



Let's Talk About Gear

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by Earnie Glazener, scouting@glazener.org

Please read this entire document. Yes, it is long, but your time will be well spent.

Your son will need some gear to be a successful Scout. The troop will attempt to provide tents, but right now we have no troop equipment at all—not even tents. In any case you will need to provide your son's personal gear and perhaps a tent. This paper will help you select the right gear for your son. You do not need to spend a fortune on gear. You can shop sales, Costco, REI, and online Web sites, or inquire about used equipment with the older Scouts and their families who may have gear that is still in good shape but no longer useful to them. Some gear can be borrowed, but be careful that any borrowed gear is the right size and weight for your son because some gear (such as boots and backpacks) fit different individuals differently. Contact the author of this document if you would like some additional ideas on where to shop to save money.

Basic Essentials

On any Scout backcountry hike, day hike, or campout, each Scout should carry the basic essential items. Several of these basic essentials might never be used, but your son will not want to be without them. If something unexpected happens, some these items might save his life. These basic essential items are as follows:

1. Pocketknife (or multi-use camp tool)
2. First aid kit
3. Extra clothing
4. Rain gear, and emergency shelter
5. Water bottle and water treatment
6. Flashlight or headlamp (with extra batteries)
7. Trail food and extra food
8. Matches (storm proof, or in a watertight container) and fire starters
9. Sun protection (sunscreen, sunglasses, and hat)
10. Compass and a one-gallon Ziploc bag for a map (map provided by the troop)
11. Emergency whistle, mirror, and duct tape

Put these items together in a mesh, nylon, or gallon Ziploc freezer bag so your son will always know where they are and can make sure they go with him on every Scout trip.

Other Essential Items

Additional equipment each Scout needs includes the following:

1. Sleeping bag
2. Sleeping pad
3. Hiking boots
4. Appropriate clothing (**not** cotton)
5. Backpack
6. Eating kit
7. Cook kit (pot/s and pan/s) and cleanup supplies
8. Sanitation trowel, toilet paper in a Ziploc bag, soap or antibacterial wipes
9. Large (huge) thick plastic trash bag
10. Backpacking stove and fuel
11. Insect repellent
12. Lighter
13. Gaiters (optional)

Order of Purchase

What do you do if funds are limited (and whose aren't nowadays), or in other words, what should you buy first. You may need to borrow some gear while you acquire yours, and doing that is fine. But do plan to acquire your own gear. Make a plan for it. Scouts, mow some yards, babysit, sell BSA popcorn on your own online (go to <http://www.trails-end.com/trailsend/scouts> to learn how and to get started) or find other ways to earn the funds to buy your own equipment. You will use your gear for many years, and probably beyond your Scout years. Use this money earning effort to earn the Personal Management merit badge. Another option is to rent gear as needed, but you may find the cost will soon add up to the purchase price for most gear. Borrowing or renting the right gear is preferable to buying junk that will fall apart after one or two uses.

But, you have to start somewhere. I suggest purchasing items in the following order and borrowing or renting anything further down the list until you have saved enough to acquire it for yourself, but do plan on working your way down the list and acquiring these items:

1. Appropriate clothing (**not** cotton)
2. Large (huge) thick plastic trash bag
3. Flashlight or headlamp (with extra batteries)
4. Pocketknife (or multi-use camp tool)
5. Water bottle and water treatment
6. Sanitation trowel, toilet paper in a Ziploc bag, soap or antibacterial wipes
7. Trail food and extra food
8. Eating kit
9. Cook kit (pot/s and pan/s) and cleanup supplies
10. First aid kit
11. Sleeping bag
12. Sleeping pad
13. Matches (storm proof, or in a watertight container) and fire starters
14. Compass and a one-gallon Ziploc bag for a map (map provided by the troop)
15. Backpack
16. Rain gear, and emergency shelter
17. Emergency whistle, mirror, and duct tape
18. Insect repellent
19. Two-man or three-man backpacking tent
20. Hiking boots
21. Lighter (optional)
22. Sun protection (sunscreen, sunglasses, and hat)
23. Backpacking stove and fuel
24. Extra clothing
25. Gaiters (optional)

Feel free to change this order around to suit your needs, but I base this order on the frequency of use of the items and on the ease and practicality of borrowing or renting an item until you can buy it. Please read the remainder of this document for ideas on what to buy and how to save money when doing so.

