

Equipment Tips & Advice

These equipment tips and advice are based on the experience of Philmont staff and participants. Take this information into account when selecting your equipment.

Packs and Frames

A sturdy pack and frame are essential for backpacking at Philmont. All of your personal gear, plus your share of food and crew equipment, must fit inside your pack. Although a good pack and frame may be expensive, cheap models tend to tear at the seams and crack at the welded joints. If you already own a pack and frame, be certain there are no cracks in the welded joints or unraveling seams on your pack.

A padded hip strap is essential for your pack. A hip strap allows you to take the weight from your shoulders and put it on your hips, which can support more weight than your shoulders.

To keep your pack dry at night and while hiking in the rain, a nylon cover is recommended.

All items in your pack should be neatly organized and packed in plastic bags. Additional bags may be used to carry small packages of food or to organize miscellaneous items.

If you do not have a good pack and frame with padded hip strap, or do not expect to use them after your trek, you are encouraged to rent an external frame pack at Philmont for \$18.

Be Prepared for Extremes of Weather

Be prepared for extremes of weather at Philmont. Afternoon temperatures in low valleys can be 100 degrees or more, and night temperatures high in the mountains may be cold enough to freeze a thin crust of ice on water.

Philmont can be dry as a desert and then a sudden downpour will soak everything. Prolonged periods of rain lasting several days occur frequently. Fortunately, New Mexico's low humidity allows wet clothing and gear to dry quickly after the rain stops. Rain occurs most frequently in the afternoon and may last an hour, all night, or several days.

Small hail or sleet often accompanies rain. Snow is possible, even during the summer. Weather conditions vary from one area of the ranch to another depending upon elevation, terrain, and irregular weather patterns. You should be prepared for all of these weather conditions.

Clothing

During cold periods, it is especially important to stay dry because wet clothing loses much of its insulating value (90 percent or more). Several light layers of clothing are better than one heavy layer since air trapped between layers of clothing provides a high degree of insulation. As the atmosphere warms, you can remove one layer of clothing at a time for proper body heat management.

Keep in mind that wool and polypropylene insulate when wet. Down and cotton lose most insulating value when wet. Cotton layers such as sweatshirts and sweatpants drain body heat when wet and dry very slowly.

While the official BSA uniform is highly recommended for use when traveling to and from Philmont and wearing at base camp, you may choose to wear other clothing on the trail. Long pants are recommended for cold nights and are required for horseback riding and pole climbing at logging camps. Shorts and short-sleeved shirts will generally be sufficient during the day; however, a sweater or warm jacket is necessary for cold mornings and evenings and frequent downpours of rain or hail.

To be comfortable and dry during rain, a good quality rain suit (jacket and pants) is essential. Inexpensive vinyl rain suits or ponchos will not hold up under extended use.

Boots and Socks

WWW.Scouting.org

A quality pair of broken-in hiking boots is a necessity at Philmont. Your trek may cover uneven rocky areas with many steep trails. Well broken-in boots that fit properly will keep you comfortable and prevent injuries.

When fitting boots, try them on at the end of the day when your feet may be a little larger. Use the same socks you will hike in. With your feet in the boots and laces loosened, you should be able to place two fingers behind the heel. With your socks on and your laces fully tightened, your toes should not touch the end of the boot while standing on a 30-degree incline. Don't be surprised if your boot is one size longer and one width wider than your shoe size. Hiking boots for Philmont should be 6 to 8 inches high with a sturdy sole. Be sure to treat your boots for wet weather.

Two pair of socks will be more comfortable and prevent blisters. The two pair should not be made of the same material. Wear a thin inner sock liner and a heavier outer sock. Advisers might consider a knee-high inner sock with 8 to 12 millimeters of compression. Wool blends work very well for the outer sock. Socks made of new materials are available that are worn as a single sock.

Labels

Be sure to label all of your clothing and equipment with your name and expedition number so you can readily identify what is yours and so any of your belongings lost and found can be retrieved.

Glass and Aerosol Containers

No glass containers or aerosol cans should be carried on the trail. Glass breaks easily and aerosol cans are bulky and may spew forth in packs.

