample Course
- Compass Games
- Make Your Own Compass
- Find Your Pace

Girl Scout Council of the Southern Appalachians
www.girlscoutcsa.org

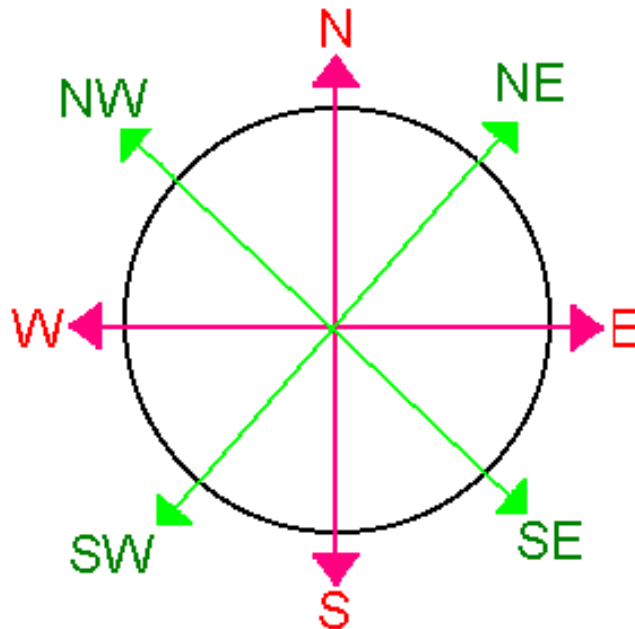
Compass Skills

(Reference: <http://www.funsocialstudies.learninghaven.com/articles/compass.htm>)

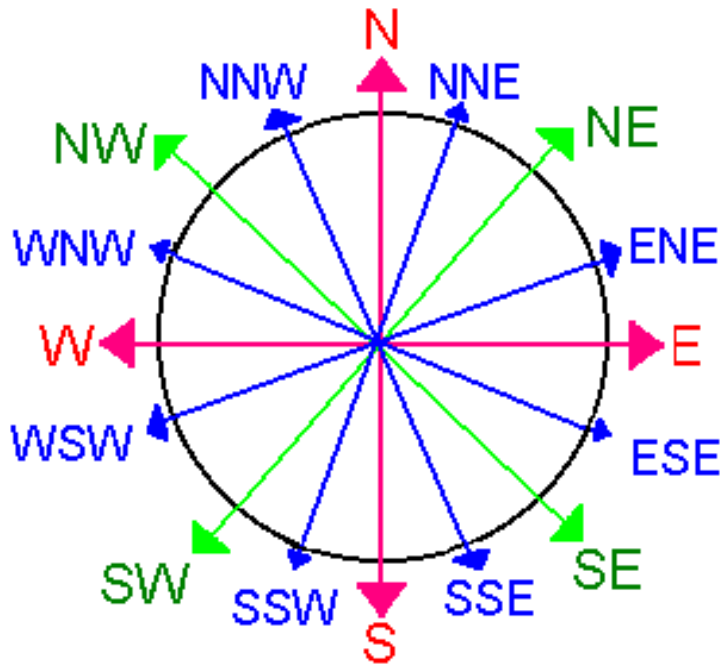
The compass has four main points or **cardinal points**. These are North (N), South (S), East (E), and West (W). If you think of a compass like a clock, the North is a 12, East at 3, South at 6 and West at 9.



The **intercardinal points** are the points half way between the cardinal points. They are named for the points they lie between. They always begin with North or South. They are Northeast (NE), Southeast (SE), Southwest (SW), and Northwest (NW).



The **secondary intercardinal points** lay half way between the cardinal points (N, S, W, & E) and the intercardinal points (NE, SE, SW & NW). They are named according to the points they lie between. The cardinal point comes first, and then the intercardinal point. For example, the first four are: North-northeast (NNE), East northeast (ENE), East southeast (ESE), and South-southeast (SSE).

