

Camping & Backpacking Gear Notes

For your first couple of camping trips with the troop, a large duffle bag will hold most of your gear. Tie a sleeping bag on with a length of rope, and you're set. However, sooner or later you'll want to get off the beaten path. For that, you need a backpack. Each Scout will be responsible for their own personal gear. Much of the personal gear the scouts have used on past camping trips is sufficient. The two essential items for backpacking that make the difference between enjoyment and misery are a decent backpack and good foot gear. These should be selected, fitted, and broken in BEFORE the backpack trip.

Boots & socks:

Good foot gear is a system that works together. A \$200 pair of boots will leave your feet wet and blistered if you have the wrong socks.

Socks:

You need both an inner and an outer sock -- even in the summer. The inner sock should be a tightly woven, synthetic fabric (or silk) that wicks moisture away from your feet and into the outer sock. Specialized inner socks are often available in outdoor gear stores. Outer socks are heavy wool or synthetic socks that provide cushioning and moisture absorption. Wearing both is essential. Once your feet are wet, due either to muddy trails or your own perspiration on a hot day, blisters are not far behind. Don't wear cotton or cotton-blend athletic socks. They quickly get wet and stay wet.

Boots:

Hiking boots are probably more widely available now than ever before. One difficulty is that many boots found in shoe departments are "rugged" in appearance only, lacking these important features of a good pair of boots:

- smooth interior seams, with no rough spots
- a minimum of external seams -- seams are where boots leak
- sole stitched or molded and solidly attached to the upper
- an open, aggressive tread -- good for Ohio's slippery clay soils
- high tops for ankle support with heavy loads
- a waterproof, but "breathable" upper.

The upper can be properly waterproofed leather or a combination of heavy fabric (nylon cordura or kevlar) and perhaps a breathable, waterproof (Gortex) lining. While U.S. made "combat" boots are fine (and sometimes available cheap at second-hand thrift stores), avoid imported look-alike boots with cotton canvas uppers and glued on soles -- they will fall apart.

For most boots, a good coating waterproofing is essential. If you buy a synthetic boot, be sure to check the manufacturer's instructions on waterproofing. Stay away from vinyl and imitation leather or your feet will be soaked in your own perspiration.

For older scouts, it may be worthwhile to invest in a good pair of true hiking boots. Expect to pay anywhere from \$80 to well over \$200. With care they will last many a season, if not a lifetime. (I have a pair of 26 year old Vasque all-leather boots that still don't leak, but I've just about worn the tread off the soles.)

If your feet are still growing, it makes more sense to buy a cheap pair of hiking boots or even leather work-boots, heavily waterproofed -- they only have to last a year or so. Just be sure the inside seams are smooth or you'll have blisters. K-Mart and other discounters often have such boots in the \$20- \$30 range.

As a second choice, running shoes will work. They are very light, and usually have good tread. On the downside, they provide no ankle support and are not waterproof. You will need to pack two pairs of running shoes and extra pairs of socks to keep your feet dry, or consider a Gortex liner sock (which will cost almost as much as a decent boot).

How to waterproof your boots:

Each footwear type is a bit different. What works on one, will ruin another. When in doubt, ask the boot's manufacturer. Here's a quick guide to the most common types.

Gortex lined boots: These are pricey, high-performance boots that keep your feet dry but let them breath (at least that's what the ads say). My personal experience is that the Gortex liner has a useful life of about a year or two. Additional waterproofing is helpful in keeping the outer fabric and leather dry, adding to the life of the boot. The wrong kind of waterproofing will ruin them. Do not use SnoSeal, Mink Oil, or sprays that contain silicone -- these will close the microscopic pores that allow Gortex to breath. Kiwi makes a red-capped version of Camp-Dry spray especially for Gortex lined materials. Just make sure you check the warranty on your boots before you use anything.

