

Weight Reduction Hints (A "Conversational" Guide for Advisors and Crew Chiefs)

One of the most important keys to an enjoyable Philmont trek is packing light. Crews that have lower average carry weights hike faster, arrive at their destinations sooner, and still have plenty of energy and enthusiasm for scheduled programs, camp chores, and "unscheduled activities" such as side hikes or informal staff-run games and/or staff-run evening campfire programs. Crews with lower average carry weights can also consider adding additional miles, camps, and (possibly) programs to their treks, thereby enhancing their Philmont experiences. [For example, my 2007 Crew added 25 miles and 2 extra programs to that year's Trek 32, resulting in a 107 mile trek.]

In the most extreme case, a full-sized 2021 Crew (12 members) could leave Basecamp with 3 days of food and 3 liters of water, at about 35 pounds average carry weight. However, this would require every weight reduction trick in the book, including minimal clothing and elimination of every single "optional" item on the equipment list, and in my opinion such a hard-core approach would likely have a negative impact on a Crew's Philmont experience - and it could approach a Health and Safety violation if the weather was particularly uncooperative. That's neither desirable nor smart.

The Troop 111 "record" for average carry weight at Philmont was 34 pounds, achieved in 1995 (12 man Crew). We could not match that record today because Philmont food packages now weigh considerably more (as a guestimate, about 50% more than in 1995), plus there are additional requirements for the Crew to carry a 2nd bear-bag rope and carabiner, and for each trekker to carry a 4th canteen and a set of "sleep clothes" (clothes worn only inside your tent for sleeping). The additional food is the #1 cause for the jump in average carry weights. A "non-Philmont" contributing factor is the increasing popularity of internal frame backpacks, many of which weigh 1-3 pounds more than their equivalent external frame backpacks. In contrast, only a few technological advances have resulted in weight decreases, and most of these are minor: Digital cameras (no need for 40 rolls of film), digital recorders (no notepads), lighter rainsuits, lighter canister-type stoves, and lighter Sil-Nyl tarps, etc. In my opinion, a 35 pound average (today) would represent quite an achievement, and a 40 pound average is a more rational, achievable goal. This is not to say that this goal would be easily reached - you would really have to work for it. But (as noted in the first paragraph) it's worth the effort.

**As a point of contrast, off the top of my head the current average carry weight at Philmont is about 55 pounds, and a significant number of Crews exceed 60 pounds average.** That's just painful.

Given that rather long preamble, the basic tenets are as follows:

- (1) Absolutely Minimize Personal Kit
  - \* Minimize *amounts* of items
  - \* Minimize *weights* of items
- (2) Eliminate/Minimize Duplicative Gear
- (3) Minimize Crew Gear except where necessary to Maximize Versatility
- (4) Meal Strip where possible
- (5) Be Conservative but Rational on Fuel and Water

At this point, it would be useful to review my Equipment Lists I and II (in this way, the following discussion will proceed from an existing basis of knowledge).

The first hint was “Absolutely Minimize Personal Kit,” by minimizing *amounts* of items, and minimizing *weights* of items. A couple of comments: No-one is allowed to bring anything beyond the line of asterisks on page 3 of List I. **I hold no patience with the attitude that “I want to bring it, and I’m willing to carry it, therefore I’m bringing it.”** Sorry, no way. Because we at least start out with everyone carrying proportionally equal weights (see next paragraph), this is an immature and selfish attitude which causes everyone’s carry weight to go up, and can result in real problems if one or more Crew members come down sick or injured on the trail and need to have weight taken off. And no, I’m not willing to try and keep track of everyone’s personal “extras” and weights thereof - that’s idiotic. Crew first – your personal desires and/or machismo a long way second.

“Proportionally equal weights” mean bigger or stronger guys carry heavier packs, medium guys carry average packs, and small or weaker guys carry lighter packs. The preliminary divisions are based in part on the shakedown events, but Philmont altitude can scramble those arrangements. Altitude can bring strong men low. It usually only takes a day or two to determine who’s not doing so hot, and you can therefore shift items in order to better match up carry weights with the actual abilities of the individual Crew members. ***This weight re-distribution falls apart if the Crew members feel that they’re being forced to carry someone else’s unnecessary crap!*** However, when everyone knows that everyone else has also worked their respective butts off to minimize weight, then weight shifting is accepted as the best way to maximize hiking speed and overall Crew comfort, and the stronger hikers will actually volunteer to carry extra “for the Crew.” Troop 111 usually has fast Crews on the Ranch, because we’ve kept our weights down, and once on the trail we quickly matched everyone’s carry weights to their actual (that is, their high altitude) capabilities.