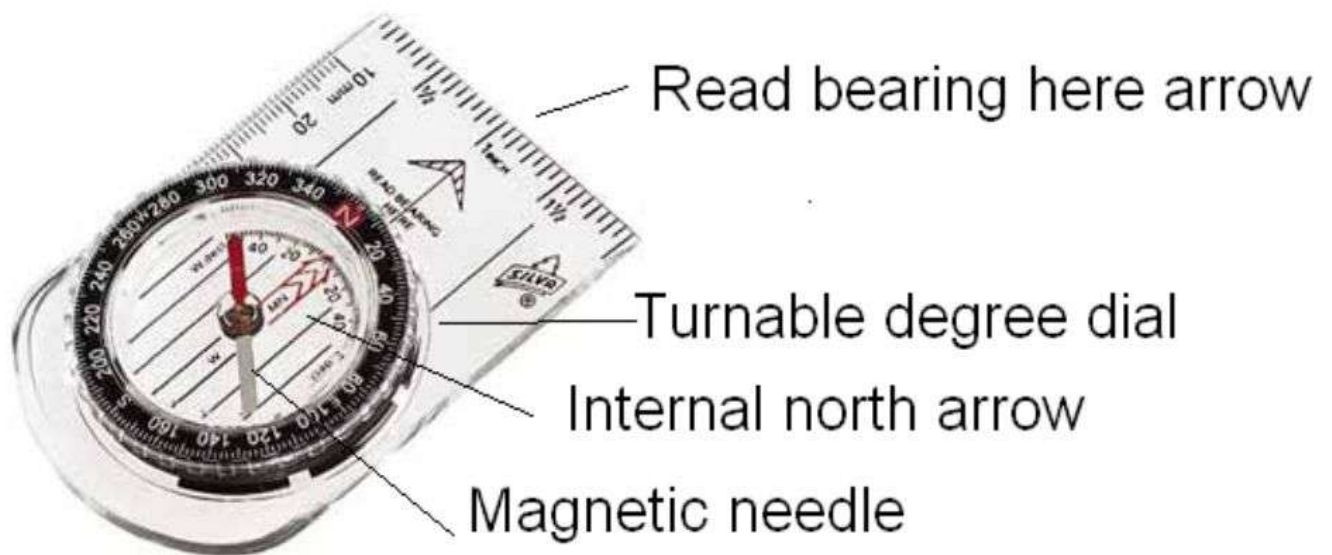


The compass is divided into 360 degrees (°), the same as any other circle. North is at 0 degrees. The cardinal points are 90 degrees apart, therefore North=0°, East=90°, South=180°, West=270°. The intercardinal points mark the midway point between the cardinal points. Therefore, NE=45°, SE=135°, SW=225°, and NW=315°.

How to Use a Silva Compass

The parts of the Compass:

- Plastic base:
 - Direction of Travel Arrow (see below: “read bearing here arrow”)
 - Scale (inches or millimeters)
- Metal or Plastic Housing Dial
 - Red-tipped magnetic needle (the red tip always points toward the north magnetic pole unless another magnetic influence is nearby)
- Black or Red Outlined Arrow (see below: “internal north arrow”)
 - (Orienting arrow)
- Numerical Degrees (0 to 360 degrees)
- Letter Directions / cardinal points (N, E, S, W)



(Reference: <http://www.nonprofitpages.com/nica/Attic/Compass.htm>)

How to find the bearing from an object:

- Point the direction of travel arrow at the object.
- Turn the degree housing dial until the orienting arrow (internal north arrow) lines up with the red end of the magnetic needle.
- Read the numerical degree at the bearing where the direction of travel (read bearing here arrow) intersects with the housing dial.

Some notes about using the compass:

Hold the compass flat so that the magnetic needle easily moves. Since the needle is a magnet, you need to be a couple feet away from any metal or other magnets.

The smallest unit on the compass is 2 degrees. There are 20 degrees between numbers, the larger mark on the dial between two numbers represents halfway between them, so the larger mark between 340 and 360 equals 350 degrees.

Using a Silva Compass to Follow a Trail:

- Decide the direction that you wish to go in numerical degrees.
- Hold the plastic base and turn the housing so as to align the desired direction reading with the direction of travel arrow on the base.
- With the direction of travel arrow pointing in the direction you are facing, turn your body, holding the compass level and close in front of you, until the red-tipped needle and the outlined arrow (orienting arrow) point the same way. You should now be facing the direction you want to go.
- Sight over the direction of travel arrow into the distance to some object. Walk the given distance toward that object.

Using a Silva Compass Construct a Trail:

- Hold the compass level. Point the direction of travel arrow at the object to which you wish to know the direction/degree reading.
- Turn the housing until the red-tipped needle and the outlined arrow (orienting arrow) point the same way.
- Read the degree on the housing above the direction of travel arrow. This is the direction you must travel to get to that point.

A Sample Compass Course

(Used at Lorado Taft Field Campus of Northern Illinois University)

COMPASS ORIENTATION COURSE – Group A / Card 1

TEAM MEMBERS: _____

Follow directions carefully.

Answer all questions.

- Leave Poley House through the east door, and step to the tray. Walk 54 meters (59 yards) at an azimuth of 159 degrees. What human-made structure do you see immediately to the west?
_____ Why might someone build something like this here? Is there some local history about this that we might want to explore? Where and how can we find out?