Money

Campers spend an average of \$100 each in Philmont trading posts. If major items such as jackets are desired, more will be needed.

About \$20 should cover most expenses on the trail. Money taken to the backcountry should be in small bills. These expenses may include:

- Shotgun and .30-06 rifle shooting. The first three shots are free. Additional rifle or shotgun shots must be purchased.
- Youth 10-day fishing license for ages 13-17. The cost is determined by the state of New Mexico (about \$1.50). The license applies only to Philmont property.
- Adult fishing license, one-day, five-day, or annual. The cost is determined by the state of New Mexico (about \$9, \$17, \$45 for non-residents). Most adults opt for the five-day license, which can be purchased in the backcountry. This requires bringing your driver's license with you on the trail, however.
- Candy, root beer, film, replacements for damaged equipment, etc.
- Fuel for stoves

Sleeping Bags

Your sleeping bag should be warm (suitable for temperatures down to 25 degrees) but not bulky or heavy. If your sleeping bag may not be warm enough, long underwear and a stocking cap will increase your comfort on cold nights. When your sleeping bag is packed, it should be no more than 20 inches long and 10 inches in diameter, and it should weigh five pounds or less. Use a waterproof sack to store your sleeping bag and line the sack with a heavy-duty (4 to 6 mil) plastic bag safely secured to keep your sleeping bag dry even in wet weather.

Camera and Film

Although optional, a camera and film are rewarding to record memorable experiences and beautiful scenes. Some crews select a crew photographer who takes shots for everyone. Another weight-saving scheme is for several crew members to share a camera and have duplicate pictures made at home. If you have one set developed first, you can sort out poor photos before having additional copies made. You will save money as well as weight.

Backpacking Stoves and Fuel

Philmont requires using backpacking stoves. They will save time throughout your trek, particularly on wet mornings or when you need to start hiking early to avoid high afternoon temperatures.

You must bring your own stoves. Philmont trading posts carry white gas, max fuel, stoves, and spare parts. If your crew uses butane, plan to carry the empty cartridges with you since they create a hazardous disposal problem in the backcountry.

Backpacking stoves must be used with adult supervision and should never be used in or near tents because of the excessive fire danger. Bottles designed for fuel (available in the Philmont trading post) should be used to carry fuel. For safety, fuel may be purchased at Philmont rather than carrying it from home. Check the gaskets of your fuel bottles to make sure they will not leak. A small funnel is needed for easy transfer of liquid fuels. If using commercial transportation, check with your carrier regarding regulations for shipping stoves.

One stove per four persons is generally best. Learn and follow these safety tips:

1. Keep fuel containers away from hot stoves and fires. Never use fuel to start a campfire.
2. Let hot stoves cool before changing cylinders or refilling.
3. Never fuel or operate a stove in a tent, building, or dining fly.
4. Place stove on a level, secure surface before operating.
5. When lighting a stove, keep fuel bottles and extra canisters well away, do not hover over stove, open fuel valve slowly, and light carefully. The pressure differential is greater at Philmont's high altitudes.
6. Refill stoves away from open flames. Recap all containers before lighting stoves.
7. Do not overload the stove.
8. Do not leave a lighted stove unattended.
9. Perform stove maintenance regularly, at home and at Philmont.
10. Store fuel in proper containers.
11. Carry out empty compressed fuel containers; they will explode if heated.
12. Use stoves only with knowledgeable adult supervision.

Overpacking

When deciding what equipment to bring to Philmont, always consider each item's usefulness, durability, weight, and bulk. It's always best to travel light. Remember that you are only packing for 10 days on the trail. It has been said that "An ounce in the morning is a pound at night."

Before your crew departs Camping Headquarters for the backcountry, a shakedown will be conducted to eliminate unnecessary items. These items may be stored in your vehicle or in a locker at Camping Headquarters during your excursion.

Navigation

A liquid-filled compass is recommended for every two crew members. If the crew brings a GPS unit, you may wish to program the coordinates of trail and staffed camps on your itinerary from the [UTM Coordinates](#) [PDF]. These coordinates are accurate to within 20 meters.