Leather/leather & fabric: My leather old leather Vasque boots have never left me with wet feet -- I used Sno-Seal, melted into the leather, applied a couple of times each season. For leather, the real trick is to get the waterproofing *into* the leather -- not on it. Here's how. Start with a clean, dry boot, and a jar of your favorite boot sealer. I prefer SnoSeal (a beeswax base), but Mink Oil (a grease base) is sometimes easier to find. Using your fingers or a rag, work a heavy coat of waterproofing onto the boot, making sure you hit the seams and toes really well. If the boot looks like it has been smeared with heavy grease, you have it about right -- you have to use a lot of the stuff. Now comes the important part. Use a hair dryer on "high" close to the boot to melt the coating so it sinks into the leather -- be careful as it runs like water when its hot. Do this over newspaper or outside to avoid a mess. If these are new boots, or if the leather is really dry, give 'em a second coat. This works on fabric too. This treatment will darken the boots, and make them appear a bit greasy, but hey, they're hiking boots! If you are worried about the appearance, try the silicone treatment below.

Fabric boots/running shoes: Department-store fabric "boots" and running shoes are light, but they tend to leak. Heavy waterproofing such as SnoSeal will sink through the fabric and make a mess on the inside. The best bet with these boots is silicone spray waterproofing. Plan ahead, because you will need to apply 3 or 4 coats, allowing several hours between coats. This treatment also works for leather. I say "works", because at best, this waterproofing will only turn a light rain or heavy dew. I good soaking rain or continuous wet trails will get your feet, well . . . soaked.

Winter Boots:

Leather hiking boots won't keep your feet warm in sub-zero camping, at least once you stop moving. A better choice are foam-insulated "mukluks" or snow boots. These have fully waterproof rubber or coated nylon uppers, a removable foam or woolen insulated liner, and a lugged sole. Buy these oversized, and make up the space with 2-3 pair of woolen socks over a liner sock. If they fit correctly, you should be able to freely wriggle your toes, but your heel should not slip. Too tight and your feet *will* get cold. Too loose, and you'll have blisters if you hike any distance. These boots are usually cheap, and bargains can be found at end-of-season sales. They do wear out quickly, so don't expect to keep them for several seasons.

Moisture will collect in the socks during the day, so spread out both the socks and the removable liner to dry each night. Otherwise, you'll be trying slip on a frozen mess the next morning.

Your backpack:

At a minimum, you will need a pack with a frame that transfers most of the load to a padded hip belt -- you'll be carrying a good deal of weight. You will need to make sure that the hip belt can be tightened snugly enough to bear all of the load (the shoulder straps should hang loose at your shoulders) with about 20 lbs in the pack - you'll be carrying more than that on the trail, but it is a good weight for fitting.

There are two basic styles of packs: internal frame and external frame. Both are available in a wide range of features, quality and price. Internal frame packs keep the load close and tight to your body, improving balance. Internal frames are favored by alpine backpackers who travel steep, rocky trails. External frames are more flexible in the load that can be carried, and are cooler to carry in hot weather. Enough "stuff" can be lashed onto a moderate sized external frame pack to support a trip of several days -- if you can carry it. I use an external frame pack.

Expect to pay at least \$60 for a new pack. Equipment often goes on sale in late fall, and there are sometimes bargains to be found in used equipment -- check the classified-ad papers such as the "Trading Post". Also, if you are affiliated with the USAF, it may be possible to rent packs for a weekend through WPAFB base services. The cost is \$2/day. A phone to WPAFB found that the pack selection is limited, and the packs they carry are low-quality external frame packs with unpadded hip belts. These will only be suitable for

short distances and light loads.

Packs are usually sized by "torso size", the length from the top point of your hipbone to the top of your shoulder. This can vary a lot by individual. For example, I am only 5'7", but fit best into a "tall" pack frame (short legs!). Most packs are sized for adults, and will work well for older scouts. "Youth" sized packs (for persons 5'6" and under) are available, but are sometimes hard to find in stores. Two I have purchased before are the Coleman "Peak 1" (youth sized), and the Jansport "Scout". Of the two, I prefer the Jansport because of the better variety of pockets in the pack and the easy size adjustment of the frame. The Kelty "Yukon" is another well rated youth packs.

One of most critical features of the pack is the waist belt. This should carry most of the load, not your shoulders. Make sure the belt fits tight around your waist. It should not slip down even if you have a load in the pack and jump up and down. For younger scouts, this is often the hardest part of the pack to make fit, because the waist belt on adult packs is too big. Youth packs have smaller belts.

