

The following is a list of all personal equipment needed to have a comfortable backpacking experience with the Troop on a weekend outing when the weather is cold outside. It is designed to help you prepare and gives you an idea of how each piece of gear will be used. The central challenge is to keep overall weight down, while at the same time carrying the proper clothing/gear to stay warm. Because weather is unpredictable, there is no guarantee that all the equipment will be used and there might be a few adjustments as weather conditions become more obvious. Please keep the following in mind as you prepare:

- Layering:** Layering means wearing numerous items of thinner clothing rather than one heavy item. Layering allows you to adapt your clothing to different weather conditions and exertion levels. Start with thinner, tighter layers near the skin and move to heavier, looser layers away from the body. Top it off with a wind-proof (or breathable water-proof) layer and you have an excellent clothing system.
- Fabrics:** A great number of fabrics are used in outdoor clothing, often with different names for the same thing. Some simple rules: (1) **Avoid cotton** - T-shirts are certainly comfortable, but they lose all their insulating value when wet (and dry slowly) and should not be relied upon for outdoor use. (2) Wool and/or synthetic clothing is recommended - these fabrics do not hold moisture and do not lose insulating value when wet. Avoid blue jeans (they are cotton); look for blended synthetic pants. Synthetic long underwear or fleece is perfect for a variety of conditions. Waterproof fabrics that breath (e.g. Gore-Tex) are preferred over non-breathable fabrics (e.g. coated nylon), but are considerably more expensive.
- Boots:** Backpacking is all about walking and you must be wearing boots that fit well and provide good ankle support. Combined with the proper socks, you'll minimize the chances of getting hot-spots or blisters on your feet. A waterproof boot is also nice, but not necessary. Never start a backpacking trip with boots and socks that you've never worn before, as the trail is the wrong place to discover problems with your foot-support system. Good ankle support is necessary when carrying weight on your back over rough terrain.
- Backpack:** Because everything is carried on your back, your backpack must fit **you** properly, which generally means that it must be sized to match your torso length (not your height) and must have a hip-belt that fits snugly and is appropriately padded. It should have a volume that matches the length of the trip, generally in the 50- to 80-liter range for a weekend outing. Internal-frame packs are the norm now, but external-frame are also acceptable. Some internal-frame packs can be adjusted as you grow into adulthood.
- Weight:** The central goal of any backpacking trip is to keep weight down as much as possible. The more you bring, the more you must strap to your back, so seek to eliminate as many "extra", non-essential items as possible and bring only the minimum number of essential items. Every ounce counts, so try to be a minimalist packer.

Upper Body Layers			
Equipment	Quantity	Comments	Check List
Long-sleeve lightweight shirt	1	Moisture-wicking, not cotton. Nice to have when starting out in the morning.	
Short-sleeve lightweight shirt	1	Moisture-wicking, not cotton. Nice to have while hiking in warmer afternoons.	
Light to mid-weight long underwear top	1	A base layer for cold days. Can be worn under your hiking shirt.	
Thin fleece or heavy long underwear	1	Any secondary fleece layer of 100-200 weight. This is your "middle" layer.	
Fleece/pile jacket	1	Should fit over other layers. This is your "top" warmth layer.	
Nylon wind top	Optional	Should fit over all layers to block the wind. Allows you to have a lightweight breathable layer for when it isn't raining.	

		A rain jacket is often a viable substitute for this wind-break layer, particularly if your rain jacket is <i>Gore-Tex</i> (or similar).	
Rain jacket with hood	1	Waterproof and durable. Should fit over all layers. <i>Gore-Tex</i> (or similar) is nice, but quite expensive and not essential. Ponchos are not acceptable, since they don't work well with a backpack (you'll get wet).	

Lower Body Layers

Equipment	Quantity	Comments	Check List
Quick-dry long pants	1	Moisture-wicking, not blue jeans. Zip-off pants are a good choice, as they can function as pants and convert to shorts when the weather warms during the day.	
Light to mid-weight long underwear pants	1	A base layer for cold days. Can be worn under your hiking pants.	
Fleece pants	1	Worn over the base layer, typically while in camp.	
Nylon wind pants	Optional	Should fit over all layers to block the wind. Allows you to have a lightweight breathable layer for when it isn't raining. Rain pants are often a viable substitute for this wind-break layer, particularly if your rain pants are <i>Gore-Tex</i> (or similar).	
Rain pants	1	Waterproof and durable. <i>Gore-Tex</i> (or similar) is nice, but quite expensive and not essential.	
Underwear	2	Synthetic (not cotton) is recommended for its drying capabilities. Cotton underwear will not dry if it gets wet.	

