

PHILMONT COOKING METHODS

Cooking methods at Philmont Scout Ranch have evolved quite a bit over the 80+ years the ranch has been in operation. This time has allowed Philmont to find the methods that work best to ensure crews have a positive life-changing experience, while also ensuring the overall ranch operation remains sustainable for future generations. This document lays out the requirements for any cooking method at Philmont as well as the primary method that the Philmont Rangers and other staff teach to participants taking part in backcountry experiences.

It is important to remember that the cooking method that Philmont staff teach is an institutional/expedition-style cooking method which is more efficient for large groups and tailored to the western mountains. This may vary significantly from methods utilized in thru-hiking, solo/small-group backpacking, or trips to other geographic areas. Philmont staff and administration have tested many different techniques shared in forums, social media groups, and Philmont enthusiast websites in varying landscapes and conditions throughout the ranch. However, we still believe the method that is taught by our staff and listed below is the best for our overall operation and the Aims & Methods of Scouting. This method is also similar to those often utilized by other institutional/expedition-based programs in the industry like NOLS and Outward Bound. More information about Philmont backpacking methods can be found in the [Philmont Shakedown Guide](#).

Requirements for Cooking Methods at Philmont

If a cooking method can meet these requirements, it is likely welcome at Philmont. The cooking method must:

- Be Safe & Stable
 - Mitigate risk of burns (from boiling water, hot food, fuel, or stoves)
 - Mitigate risk of foodborne and waterborne illness and communicable disease
 - Mitigate risk of chemical contaminants in food (leeching)
 - Reliable at varying elevation, temperatures, humidities, and environments
- Follow the Principles of Leave No Trace, in particular:
 - #1 Plan Ahead and Prepare: Follow the policies of the landowner
 - #3 Dispose of Waste Properly
 - #4 Minimize campfire impacts
- Promote the Aims & Methods of Scouting
 - Leadership Development – Crew leader, cook, dishwasher, etc.
 - Ideals – A Scout is Trustworthy & Obedient – Doesn't break the rules because no one is watching
 - Patrol Method - Brings the crew together to communicate and bond over a shared meal
- Minimize waste
 - Does not bring additional disposable waste (plastic bags, etc) into the backcountry
 - Minimizes food waste
 - Allows for the easy recycling of as many items as possible

Philmont Cooking Method

Below are the steps of the cooking method taught by Philmont staff. A video of this method can be found here:

https://youtu.be/UA_Q1ZnJDvQ.

- All cooks wash or sanitize their hands and ensure all crew cooking gear is clean and ready for use
- Fill a 6-8-quart straight sided pot with 4-6 quarts of water (depending on pot size)
 - Two [ACE Camp Tribal 8L](#) pots are provided by Philmont (with at least one lid)
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- Bring water pot to a boil utilizing a liquid or cannister fuel stove with a low & wide base.
 - [MSR Whisperlite](#) (regular, international, or universal), Optimus Vega, [MSR Dragonfly](#), and MSR WindPro II are popular options
- Add all entrée components into one lightweight 8-quart straight-sided cooking pot
- Utilizing a pot lifter or multi-tool, completely submerge all eating utensils and dishware in boiling water for at least 3 seconds
- Pour enough boiling water into cooking pot to just cover the dehydrated food
- Stir, then add more water as necessary (based on package instructions and preference)
- Cover and allow to rehydrate for the time recommended on the packaging (or until all food has softened)
- Encourage crew members to only take what they can eat and to eat as much of the food and sauce out of their personal dishware as possible
- Add biodegradable soap to hot water and utilize a piece of scrubby pad (cut pad into smaller pieces) to wash and rinse personal dishware followed by cooking pots
- Once all dishware and pots are free from food residue, pour dirty dishwater, while using strainer to catch food particles, into the campsite sump
- Pack out all food particles and any uneaten food in a zip top bag

Alternative Equipment & Methods

Rehydrate/Heat in the Gusseted Foil-Lined Bag (most Mountain House & Alpine Aire meals) – Not Recommended

Considerations/Reasoning: Philmont does not prohibit the rehydrating of meals in their bag AS LONG AS THEY ARE DESIGNED FOR THIS PURPOSE. Not all entrees provided by Philmont come in bags which can be reheated in (and changing all meals to rehydrating bags would be cost prohibitive and increase waste). Most Mountain House and Alpine Aire options come in a GUSSETED FOIL bag which has a stable base, wide mouth, additional headroom, and a foil liner which prevents melting and seepage of chemicals into food. However, this method is not recommended as it leads to increased burns from boiling water, food waste stuck in the corners of the bag, and prohibits Philmont from being able to recycle the bags. Because each bag contains food for two, for hygiene/food safety reasons they should be emptied into a personal bowl/mug (thus negating most cleanup efficiencies gained)