Next, we repeatedly weigh everything, starting from the very first equipment meeting and ending as we’re loading the packs into the vans (the night before) for the drive to the airport. We use digital scales for accurate measurements. This is necessary in order to get everyone: (A) Educated; and (B) Continuously focused on weight. Comments: It never ceases to amaze me what Scouts (and also some adults) *think* are lightweight items - many of which weigh a ton! This is why it’s necessary to use scales. Some of the most egregious examples are sneakers, daypacks, raingear, sleeping bags, eating gear, and larger items of clothing (pants, long-sleeve shirts, etc.) In addition, most Scouts have no clue as to lighter weight substitutes - for example, 1 liter water bottles instead of canteens. I hammer it to death: “If you worry about the ounces, the pounds will take care of themselves.” “If in doubt, chuck it out.” “An ounce in the morning is a pound in the afternoon.” My favorite way of putting this concept into words is: “When you’ve cut your toothbrush in half, you’re just about where I want you. When you’re also seriously considering splitting it down the middle, you’re there....” It is routine for Troop 111 Crew members to cut 5 pounds, common to cut 10 pounds, and occasionally to cut 15 or more pounds, from their original kits.

The types and numbers of items on our equipment list (Lists I and II) have evolved over the years. At this point, we’re reasonably happy with it - generally, we will use every single item, multiple times, hopefully excepting the possibles (repair) kit and most of the First Aid stuff. Virtually nothing else sits unused in the packs for 10 days. Of course, we encourage clothes washing at every opportunity, so our minimal clothing is usually reasonably clean. [Note that washing clothing appears to be a foreign concept to many Crews, and I’ve seen a lot of Scouts in other Crews carry lots of extra clothing in the name of having clean stuff at the end of the trek - ridiculous!]

Conversely, however, we have never “gone grunge” (i.e., brought only one set of clothes, and never washed it or ourselves) in order to save weight, and I certainly don’t recommend anyone else do so. In fact, we will add a few items to maintain Health and Safety if conditions are expected to be less than optimal. There are two factors here - First, as was noted in the List I Appendix, the monsoonal flow over New Mexico starts in mid-to-late July, with a dramatic increase in the probability of rain. Second, the higher number treks (i.e., the more mountainous ones that Troop 111 tends to favor) are generally rainier and certainly colder on average than the lower number treks. Obviously, these factors tend to encourage use of somewhat better (i.e., warmer and more rain-resistant) gear, and a little more of it, too. No-one wants to be wet and cold their whole trek - including me. I personally use the number of high altitude campsites (at or over 9,000 feet) to define “mountainous” in this context; these are the ones where morning temperatures in the 30's and low 40's are routine, especially in June. If I've got more than 4 high altitude sites, we'll go a little warmer on gear (e.g., encourage bringing thermals, a thicker fleece, a thicker headband, etc.). With respect to prevailing weather, treks starting either in late June or up to about July 10th can go with the minimum, while treks starting after July 15th should bring that 4th set of clothes. Yes, I pay very close attention to the Weather Channel on this, keeping an eye on the prevailing flows over New Mexico - and at least once in my career the monsoon started in late June/early July, and we had 6 days of heavy rain during that trek.

On to “Eliminating/Minimizing Duplicative Gear.” This is where we probably do far better on reducing average carry weights than most Crews. The following discussion will make a little more sense if I differentiate between “Personal” gear versus “Group” gear.