Head, Neck, and Hand Layers

Equipment	Quantity	Comments	Check List
Baseball cap or wide-brim hat	1	To protect ears and face from the sun.	
Wool/fleece hat or balaclava	1	Anything that will cover your ears, for cold temperatures.	
Warm gloves/mittens	1	For those cooler nights in camp.	

Footwear

Equipment	Quantity	Comments	Check List
Boots	1 pr	Sturdy with excellent foot and ankle support. Lightweight synthetics (some with waterproofing) work as well as leather.	
Socks	2 pr	Medium wool or synthetic - the second pair is a backup and for the campsite.	
Liner socks	2 pr	Lightweight synthetic worn inside the main sock. Some people find that having two sock layers reduces friction and is more comfortable while hiking. Personal preference.	
Campsite shoes	1 pr	Tennis shoes or another light shoe with closed toe for the campsite. No flip-flops, as these do not protect your feet.	

Packs and Bags

Equipment	Quantity	Comments	Check List
Backpack	1	Internal or external frame (50-80 Liter). Must be sized appropriately for your torso length (not your height) and have a hip-belt that gives you a comfortably snug grip on your hips.	
Pack cover	1	Removable and waterproof for when it rains/snows.	
Waterproof bags	Assorted	For keeping clothing dry inside the backpack. Gallon Ziplock bags or lightweight drybags work well.	
Small stuff sacks	Assorted	Nice to have for keeping things organized inside your pack.	

Sleeping Equipment

Equipment	Quantity	Comments	Check List
Sleeping bag	1	A synthetic bag rated to 20 degrees F. Down bags are not recommended, as they lose their insulating value if they get wet. Should pack reasonably small inside a stuffsack.	
Sleeping pad	1	To serve as an insulator between you and the ground (vital). Closed-cell foam (3/8" thick) or an inflatable pad such as Thermarest is acceptable. Old-style blow-up mattresses are not.	
Sleeping bag compression stuff sack	Optional	A waterproof stuff sack is recommended. A compression stuff sack will help reduce the size of your sleeping bag and make packing easier.	
Sleeping clothing	Optional	Comfortable sleeping clothes for those that like to wear them. Put inside your sleeping bag, so they are easily accessible when going to bed. Clothes worn during the day do not make good sleeping clothes.	

Miscellaneous Personal Gear

Equipment	Quantity	Comments	Check List
Headlamp or flashlight	1	For night time. LED lamps are quite small and run on smaller, lightweight batteries.	
Personal mess kit	1	Plate, cup, and utensils (plastic or metal). Group cooking gear supplied by the Troop.	
Water bottle (1L)	2	Quart- or liter-sized, for personal use. Hydration bladders also work well. Additional Patrol water for cooking will also likely be needed.	
Sunglasses	1	Any good quality sunglasses with 100% UV protection will work. If you wear prescription glasses and have impaired vision without them, bring prescription sunglasses with a high-quality keeper strap.	
Sunscreen	1	Make sure it is at least SPF 30 or greater. If you burn easily, bring zinc oxide. Can be shared with others to reduce weight.	
Lip balm	1	Stick or cream. Make sure it provides sun protection.	
Toiletries	NA	Toothbrush and paste, prescription meds, toilet paper. No deodorant, soap, or shampoo needed for a weekend (really).	

Prescription glasses or contact lenses	NA	Bring a spare set if this pertains to you. With a keeper strap.	
Small towel	1	Small and absorbent. Don't bring a large beach towel.	

Optional Gear

Equipment	Quantity	Comments	Check List
Trekking poles (w/rubber tips)	1 pr	Optional item for those that like them. Can reduce impact to knees and ankles and improve balance.	
Camera	1	Small, light, durable, and waterproof (or with waterproof case). Not everyone on the trip needs to carry one, so share.	
Personal first aid kit	1	Nice to have with a few essentials (such as band-aids). The Troop carries a complete first-aid kit.	
Pocket knife	1	Must have Tot'n Chip. A small, simple, lightweight one is sufficient.	
Matches/Fire-starter	NA	Must have Firem'n Chit.	
Maps/Compass	1	Nice to know where you are and where you are going.	
Money	NA	For outings where we stop for fast-food on the road.	