Don't feel you have to get the biggest pack made. An external frame pack in the 3000 cubic inch range will hold everything you will need for a weekend or more, with a tent and sleeping bag lashed to the frame. Any fool can load this size pack with 50 or 60 pounds for an overnight trip -- the trick is keeping the weight in the 20 to 30 pound range -- that takes skill. My personal preference is a pack with a variety of external pockets, and a divided main pocket. This cuts down on the maximum amount that you can cram into the pack, but makes organizing and getting to your gear easier on the trail. Other folks like the one big bag approach, and carefully organize their gear into separate plastic bags or stuff sacks -- actually, this is a good way to pack any backpack. I use zip lock bags to keep the gear in my main pocket organized so I can find things quickly. Two-gallon sized zip-locks are the right size for extra clothes.

Organize your gear in the pack the way you will use it. For example, on an overnight trip, I'll put extra clothes at the bottom of my pack, sleep clothes next, then cooking gear, and finally a pair of tennis shoes. That way, when I get into camp, I can kick off my boots and start dinner. When I lay out my sleeping clothes for the night, my clothes for the next morning are right there as well. Below is a checklist suitable for summer backpacking. Each major heading is a "kit": the indented items below all fit in a zip-lock bag (the clothes may take two bags).

I have packed every item on this checklist, including food, filled water bottles, and a fair share of patrol gear, in and on a youth pack, and totaled 25 pounds. I was very careful to take only what was needed, and to make lightweight choices, or choices based on experience. For example, the flashlight I use is a two cell, AAA size (not AA) Maglight, not a 4-D cell "searchlight" that lots of scouts seem to like. A wooden pencil in the map bag is a choice based on experience: unlike ink, pencil doesn't run when it gets wet and it can be sharpened with a pocket knife. For eating utensils, you can eat just about anything with a cup & spoon, and your pocket knife -- other utensils are nice, but add weight. The garbage bag in the repair kit can be used to haul water, serve as a poncho, or double as a

pack cover. Make changes to this checklist to suit your own style, just be sure to think through the changes.

Waterproofing your pack: Most folks don't realize it, but your brand-new \$60 to \$150 pack is not waterproof -- at least not in a heavy downpour. The fabric is usually coated nylon, which is waterproof, but the seams and zipper will leak (and for the same reason, so will the "waterproof" stuffsack that came with your sleeping bag). The best solution is a packcover. This is a seamless coated nylon cover that goes over your entire pack, including external gear such as sleeping bags and tents. A second approach is to seam-seal all of the stitched seams using the same sort of seam sealer used for tents, and keep your cloths and stuff that must stay dry in sealed plastic bags. Personally, I use both a pack cover and I pack the gear inside in zip-lock bags. When I go camping, it usually rains.

Sleeping Bags

We camp in every season -- plan on that when you select a bag. If you have to buy just one bag, size it for winter -- you can always open it up or sleep on top of it for spring/fall. You'll want to have a heavier sleeping bag than you think. The only drawback here, is that a winter bag is pretty bulky and heavy for backpacking. A mummy bag, rated somewhere between +10° and -10° will handle most conditions we are out in. I won't take the troop tent-camping if the windchills fall below -15°: in Ohio, we are not properly equipped for those conditions.

For general camping and spring/fall backpacking, select a bag rate for 25° to 35° range. Mummy bags tend to sleep a bit warmer and pack a bit lighter than rectangular bags. I have had good experience with the Slumber Jack Thermolite "Guide Light" weight bags -- rated for 35°, and less than 3 lbs.

For summer, I just carry a sheet and a blanket. A lightweight "slumber" bag is a good choice too. For all bags, try to stick to nylon or other synthetic, both inside and out. Flannel linings may seem soft the first night, but the second night on a rainy campout, they are cold, clammy, and will chill you to the bone.

Sleeping Mat.

A closed cell foam mat is the right first choice. They are about \$10 or less at Meijers or K-Mart. They aren't supposed to provide cushioning -- they provide insulation from the ground. A \$600 goose-down sleeping bag will be ice cold without one of these \$6 mats. Inflatable vinyl air-mattresses are a waste of money. Don't confuse these with the self-inflating mattresses such as Therm-a-rests. The self-inflating ones are great, allowing you to sleep comfortably on a concrete floor. They are expensive, and most are too heavy for backpacking. The ultra-light Therm-a-rest ¾ length, makes a great Christmas present for a scout.