“Personal” gear are *items that most Scouts have been taught to carry on every camping trip*, that is, the classic LISTS in the Scout Handbook, Field Guide, other camping books (including the Philmont Guidebook!), and provided by most Troops (including 111) and camping stores. Knives, maps, compasses, etc. You may have noted that ***none of these items were included in List I*** (i.e., above the line of asterisks on page 3), ***and no-one is allowed to bring any of these items on their own!*** This is a tough one for most Scouts, and especially for adults, because they have to “unlearn” everything they’ve been taught about going camping “properly” equipped. My term for this is “the Jeremiah Johnson Complex”; that is, I Must Have Every Single Item I Need To Go Camping. This is incorrect! - *YOU* don’t need everything - the *CREW* needs everything. Thus, we don’t carry 12 knives, 12 compasses, 12 sets of maps, 12 cameras, 12 first aid kits, 12 Bic lighters, 12 watches, 12 “possibles” kits, 12 tubes of toothpaste, 12 repair kits, etc. We take only 2 of each item as CREW GEAR, and generally as small as possible in keeping with the needs of the Crew. **This absolute edict against duplicative gear reduces our overall Crew weight by a tremendous amount.** And it doesn’t cost a thing - in fact it saves money. It does require some vigorous Crew training; we *HAVE* to stay together on the trail, and we *MUST* keep all Crew gear together, available, and secure at all campsites. We have a small equipment tarp that is dedicated to Crew gear, and everyone is trained that if you take it, you have to put it back as soon as you’re finished with it. The Crew Chief also has a cheat sheet of who has what, so if something’s missing it’s usually easily tracked down - usually someone has already borrowed it off the tarp. [By the way, one of the most illustrative sights you will ever see is an enraged Advisor “dumping” every single pack in his poorly trained Crew to find missing gear or food packets, and screaming himself hoarse at the miscreants. I’ve witnessed this twice, and heard it happening several other times.]

As noted above, common gear sharing and elimination of needless duplicates can be a tough sell, especially for older, experienced Scouts, but once they understand it and buy into it, they’ll go after it with a vengeance. Again, ***no-one wants to carry stuff they don’t need.*** The key, of course, is training them in this “new” way of doing things - which we do as part of our meetings and shakedown. By the way, **the biggest violators of sneaking additional gear are (of course) the adults.** “Just in case” has

cost a lot of adults a lot of needless pain and suffering. Adults need to recognize that Philmont is NOT wilderness; it is semi-wilderness, and staff assistance is no more than 4 hours away from virtually anyplace on the Ranch – and usually is a lot closer. There is no need for “Just in case” stuff.

“Group” gear are Crew items such as tents, tarps, cook kits, stoves, etc.) As with everything else, we try to minimize weights and numbers of items here as well, but with some compromises. For example, use of ultralight, low-profile, 2-man tents instead of Philmont tents (pretty tight, but adequate). In exchange, however, we also bring a much larger Sil-Nyl tarp than the classic Philmont rain-fly; it’s big enough for both us and our gear - but weighs much less. Thus, we have group interaction during “rain delays,” and all our gear (except the tarp) is kept dry until we absolutely need it. It’s sad seeing other Crews all isolated in their tents during afternoon rain-storms - some of my better Philmont moments have come while we’ve all been gathered together, telling stories and jokes, laughing and having a good time, under our tarp. Got lemons? - make lemonade. Similarly, we bring specialized cleaning gear, extra ground-tarps for drying pads and Crew gear (I hate laying gear in the dust, especially in the high impact campsites), our own bear-bags (all *much* lighter than the Philmont stuff), and an abbreviated set of cookware and cooking utensils. The total number of optional items our Crew pick up at Philmont in the way of Crew gear is “none,” and I’m still working to further reduce the total carry weight of what we do bring. Note that all this has cost a fair chunk of change over the years - but that’s the price for having lighter weight and higher quality gear. Obviously we have considered the price to be worth it.

The additional advantages of having and bringing Troop-owned gear are: (A) We save a lot of time at Philmont on arrival and coming-off-the-trail days, because we don’t have to check everything out or back in; and (B) Our Crew is fully trained in the use of our gear well before we ever hit the Ranch (I usually ask my Ranger to watch while the Scouts set up our first campsite; they’re usually impressed).

Finally, note that all of our Philmont Crew gear is *completely separate* from all our other Troop stuff - we use it only for Philmont shakedown and treks and similar high adventure treks. This tends to ensure everything is there and in good shape when you need it, and also that it’s all bear-safe (e.g., no dried-up soda spills, gummy-bear smears, or stray M&M’s from regular Troop campouts in our tents).