Places for Deals

REI Outlet is an online only store. Go to <http://www.rei-outlet.com>. These are overstocks, closeouts, and "last year's model," which usually means very little changes when it comes to outdoor gear. Prices are amazing, but things go quickly. Quantities are what are on hand only, and they are usually limited.

ALPS Mountaineering makes some good gear (sometimes a little heavy) at great prices for Scouts because they have a special Scout only 45% off retail pricing available via <http://www.scoutdirect.com>. They sometimes even have sales on the Scout prices (check the Web site) for seconds, overstocks, and used items.

Ever wonder what REI did with non-defective returns because of its liberal return policy? REI scratch and dent or garage sales are quarterly events each store holds to sell returned merchandise at amazingly low prices. Contact each store to find out when theirs are.

Campmor is another online only store at <http://www.campmor.com>. Normal prices are okay. Sales are usually fantastic.

Sierra Trading Post is another closeout online location at <http://www.sierratradingpost.com>. Prices are great if they have what you want.

Mountain Sports is an outdoor gear retailer located in extremely flat Dallas, TX and online at <http://www.mountainsports.com>. Their everyday prices are among the best and sales are even better.

Garage sales are good if you know what you are looking for. Same goes for thrift stores.

Information

The following information can help you when making decisions about what equipment to get. This information is by no means complete. You may want to explore additional resources, such as information on the Internet (like the 12th edition of the *Boy Scout Handbook* online at <http://www.bsahandbook.org>, REI's excellent Expert Advice pages at <http://www.rei.com/expertadvice>, or MEC's also excellent learning pages at www.mec.ca/learn), books and magazines on hiking and backpacking, and others who have extensive backpacking and hiking experience. Feel free to contact the author of this document, if you need additional information or clarification.

Pocketknife (or multi-use camp tool)

Pocketknives are useful for a variety of purposes on Scout hikes and campouts, including gear repair, food preparation, first aid, making kindling and other non-emergency and emergency needs. Buy a good, basic, high quality, brand name pocketknife or a high quality, brand name multi-use tool. Do not buy a straight knife that does not fold. Buy a folding knife. Look for smooth movement between the blade and handle and for blades that lock in place for maximum safety. Utility knives (such as the Swiss Army Knife) are another option. Look for one with at least one foldout blade, a screwdriver, and a pair of folding scissors. Your son may want to carry a basic pocketknife and a small utility knife. Multi-use tools (like the Leatherman) are bigger and more complex than Swiss-Army-style utility knives. These hard-core utility-style knives are built to handle tough jobs and complex repairs. In addition to standard blades, most have heavyweight tool accessories like pliers, screwdrivers and small saws. Consider both weight and size when comparing models and deciding what your son will carry. Stick to the smallest and lightest option that will meet your son's needs. Consider how easy each model is to use. Have your son take a few minutes to try each tool feature so he knows how easy or difficult they are to deal with and how well they work. Buy brand names such as Benchmade, Boker, Buck, Columbia River, Gerber, Kershaw, Leatherman, SOG, Spyderco, Victorinox, and William Henry. Avoid off brands. Avoid most knives made in China (most of them they really will fall apart quickly; Buck is an exception). Good knives start around \$25 and average around \$40. Good multi-use tools start around \$40 and average around \$60. The Personal Property Sales office of the US General Services Administration in Auburn (425-522-2891) sells knives confiscated at the airport for low prices.





Compass

Look for a clear base with a ruler. A sighting mirror is nice, but not essential. Nice compasses with either clear ruler bases or sighting mirrors can be had for \$15 or slightly less. Be careful to not go lower and end up with an unusable device. For a compass with both the clear base with a ruler and a sighting mirror, expect to pay up to \$65. Scouts do not have to have a compass with both a clear base with a ruler and a sighting mirror, and I would prefer they have one with a clear base if they have to make a choice. One advantage of adding the sighting mirror is it can be used as a signal mirror in an emergency. The Brunton Classic 9020G, Suunto A-10, and Silva Polaris Base Plate are all high quality clear base beginning compasses and are excellent for Scouts. The Silva Trekker 420 is a reasonable model with both a clear base and a sighting mirror. The Suunto MC-2 Pro, Silva Ranger CL, and Brunton 15TDCL are all superb devices that will last a lifetime (unless you lose them).

