The following is a list of all personal gear required for Philmont high-adventure with Troop 8. It is designed to help you prepare and gives you an idea of how each piece of gear will be used and how much it weighs. The central challenge is to keep overall weight down, while at the same time carrying the proper clothing/gear to stay warm at the higher altitudes encountered at Philmont. 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 that can go from the hot, arid daytime to the cool evening.

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 or rubberized 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 70- to 80-liter range for a Philmont 12-day trek. 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.

Organize:

Stuff sacks and/or plastic Ziploc bags are useful for organizing gear and separating clean clothing from dirty (and bear-bag worthy). It is probably not necessary to wrap all your clothes in plastic, as a good pack cover will keep your gear dry when it rains, but some organization is helpful.

Washing:

Opportunities to wash your clothes on the trail are few, but this does not mean that you should pack more clothes and/or wear the same dirty clothes on trail. It is possible to adopt the "wear one/wash one" philosophy, which states that you only need two sets of hiking clothes (shirt, pants/shorts, underwear, and socks). While one pair is being worn, the other is drying on the outside of your pack after being lightly washed with biodegradable soap. Clothing for sleeping is separate, since these clothes MUST never be worn outside of the tent (to avoid food contamination). Because hiking socks are so important, having a 3rd pair allows you to change socks during the day if necessary.

Permethrin Permethrin is an insecticide that can be applied to clothing without damaging them (whereas DEET should not be used on clothing). Treating your clothing with permethrin before the trip will lessen your need for insect repellant and is effective at repelling ticks. Sawyer makes a spray that can be used for clothing and is available at REI. Otherwise, there are many articles on the web that talk about the safety of permethrin and methods for applying it to your clothing.

Upper Body Layers					
Equipment	Quantity	Comments	Wt. (oz)	Check	
Long-sleeve lightweight shirt	1	Moisture-wicking, not cotton. Nice to have when starting out in the morning and to provide sun protection when needed. A collared shirt can protect your neck from sun.			
Short-sleeve lightweight T-shirt	2	Moisture-wicking, not cotton. Nice to have while hiking in warmer afternoons. Your Troop 8 Philmont T-shirt should be one of these shirts.			
Lightweight long underwear top	1	A base layer for cold days. Can be worn under your hiking shirt. An insurance layer for cold evenings.			
Thin fleece pullover or sweater	1	Any secondary thin fleece layer. This is your "middle" layer.			
Synthetic jacket	1	Should fit over other layers. This is your "top" warmth layer.			
Rain jacket with hood	1	Waterproof and durable. Should fit over all layers. Gore- Tex (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	Wt. (oz)	Check
Hiking shorts	1-2	Shorts are the best option for hiking in hot weather. If your long pants can convert to shorts, then a second pair of hiking shorts is not necessary.		
Underwear	2-3	Synthetic (not cotton) is recommended for its drying capabilities. Cotton underwear will not dry when it gets wet.		
Quick-dry long pants	1	Zip-off pants are a good choice, as they can function as pants and convert to shorts (replacing your 2 nd shorts)		
Lightweight long underwear pants	1	A base layer. Can be worn under your hiking pants on cold mornings. An insurance layer for cold evenings.		
Rain pants	1	Waterproof and durable. Gore-Tex (or similar) is nice, but quite expensive and not essential.		

Footwear					
Equipment	Quantity	Comments	Wt. (oz)	Check	
Boots	1 pr	Sturdy with excellent foot and ankle support. Lightweight			
		synthetics (some with waterproofing) work as well as			
		leather. Well broken in with your chosen socks.			
Socks	3 pr	Medium wool or synthetic - additional pairs useful for			
		swapping during the day and for the campsite.			
Liner socks	3 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	Lightweight sneaker or another light shoe (Crocs) with			
		closed toe for the campsite. No flip-flops, as these do not			
		protect your feet. Worn with socks.			

Head, Neck, and Hand Layers					
Equipment	Quantity	Comments	Wt. (oz)	Check	
Baseball cap or wide-	1	To protect ears and face from the sun. Baseball caps do not			
brim hat		provide good sun protection for your ears.			
Light wool/fleece	1	Anything that will cover your ears, for colder			
hat or balaclava		temperatures.			
Glove liners/mittens	1 pr	For those cooler nights in camp. Light synthetic or wool,			
		should not designed for winter weather.			

Packs and Bags					
Equipment	Quantity	Comments	Wt. (oz)	Check	
Backpack	1	Internal or external frame (65-85 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. Usually comes with lashing straps to tie additional gear below and on sides. Rentable directly from Philmont.			
Pack cover	1	Removable and waterproof for when it rains. Should fit over the pack and any items lashed to it.			
Summit Daypack	1	For side and day hikes. May be shared with buddy.			

Sleeping Equipment				
Equipment	Quantity	Comments	Wt. (oz)	Check
Sleeping bag	1	A synthetic bag rated to 20 degrees F and between 3-5 lbs. Down bags are not generally recommended, as they lose their insulating value if they get wet. Should pack reasonably small inside a stuff sack.		
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 acceptable.		
Sleeping bag compression stuff sack	1	A waterproof stuff sack is recommended. A compression stuff sack will help reduce the size of your sleeping bag and make packing easier, particularly for smaller backpacks.		
Sleeping clothing	1 set	Worn ONLY in the tent/sleeping bag (and packed with the sleeping bag) - T-shirt and gym shorts acceptable.		