“Meal Stripping” - We “field-strip” all our meals at each commissary point - including at Basecamp - of all the items we know we won’t or don’t care to eat (that is, based on past experience *and* the desire to have all no-cook breakfasts.) Why carry it 20-30 miles to dump at the next swap box when you *know* you aren’t going to eat it, and there’s a swap box right there? Included in this list are Hot Chocolate, Oatmeal, “breakfast drinks,” half our Spreadables, one half to two-thirds of our Gatorade, and some of the less desirable meal items like the cloyingly sweet “cobblers” or items with a bad reputation (there’s always a few). Most people would object to dumping this much food (cause they’re always “starving to death”), but it’s not a one way street for us – **if necessary**, we substitute in other items for the removed items, things like Nature Valley granola bars, cracker 6-packs, dried fruits, cashews, Cup-of-Soups or Ramen Noodles, and beef jerky, etc. These are items that we purchased in Colorado for this express purpose. Because these are all dry and rather lightweight substitutes, it is routine for us to reduce total food weight by 10 - 20%, *while simultaneously increasing the amount and quality of the food.*

The meals issued at Basecamp can be supplemented there (put the stuff right in the appropriate bags, and re-seal them with electrical tape). The rest is carried in bulk by 2 (sometimes 3) people, usually the adults, as part of their “Crew gear.” [We don’t have individuals carrying “their share,” or the undisciplined will eat in all in 3 days.] The Crew Chief and Assistant Crew Chief decide whether to add stuff in at the backcountry Commissary pickups, or parcel it out at meals - that is, if a meal is thin, or if everyone is really hungry, pull an appropriate amount and add it in.

In some cases - usually if you have a Crew of real horses - the amount of food is inadequate. With the major increases in the amounts of food in the packets over the past 10 years, this is now rare. However, if the Scouts really are under-served by the amount of food, virtually all "Swap" boxes are now considered to be "Swipe" boxes, and you can pick up extra food (of all sorts) along the way, at virtually every Staff camp (just be careful that the meal packets aren't broken or old). If I observe that the Scouts are eating EVERYTHING in the meals, including our supplemental stuff, then grabbing extras from the Swipe boxes is justified - but if all they're doing is eating the sugary crap while ignoring the main meal items, then complaining how they're starving, well that's just teenager carping and bad nutritional choices, and I ignore it. Eventually they'll start eating the food they're supposed to eat.

"Be Rational but Conservative on Fuel" - You've already gotten one hint above - we never cook anything for breakfast. In fact, we always eat on the trail, after 30 - 60 minutes of hiking. This gets you out of camp quickly and cuts fuel use dramatically, because you're only cooking dinners - and you may skip one or more dinners if you have a Chuck Wagon Dinner or if you successfully trade a dinner for a lunch at the Baldytown commissary on your Baldy summiting day. In 2007 we cooked only 7 dinners on 10 trail nights. We bring 2 MSR Wind-Pro stoves, and 3 450-gram canisters, per Crew; I think we could have gotten away with 2 canisters of fuel that year, but as noted, we're being conservative. In essence you need enough fuel to boil 2 gallons of water per dinner (and if you wish to have cooked breakfasts, enough fuel to boil 3 gallons of water a day). Of course, minimizing fuel requires training the Crew to not waste fuel (i.e., have stoves roaring away with nothing on them). If I have a leftover 1 or 2 gallon pot - which happens in about half the meals - the cleanup water goes on as soon as the hot water has been added to the meal items. Otherwise, we turn the stoves down very low (not off), and get a cleanup pot going as soon as practical. Finally, in order to save additional weight I will try to give away our remaining fuel canisters when I know I won't need them anymore - again in 2007 (Trek 32), I gave them away after dinner on our next to last trail night, because we had a "Chuck Wagon Dinner" the following night at our final camp.

"Be Rational but Conservative on Water" - Philmont now requires all trekkers to have 4 liters *capacity* on water - and with good reason. However, there are many hikes where there is no need to carry more than 2 or 3 liters - these are either short distance hikes, or hikes where you'll be passing good water sources along the way. Note that we're *very* conservative on this (and you should be equally cautious, especially if you're unsure of your upcoming water sources). I don't want to pull into anyplace "dry" - but nor do I want to carry a bunch of extra water just for the exercise, either (each liter of water weighs 2.2 pounds, so this is not a trivial issue). My 2007 Crew started several long "dry" hikes with 4 liters of water, and also having just downed 1-2 liters before departing, and yet once or twice we were still down to our last half a liter each by the time we reached our next water source. Always remember, it's a desert environment, and furthermore one that has had an ongoing drought for decades now - "Be Very Careful."

Again, it's a lot of work, and a lot of training - and potentially a lot of expense, too - but if you drop from an average carry weight of 60 pounds down to 45 pounds, that makes a world of difference on the trail.

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