Personal First Aid Kit

Your son should have made one of these when working on his Scout first aid requirements. He should bring that kit or one similar with him. Make sure he has any personal medication he needs to take and that he understands how to take them. A quart Ziploc freezer bag makes an excellent container for a personal first aid kit. See the *Boy Scout Handbook* for more information on what to include in the kit.

Extra Clothing, Rain Gear, and Emergency Shelter

Your son should dress using the layer system. He should not wear or bring cotton clothing. Repeating, that was **NO COTTON**. Your son should bring one or two extra layers of clothing. Conditions in the backcountry can change abruptly, and this extra clothing can help. Extra clothing in most cases is not duplicative clothing—it's additional layers. He should bring extra socks in case his first pair becomes soaked; those are duplicative. A wool or fleece cap weighs little and is a fine heat-retainer on cold nights. Rain gear can be as simple as a large (huge) heavy black trash bag with arm and face holes cut out or a large rain poncho made for backpacking, or it can be as extravagant as a breathable rain jacket and pants. The gear in between the poncho and the breathable gear is not worth buying because your son will probably sweat in it and become wet and cold (and the purpose of the rain gear is to keep him dry so he can stay warm). A large rain poncho is usually sufficient for most Scouts. Disposable single-use ponchos can be had at dollar stores at two for a dollar. A large heavy black trash bag (I recommend the 55 gallon, 3.0 mil Iron Hold® Contractor Trash Bags in the red box at Ace Hardware stores) can serve as an emergency shelter, and extra clothing can help keep your son warm if caught overnight when he did not expect to stay overnight (and did not bring a tent). Some lightweight, extremely compact packing emergency shelters are also available in most outdoor equipment stores. Depending on the conditions, your son should consider carrying a fleece jacket or pile sweater, a waterproof shell or even a compressible parka. For day hikes on days when overnight temperatures are likely to be cold enough to kill a stranded person, your son should also bring his sleeping bag just in case.



Water bottle and water treatment

Bottled water is not a water bottle. Please get a water bottle that will not leak or break and will hold around 32 ounces. Athletic or bike bottles are fine, as long as they do not leak around the lid when full. Nalgene makes the best bottles, in either Tritan™ (BPA free) or polyethylene. If you want a metal bottle, then get a stainless steel one and not an aluminum one (aluminum bottles contain an epoxy liner that will likely contain BPA). Expect to pay \$4 to \$8.

Water treatment options start with boiling water. Boiling means carrying extra fuel for a backpacking stove, so boiling does not lead to long-term cost savings. Boiling also means having each day's worth of drinking water ready each morning and having enough bottles to carry all the water needed. The next least expensive option is iodine tablets or Potable Aqua Chlorine Dioxide Tablets (\$4 to \$10 for a supply). Both work well, but you have to wait at least 20 minutes before you can drink the water after it is treated. Iodine also affects the taste of the water. Chlorine Dioxide does too, but not as much as iodine. Water filters/pumps are the most expensive option initially, but they are also the most





versatile. They allow you to stop and filter water at any time, assuming a water source is available. They start around \$80. There are two types of filter media. Ceramic filters are heavier, but are completely serviceable in the field. Non-ceramic media filters are lighter, less expensive, and may or may not be field serviceable (depending on the make and model). Look at the MSR SweetWater Microfilter, a non-ceramic filter that is field serviceable, lightweight, and will last for many gallons of filtration if cared for properly. For extra safety, your son may wish to carry SweetWater Purifier Solution to add to the water after filtering. No portable water filter can eliminate all viruses (some of the viruses are too small), so this chlorine-based purifier solution provides simple and fast virus protection to water filtered with the MSR SweetWater Microfilter. A good choice for a ceramic filter is the MSR MiniWorks EX Filter. The lightest and most expensive initial price water treatment option is the MSR MIOX Water Purifier, which is used by the US Military's Special Forces units. SteriPEN UV water purifiers are priced higher than filters/pumps but less than the MIOX. They work well if cared for, but they do have some usage caveats to get used to.