Rehydrate/Heat in standard packaging (Backpacker's Pantry, stuffing & all other entrees) – PROHIBITED

Considerations/Reasoning: BOILING WATER MUST NOT BE Poured INTO BAGS THAT ARE NOT COMMERCIALY MADE FOR THE PURPOSE OF REHYDRATION. This is extremely dangerous and has led to many Scouts and Advisors being taken to the infirmary for serious burns. Bags that are commercially made for this purpose have extra headroom for the added water, have foil-lined interiors (to prevent melting and/or leeching), and have gusseted bottoms so that they can stand upright without additional support. The use of commercially produced or DIY pouches, cozies, or other devices still does not address these concerns or make this practice safe.



Serious burn on foot from poured boiling water - This will quickly end a participants' trek

Rehydrate in individual containers (Cold-Soaking) – Not Recommended

Considerations/Reasoning: Cold-soaking dehydrated food, a method sometimes utilized by individual thru-hikers, is not practical at Philmont Scout Ranch. This method does not effectively mitigate risks from foodborne illness/communicable disease through sanitization of eating utensils/dishware. If water is being boiled to sanitize and clean dishes, it might as well be utilized to heat and rehydrate meals. This method also does not promote the patrol method through a daily shared meal experience (and the leadership/responsibilities associated with it).

Boil in Turkey/Ziploc Bags – PROHIBITED

Considerations/Reasoning: Cannot be easily cleaned and therefore introduces a large amount of unnecessary smellable plastic waste (which overloads already overstrained backcountry trash collection). May lead to melting/leeching of plastic. Difficult to retrieve from water.

Integrated Cannister Stove (Jetboil, MSR Windburner systems, etc.) – Not Practical as Primary Stove

Considerations/Reasoning: Integrated cannister stove systems can be a great supplemental stove for quickly heating up enough water for hot drinks or preparing meals for those with strict dietary restrictions while also serving as an emergency backup if the primary stove fails. However, the integrated pot/cup cannot heat enough water for the rehydration of a full crew's food, requiring multiple inefficient boils or crew not being able to eat at the same time. The utilization of adaptors leads to an extremely unstable stove surface for any

size of pot to boil water safely. Additionally, overfilled vessels can boil over onto the control/shut-off leading to scalds/burns.

Ultra-Compact Cannister Stoves (MSR PocketRocket, SnowPeak GigaPower, BRS-3000T, GSI Pinnacle, etc.) – Not Practical As A Primary Stove

Considerations/Reasoning: Similar to integrated cannister stoves, compact cannister stoves can be a supplemental stove when carefully paired with a SMALL lightweight pot or metal mug for hot drinks or separate preparation of meals for those with strict dietary restrictions. It can also be a backup in case of the failure of the primary low, stable, full-size stove. However, when these stoves are placed on top of a fuel cannister they are not a stable platform to boil the large quantities of water required for a crew of 8-12. Additionally, the control/shut-off is generally located under a hot pot of boiling water, which can lead to scalds and burns. 1-2 large, stable stoves, split between a crew of 8-12 ends up being lighter than 4-6 ultracompact stoves.

Alternative fuel stoves (alcohol, solid fuel, or natural fiber) – PROHIBITED

Considerations/Reasoning: Stoves which utilize alcohol, solid fuel, or natural fiber (wood, etc) are prohibited for use at Philmont for a variety of reasons. First, only liquid fuel stove are permitted to be used on most USFS, state, and private land during fire bans. Additionally, these stoves utilize advanced techniques beyond what is taught at Philmont, they lack the ability to be turned off when needed, they often lack the power to boil water in a 6-8-quart pot, and the wide variety of fuels cannot be readily provided at Philmont backcountry camps/commissaries (only white gas and cannister fuel are readily available in these locations).

Alternative Cooking Pots (Collapsible, smaller volume, etc) – Not Recommended

Considerations/Reasoning: Philmont strongly recommends the use of at least one 8-quart pot for preparing backpacking meals on the trail. Limited quantities of smaller (4 and 6 quart) pots are available from Outfitting Services upon request for the second pot. Some crews may opt to bring their own made of lighter-weight materials. Please keep in mind that while an 8L pot may seem large and heavy, these pots are split between a crew of 8-12. Each crew member or buddy pair carrying their own metal pots/mugs will end up being heavier than carrying 2 large pots split between the crew. It is also worth noting that smaller volume pots with less headroom are more likely to lead to spillage/burns. This is even more the case with collapsible pots made of silicone (with hard bottoms) or other materials.