Sources:

I have had good luck finding both advice and gear at GS Outfitters in downtown Dayton. Many of the folks there use as well as sell the equipment. If you go to look at either packs or boots, be sure to ask the salesperson if they backpack. If they don't, ask for a salesperson that does. We ran into a saleswoman who had recently hiked the Appalachian Trail end-to-end in one summer (over a 2000 mile trek). Her answers on equipment were much more knowledgeable than the salesman we saw a week later who had never backpacked. You can find some good gear at Dick's Sporting Goods, but I have not met a salesperson there yet who knows anything about camping. Their boot selection seems better suited to fashion than to serious hiking. Gander Mountain also has a good selection – but I have not shopped there yet myself. The council Scout Shop carries packs, but has no experience in fitting them. Also, do your homework before you go shopping. BackPacker magazine has an annual gear report issue which rates hundreds of items of gear. Try the library for back issues.

Another option is mail order. A wide selection is available, but there is zero advice. Mail order is great for the hard-to-find basics such as inner socks, but you should be familiar with big-ticket items before you order them "blind". Campmor is one mail-order retailer I have used in the past that has a good reputation for service. A free copy of their catalog can be obtained by calling 1-800-230-2151. They are also on-line at www.campmor.com.

Personal equipment (Spring/Fall):

Wear:

- Pack
- Boots & correct socks
- Hat
- Watch
- Clothing for the weather

Lashed to outside of pack:

- Sleep bag/blanket in waterproof bag
- Foam sleeping pad

Accessible in outside pockets of pack:

- Rain gear
- Pocket knife
- Bug repellent
- Sunscreen
- Toilet paper in plastic bag & small soap
- Water bottles (2 ea, 1 quart size)
- Map bag (large ziplock)
 - Map
 - Compass
 - Small Flashlight
 - Wooden pencil

First-aid kit (personal)

- 3 gauze pads, 3x3 or 4 x4
- 6 band-aids (3/4" wide)
- Small roll of adhesive tape
- Moleskin for blisters
- Quarters for phone calls
- Essential medications*

Fire-n-water kit

- Matches in waterproof case
- Plastic butane lighter
- Fire starters
- Purification tablets/filter
- Large plastic garbage bag
- Whistle

Inside of pack:

- Extra clothing(for length of the trip)
 - Socks (___ inner/ ___ outer)
 - Short sleeve shirt(s)
 - Shorts
 - Underwear
 - Long pants (for thorn protection)
 - Long sleeve shirt /jacket (for warmth or thorn protection)

Eating utensils

- Cup
- Spoon
- Plate or bowl**
- Fork & knife**

Repair kit

- extra batteries & spare bulb
- large garbage bag
- safety pins
- needle & strong nylon thread
- duct tape (2-3 feet)

Rope or cord (6-10' long, 2 pieces)

Inside of pack (continued):

- Tennis shoes/moccasins in a plastic bag
- Toilet kit
 - Washcloth
 - Small towel
 - Soap in container/ziplock
 - Toothbrush
 - Toothpaste
 - Comb
 - Mirror (unbreakable)**
 - Razor**
 - Deodorant**

Your portion of patrol gear (may not have all items)

Lashed to outside of pack:

- Your portion of 4-man tent
 - ground cloth
 - tent
 - tent fly
 - poles & fittings
 - tent stakes
- Bear-bag rope for patrol (50 - 100 ft)

Outside pockets:

- Extra fuel bottle for stove.†

Inside of pack:

- Backpack stove† (1 per patrol)
- Cooking utensils††
 - Skillet
 - Large Pot
 - Kettle
 - Large spoon
 - Spatula

Bearbag (1 per patrol)

Food (your portion)

Optional gear:

- Camera (lightweight)
- Binoculars
- Hiking stick
- Emergency radio (Ham or weather)

Notes:

* To be turned into adult leader. Include name & dosage instructions in ziplock bag.

** Optional depending on personal preference.

† depending upon menu & length of trip

†† depending upon menu. Not all items expected to be packed.

Lessons learned from past trips:

A backpack with a frame, padded waist and shoulder belts is required. Please check to make sure the hip-belt fits tightly

Bring two, wide-mouth, sealable water bottles (1 Quart Nalgene bottles are excellent). Do not bring sports bottles.