Flashlight or headlamp (with extra batteries)

This item is straightforward. Just remember your son needs to carry this flashlight/headlight in his pack, so do not get one that is too big. Headlights are easier to use and more practical than flashlights. The newer LED lights are great, but be sure to get one with either a 3-watt (best) or 1-watt (good) LED. Your son may want to carry an additional small (tiny) last-resort flashlight or headlamp. Do not forget extra batteries (and an extra bulb for traditional non-LED lights). Good flashlights start around \$12. Good LED lights start around \$30.



Trail food and extra food



Extra food is something your son should put with his ten essentials and use as a food of last resort. The various meal replacement bars work well. Get a couple of bars of a flavor your son does not like—he will be less likely to eat them except in an emergency that way. Trail food is just what the name implies, food your son can carry and eat when he becomes hungry as he is hiking on the trail. Trail food could be a Cliff Bar (buy them at Trader Joe's), M&Ms, trail mix, jerky, or similar foods.

Matches (storm proof, or in a watertight container) and fire starters

Your son should always carry matches for an emergency, even if he carries a lighter for most of his fire needs. Fire starters come in a variety of shapes, sizes, and prices. Buy enough so your son can try his matches and fire starters in a non-emergency situation and will know how they work if an emergency should arise. Fire starters and matches need to be replaced when used, and Scouts will use far more of them than you think—buy extras. You can make your own fire starters by mixing wax and dryer lint, then forming it into small pellets or balls. The best commercial fire starter is by far the Ultimate Survival Technologies WetFire™. Put your fire starters in a small Ziploc bag to make them easy to find and to keep them from ruining other items in your pack.

Lighter

A small lighter makes lighting a backpacking stove and starting fires easier. They also can be used over and over again, unlike matches. You still need fire starters.

Sun protection (sunscreen, sunglasses, and hat)

Have your son carry sunscreen sufficient to keep him from being burned. Sunglasses can save your son's eyes on bright days. Make sure they are impact resistant. A hat protects against the sun and is also useful for warmth on cold days and nights.

Emergency whistle, mirror, and duct tape

Be sure to get a whistle that will not break easily and does NOT have a pea. If your son's compass has a mirror, he will not need another mirror. If it does not have a mirror, get a small, unbreakable rescue mirror. The mirror can be used for emergency signaling and can often be seen from the air.



Duct tape is useful for equipment repair, sprained ankles, and hundreds of other things. Your son needs about six to ten feet of it. Emergency whistles and survival mirrors both start at less than \$5.

Sleeping bag

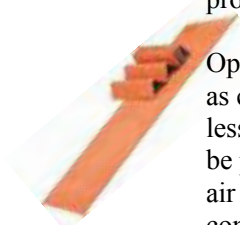
Down sleeping bags are lighter and pack more compactly, but they are useless when wet (and we do live in a wet geography). There are expensive down bags that are water resistant and even waterproof. You neither need to nor want to spend that much money for your Scout's sleeping bag to start with. Synthetic fill bags are a better choice for Scouts. The mummy bag design allows for warmth with less bulk than other designs, and is the most common design for backpacking. Remember, our nights can be cold even in the summer time, especially in the mountains. A bag rated +15 +20 (maybe +25 if it uses the new European rating system, which is more accurate) or lower is better because your son can always unzip the bag if it is too hot. If you chose to get one rated at +30 or higher, you will probably want to buy a fleece liner for the winter when we do winter camping. The testing for bag temperature ratings is done in rooms where the air remains still. Wind has an effect on relative temperature (wind chill). In other words, if your son is sleeping in the open in a twenty-degree nylon-shelled bag on a twenty degree night with a five mile per hour wind, he will absolutely be cold because nylon is not windproof. Individual metabolisms vary. Some sleep comfortably while others feel cold in the same bag. This variation ranges up to 15° F. If your son sleeps on the cold side, choose a slightly warmer bag for a given condition (which, for safety and comfort's sake, is a good idea regardless of metabolism). All sleeping bag temperature ratings are based on use of a sleeping pad. Sleeping bag manufacturers use abundant insulation underneath the bag when testing. The standard for testing sleeping bags is a 1½ inch thick pad that provides more insulation than most will carry. So, using a ¾ inch foam pad will mean the bag will not feel as warm at its given rating.