- Walk 82 meters (268 feet) at an azimuth of 100 degrees. You should now be at the corner of a residence. Next go, 53 meters (175 feet) at an azimuth of 30 degrees, and stand on human-made stone. Next take 12 steps at an azimuth of 84 degrees. Enter the room nearest you. What would you assume is the purpose of this room? _____
- If there is an envelope labeled for Group A open it and follow the directions. Do not disturb and envelopes not intended for your team.

Games with a Magnetic Compass

On a separate piece of paper, give one set of directions to the group, and have them follow the directions, using the compass to make a geometric shape. When done, have them unfold the shape name and see if they used the compass correctly to make the shape.

Directions for a SQUARE

Place Marker go 6 steps @ 360 degrees
Place Marker go 6 steps @ 270 degrees
Place Marker go 6 steps @ 180 degrees
Place Marker go 6 steps @ 90 degrees

Directions for Z

Place Marker go 10 steps @ 90 degrees
Place Marker go 10 steps @ 240 degrees
Place Marker go 10 steps @ 90 degrees

Directions for an OCTAGON

Place Marker go 5 steps @ 45 degrees
Place Marker go 5 steps @ 90 degrees
Place Marker go 5 steps @ 135 degrees
Place Marker go 5 steps @ 180 degrees
Place Marker go 5 steps @ 225 degrees
Place Marker go 5 steps @ 270 degrees
Place Marker go 5 steps @ 315 degrees
Place Marker go 5 steps @ 360 degrees

Directions for a TRIANGLE

Place Marker go 10 steps @ 120 degrees
Place Marker go 10 steps @ 240 degrees
Place Marker go 10 steps @ 360 degrees

Directions for a RECTANGLE

Place Marker go 6 steps @ 360 degrees
Place Marker go 10 steps @ 270 degrees
Place Marker go 6 steps @ 180 degrees
Place Marker go 10 steps @ 90 degrees

Directions for a RIGHT TRIANGLE

Place Marker go 6 steps @ 270 degrees
Place Marker go 8 steps @ 360 degrees
Place Marker go 10 steps @ 160 degrees

Directions for a PENTAGON

Place Marker go 6 steps @ 72 degrees
Place Marker go 6 steps @ 144 degrees
Place Marker go 6 steps @ 216 degrees
Place Marker go 6 steps @ 288 degrees
Place Marker go 6 steps @ 360 degrees

Directions for a **DIAMOND**

Place Marker go 10 steps @ 320 degrees

Place Marker go 10 steps @ 45 degrees

Place Marker go 10 steps @ 120 degrees

Place Marker go 10 steps @ 230 degrees

Making your own Compass

Explanation:

The earth produces a magnetic field. This field, although weak, is sufficient to align iron and other paramagnetic compounds such as your needle within it. By floating the needle on a cork or piece of Styrofoam, you let it rotate freely so it can orient itself within the earth's magnetic field, to point toward the north or south poles of the planet.

Overview:

Make a simple compass to find magnetic north.

Equipment:

- Sewing needle ~1 inch long.
- Small bar magnet. Refrigerator magnets may work if you don't have a bar magnet.
- A small piece of cork or piece of Styrofoam.
- A small glass or cup of water to float the cork or Styrofoam and needle.

Safety:

Needles are sharp; treat them appropriately.

How to do the experiment:

- Your compass will work better if you first run a magnet over the needle a few times, always in the same direction. This action 'magnetizes' it to some extent. Drive the needle through a piece of cork or Styrofoam so that it will be able to lie flat in/parallel to the water. Cork from wine bottles works well. Cut off a small circle from one end of the cork, and drive the needle through it, from one end of the circle to the other, instead of through the exact middle - be careful not to stick yourself!
- Float the cork + needle in your cup of water so the floating needle lies roughly parallel to the surface of the water.
- Place your 'compass' on a still surface and watch what happens. The needle should come to point towards the nearest magnetic pole.
- If you want to experiment further, try placing a magnet near your compass and watch what happens. How close/far does the magnet have to be to cause any effects?

Finding your Pace:

- Mark off 100 feet on a flat surface.
- Walk the distance three times. Always start with your left foot. Count each time your foot hits the ground as you walk.
- Add up the three numbers and divide by three. The number you get is the average number of paces it takes for you to walk 100 feet.

$$\underline{\quad} + \underline{\quad} + \underline{\quad} = \underline{\quad}$$

- Now divide your average into 100 feet to get the length of your pace.

$$100 / \underline{\quad} \text{ (your average)} = \underline{\quad} \text{ feet}$$

- There are 5280 feet in one mile. How many steps would it take for you to walk one mile?

$$5280 / \underline{\quad} \text{ (your pace)} = \underline{\quad} \text{ steps per mile}$$