Miscellaneous Items (Smellable Items for Bear Bag)					
Equipment	Quantity	Comments	Wt. (oz)	Check	
Water bottle (1L)	1	For use with drink mixes. Designate only ONE water bottle for this purpose, with 3 additional bottles (3L) devoted only to water (see below). Can be Nalgene or larger disposable water bottle (Gatorade). Mark it so it is easily identified (or pick a special color). Total personal water capacity 4L.			
Bandana/Tubular head gear	2	Bandanas or headgear known as Buffs work well - there are many brands on the market.			

Lip balm	1	Moisturizing balm with SPF 25 or greater. For personal use	
	1		
Soap, biodegradable	1	Concentrated 1.3oz (can use Philmont-supplied if desired)	
Toothbrush	1	Small travel size works well.	
Toothpaste	1	Travel size (0.85oz), or share with buddy	
Personal medication	N/A	A First-aid kit is carried by an Adult leader, but each Scout	
		is responsible for their own prescription meds (which must	
		be documented on the medical form).	
Washing bag	1	2 Gal. Ziploc freezer bag for washing clothes on trail. Part	
		of the "wear-one / wash-one" philosophy.	
Clothes pins	2-3	For attaching wet/washed clothing to the outside of the	
·		backpack to dry. Can use any rigging system you choose.	
Stuff Sack	1	To hold all "bear bag" items listed above. Keeps your items	
		together when placed in the larger group bear bag at night.	
		Put your name on it to quickly identify.	

	N	Aiscellaneous Items (Not Smellable)		
Equipment	Quantity	Comments	Wt. (oz)	Check
Bowl	1	Deep bowl made of lightweight material. Most meals are "stew"-like and plates are impractical. A full mess kit is unnecessary and too heavy.		
Mug/Cup	1	Made of lightweight material. Nice to have measuring units on it (12-20 oz).		
Spoon/Spork	1	Lightweight (Lexan). Sporks, which combine the characteristics of a spoon and a fork, are popular		
Water bottle (1L)	3	For extra water carrying capacity. NEVER to be used with drink mixes. Hydration bladders also work well (3L). Total personal water carrying capacity 4L.		
Pocket knife	1	Small, folding and lightweight. Mostly to open packaging, so leave the Swiss-army style or big buck knife at home. Can be shared with buddy if desired).		
Headlamp	1	For night time. LED lamps are quite small and run on smaller, lightweight batteries. For around camp at night. Put fresh batteries in it before the trip.		
Sunglasses	1	Any good quality sunglasses with 100% UV protection will work. The sun's intensity at altitude is very high. If you wear prescription glasses and have impaired vision without them, bring prescription sunglasses with a high-quality keeper strap.		
Prescription glasses	1	Bring a spare set if this pertains to you. With a high-quality keeper strap.		
Small camp towel	1	Small and quick drying. Synthetic chamois or similar (certainly not cotton).		
Survival Whistle	1	Lightweight plastic for emergency signaling		
Wristwatch	1	To keep track of hiking stop/start intervals and planning.		
Stuff Sack	1-2	To hold above miscellaneous items (except water bottles). It is nice to have items you'll need for eating and the evening activities available in one place.		

Optional Gear				
Equipment	Quantity	Comments	Wt. (oz)	Check
Trekking poles	1 pr	For those that like them. Can reduce impact to knees and ankles and improve balance. Must fold or retract for transporting on an airplane.		
Camp chair	1	Allows one to not have to sit on the ground, but lightweight ones are very expensive. A small insulated pad for sitting on the ground also works well.		
Camera	1	Small, light, durable, and waterproof (or with waterproof case). Not everyone on the trip needs to carry one, so share. DSLR cameras are far too heavy for backpacking.		
Notepad and pen	1	If you want to keep a diary of the trek.		
Small book	1	If you are someone who likes to read a lot. With all the activities at Philmont, opportunities to read are few.		

Notes:

- 1) Items prohibited on the trail include: deodorant, radios, CD/MP3 players, video games, hammocks. They may be part of the pre- and post-travel, but not while on the trail.
- 2) Cell phones: may be brought for the trip to/from Philmont, but may not be brought on the trail. A cell phone in "airplane" mode makes a poor camera and will quickly run out of battery. Cell phone service is spotty and there is no place to recharge it.
- 3) Backpacks on the airplane: Your backpack should be packed such that it is not needed until we get to Philmont BaseCamp (see Blue Sky packing list for the pre- and post-trip needs). Place your backpack in a large duffel bag or nylon commercial laundry bag so that it can be transported in the luggage compartment of the airplane without being damaged.
- 4) Bring a small carry-on with toiletries, medications, sunscreen, rain gear, fleece, bathing suit (there is a swimming pool at the hotel), travel clothing, towel, etc. Think of this trip as a two-part adventure, where you have a small carry-on to deal with the pre- and post-portions of the trip and a large duffel bag containing your backpack and Philmont-only clothing/gear. When we get off the trail, you'll switch back to your small bag clothing/gear. You don't need much, but you should probably not be wearing your trail clothing AFTER we get off the trail. Remember liquid limits for carry-on items.
- 5) While traveling, everyone must wear their Class A uniform and boots (to ensure that they are with you...put any comfortable shoes in your carry-on for the post-trip travel).
- 6) Travel money: Philmont states that campers spend an average of \$100 at the trading posts. There are also limited opportunities to purchase snacks and small items while on the trail. \$20-\$50 (in small bills) should cover most expenses on the trail.