One option to consider is a kids' bag. These are shorter (and lighter and less expensive because of that) than adult bags, but your son may outgrow a kids' bag before he turns 18. If you have a younger son following this one by a couple of years or more, a kids' bag can make a great hand-me-down. Some adult bags are also available in short lengths. In any case, take your son with you when you shop for his sleeping bag. Have him climb in the bag and spend 10 or 15 minutes in it. Make sure it is comfortable for him and fits his body size and shape. For \$85 to \$140 (shop sales), you should be able to find a good sleeping bag for your son. Do not buy a bulky, heavy bag! Buy one that weighs three pounds or less. Buy a real compression sack that will allow the bag to be packed in a smaller space if the bag does not come with a good compression sack (most do not). Consider the REI Zen +25, ALPS Mountaineering Clearwater +20, Kelty Light Year XP +20, and The North Face Cat's Meow +20.

Sleeping pad

Sleeping pads provide comfort on rough ground and insulation from the cold. A great sleeping bag directly on the cold, damp ground of the Pacific Northwest is almost useless, but a sleeping pad provides the needed insulation to allow the sleeping bag to do its job.



Open-cell foam is lighter and more comfortable (and less expensive), but it does not insulate as well as closed-cell foam, and it also absorbs water. Don't buy it. Closed-cell foam is better insulating and less likely to absorb water, but it is heavier. Simple air mattresses do not provide insulation and can be punctured. Therm-a-Rest pads attempt to blend the best of all these types. They are self-inflating air pads with closed-cell foam built into the inside of the pad, but they are more expensive. Several competitors (including store brands) to Therm-a-Rest have sprung up in the past couple of years. These are as good as the original Therm-a-Rest pads, but Therm-a-Rest has gone on to innovate with new materials that make their latest (and most expensive) pads even lighter. ¾-length pads are fine for everything except winter camping. Winter camping requires a full-length pad (really, two pads, one of which can be a cheap blue or gray closed-cell foam one), and your son may prefer a full-length pad year round. Take your son with you when you shop for his sleeping pad. Have him lay down on the pad for 5 or 10 minutes. Make sure it is reasonably comfortable for him and fits his body size.

Keep the pad weight below 2½ pounds. Consider the Therm-a-Rest Trail Pro (air/cc foam), Therm-a-Rest Z-Lite (closed cell foam), REI Trekker (air/cc foam), REI Lite-Core (air/cc foam), and ALPS Mountaineering Lightweight (air/cc foam). Prices range from \$15 to well over \$100.

Hiking boots or shoes

Take your son with you when you shop for his boots or shoes. He needs to try them on and wear them around the store for 10 to 20 minutes, walking with them on a variety of surfaces. Make sure you get a salesperson that knows what they are talking about and can fit your son properly, or go with someone with experience if you are going to do it yourself (Fred Meyer has some decent boots at good prices when they are on sale; they also have some junk, so you need to know what you are looking for). You want boots that have slightly flexible (but not at all flimsy) soles, good cushioning, and good lateral support. Get waterproof boots or non-waterproof shoes that will drain water easily. Do not get non-waterproof shoes that will not drain easily. For boots, waterproof may mean Gore-Tex lined boots (if you can find them in kids' sizes) or leather boots. Buy some waterproofing liquid or cream and use it. One of the best tricks in fitting a boy in boots when the kids' section does not have what you want but his feet are too small for men's boots is to shop in the women's section. Only you and he (and the salesperson) need to know his boots came from the women's section, and your selection will expand tremendously if your son is at one of those awkward shoe sizes. Once purchased, wear the boots outside for a few days to break them in before wearing them on a hike or campout. Prices range from \$40 to \$180.



*Cotton is Rotten
and
Should be Forgotten*

Appropriate clothing (not cotton)

Start with good socks to go with the boots. I recommend a liner sock and then wool socks over the liners, with the weight of the wool depending on the season. Heavy wool can be worn year round in Washington, and it is amazingly cool in the summer. Costco sells nice wool hiking socks from about October to December each year. Usually three to four pairs for \$10 total. Dress in layers, so it is easy to add or subtract layers as needed. A pair of lightweight gloves is also a good idea in case it gets cold around camp at night or early in the morning. Pants with zip off legs that convert to and from shorts are good for hiking and camping. The new Boy Scout nylon uniform pants are actually decent for this, and serve the dual purpose of being uniform pants for uniformed occasions. Again, no cotton. Check thrift stores, Wal-Mart, Target, and sales at outdoor and sporting goods stores for best prices.

Backpack

Plan on spending some time (an hour or two) when shopping for a backpack. This is an important purchase, and your son must go with you when you shop for his backpack. Backpacks fit different people differently, and the pack that fits one person perfectly may be painful to another person.

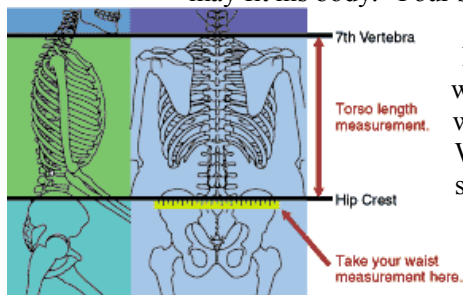


Two types of backpacks exist, external frame and internal frame. Neither one is better or worse than the other is—just different. Internal frame backpacks have a frame that is located inside the pack itself. The frame usually consists of either two aluminum stays and/or a framesheet. Internal frame backpacks tend to ride closer to the body and not move around nearly as much as external frame backpacks. Internal frame backpacks are ideal for off-trail or rough trail use or for where maintaining balance, even under a heavy load, is crucial. Internal frame backpacks also tend to disperse the weight more evenly than external frame backpacks. Internal frame backpacks also generally have much more padding as the pack rides closer to the hiker. The downside to internal frame backpacks is they can make the hiker's back quite warm, especially in the summer. By contrast, an external frame backpack has the entire frame, usually made of lightweight aluminum, outside the pack itself. The pack is attached to this external frame by various means. External frame backpacks may include better organization abilities due to more pockets (but many internal frame backpacks today have just as many pockets). The back of a hiker will stay cooler with an external frame backpack because the frame rides much further off the hiker's body. One big disadvantage of external frame backpacks is they tend to move around and sway a lot because they do not fit the hiker snugly. This can cause some balance problems, especially when traversing rocky terrain. For kids with small torsos and small body



frames, however, an external frame backpack may carry the weight better (or it may not). Your son needs to try on several backpacks to find which fits him best.

The salesperson should start by measuring your son's torso length. That will limit the backpacks that may fit his body. Your son should try the pack on. If the fit looks good, take the pack off and have the salesperson load it with weight. Your son should carry no more than $\frac{1}{4}$ of his body weight (including the weight of the pack), and less than $\frac{1}{4}$ of his weight is desirable for 11-13 year olds. Have your son walk around with the weight in the pack. Adjust the pack's adjustment straps to help carry the load. Walk on a variety of surfaces, up stairs, down stairs, step over things, try squatting and standing back up, try kneeling and standing back up. If his pack does not fit properly, your son can end up with serious back, shoulder or leg pain. The right pack will be much more comfortable and make carrying gear a lot easier than the wrong pack—and right and wrong here are very individualized things. To be fair, keep in mind that no fully loaded pack ever feels truly comfortable. What you are seeking to avoid is any sharp or unreasonable discomfort or pain.



Try to get an internal frame pack with about 4000 cubic inches of space or an external frame pack with around 3000 cubic inches. These two sizes are comparable because the sleeping bag goes inside an internal frame pack but is tied to the outside on an external frame pack, and most sleeping bags are about 1000 cubic inches when compressed. If possible, look for packs that can be adjusted and will grow as your son grows. This is another area where looking at the women's models may make sense, and unless the women's version is some odd pastel color no one will know. Look at the Kelty Coyote 4750. It's a pack you cannot go wrong with. It has an adjustable suspension that will grow to fit from all but the tiniest boy to full grown men. It can be had on sale regularly for \$120, and I have seen it as low as \$85 on rare occasions. Also consider the ALPS Mountaineering Orizaba (also has an adjustable suspension), ALPS Mountaineering Cascade, Kelty Trekker, Kelty Yukon, and REI Meteor. These are all reasonably priced, high quality packs. You can spend more if you want to (see the Gregory Palisade and the Osprey Atmos 50), but you probably do not need to, and your son probably will not fit in the more expensive packs anyway. Keep the receipt because field testing on his first couple of Scout activities will be the best way to know if the pack you selected in the store really is the right one for your son. REI is great here because of its return policy, and the downtown REI store cannot be beat for selection and expertise when it comes to packs.

If you chose to borrow a pack, make sure it fits your son. Use the information in this section to decide. Remember, the right pack can make the difference between a great and an unpleasant outdoor experience. Prices range from \$80 (shop sales, REI's online outlet store, and other online stores) to \$150 and up.

Rain cover for backpack

Your son does not need a commercial rain cover. A large heavyweight trash bag can serve as a good alternative to a commercial rain cover.

Eating kit

Scouts love to eat, and they need a cup and spoon (any maybe a fork and plate) to eat with. Consider a spork. Prices range from \$5 to \$35.



Cook kit and cleanup supplies

Your Scout needs a pot or pots for his own cooking and for his part in the troop cooking. Nonstick makes clean up easy. Aluminum is light (titanium is even lighter, but much more expensive). Some manufacturers make eating and cook kits that nest together and are sold together at reasonable prices. Consider buying a small waterproof ditty bag to carry the cook kit and eating kit in the backpack. The mesh bags that often come with cook kits will not protect the other gear in a pack from the water and



cooking smells from a cook kit. Biodegradable soap should be carried in a small, leak proof bottle. We will normally wash our dishes with only boiling water, but sometimes using the soap becomes necessary. Prices range from \$10 to \$70.

Sanitation trowel, Toilet paper in a Ziploc bag, and Soap or antibacterial gel or wipes

Should be obvious what all this stuff is for. Pack it all together in a large Ziploc bag so it is easily accessible when nature calls. Trowel price is around \$1.50.



Plastic trash bag

A white kitchen bag will work, but something a little larger and more heavyweight is better. I recommend the 55 gallon, 3.0 mil Iron Hold® Contractor Trash Bags in the red box at Ace Hardware stores. This bag can be used for groundcover, a sleeping bag cover, and an emergency shelter, among other things, and it can always be used to carry out trash. Your son should carry a few gallon Ziploc bags. They make excellent trash receptacles that seal to keep the smell and moisture in as he carries the trash out.

Backpacking stove

It's just about impossible to beat the MSR Pocket Rocket for its combination of price, performance, and weight. If you want to spend more, you can, and there are better stoves available (just ask me if you really want to spend the money on one). But why spend more than you need to? The Pocket Rocket is way more than adequate. In fact, it's won several awards and works like a charm.



Fuel for backpacking stove

The Pocket Rocket uses MSR IsoPro canister fuel (as do most canister stoves). The fuel is available in 4-ounce and 8-ounce canisters. Each 8-ounce canister will boil 4¼ gallons of water. Please be sure your son has enough fuel with him. The 4-ounce canister is fine for overnight trips.

Insect repellent

The bites of mosquitoes and their cronies are annoying. West Nile virus can also be a concern. Please see http://www.cdc.gov/ncidod/dvbid/westnile/qa/insect_repellent.htm and <http://www.epa.gov/pesticides/factsheets/chemicals/deet.htm> for information on DEET in repellants. Some newer repellants use Picaridin or permethrin, and the Repel Lemon Eucalyptus repellent also works well. Fred Meyer carries Repel Lemon Eucalyptus repellent now (in the camping section). See <http://npic.orst.edu/wnv/pesticideinfo.htm#repellents> for more information on these repellants.



Tents

You have to balance durability and weight. Lighter is better if it doesn't sacrifice too much durability. Free standing tents simply work better for Scout age boys. There are better tents that are not free standing, but Scouts do better with the simpler free standing designs. Tents for Scouting need several key essential features. These include a bathtub floor, a rain fly that extends the full length of the tent (cheap tents do not have these), sealed seams, good waterproofing, strong but light poles, and a freestanding design. Poorly made cheap tents lead to miserable camping experiences when the weather turns bad or the tent fails. You want a two-man or three-man backpacking tent.

Tent shown with rain fly removed



It's hard to beat the REI Half Dome 2 for price/performance. It's won several awards. ALPS Mountaineering also makes some good tents (a little heavy) at great prices for Scouts. Expect to spend at least \$100, more likely between \$100 to \$200 for a decent tent. ALPS' sales sometimes drop them to the \$50 to \$75 range for used (returned) tents. You can, of course, spend much more on a tent, but the \$100 to \$200 price point is a sweet spot for tents for Scouts.



Full rain fly is essential



Avoid a partial rain fly

Gaiters (optional)

Gaiters keep trail grit, mud, water and snow out of boots. Gaiters are essential for snow camping and nice to have the rest of the year.



See you on the trail