

How to Do More by Taking Less



My passion is inspiring and equipping more people to get outside. We do that at Gossamer Gear by providing functional lightweight and ultralight gear to make it easier for people to enjoy the backcountry. And we also provide a community to help people gain the knowledge, skills and abilities to confidently explore the outdoors. Towards that effort, I've assembled the following knowledge base to help you take that next step towards lightening your load, no matter where you are starting from.

- ❖ I'm still not totally convinced...
- ❖ I'm ready to start!
- ❖ I've done some lightening, I want to take it to the next level.
- ❖ I'm packing pretty darned light, just looking for some tips to shave those last few grams...

I'm still not totally convinced...

Okay, you're intrigued with the possibility of heading out backpacking with a lot less weight on your back. But you can't help it, maybe it's just the way you're wired, but you've got questions that you need answered before you're ready to start the journey.

- **I need to hear the benefits of going lighter.**
- **Hey, I already own a bunch of [heavy] gear!**
- **What about safety?**
- **What about comfort?**

I need to hear the benefits of going lighter.

Not everyone will experience all the benefits of a lighter backpack, but then not everyone is looking for all the benefits of going lighter. Benefits enjoyed by hikers who have lightened up include:

- Easier on the body
Even if you do manage to find the perfect backpack, with awesome padding, with a perfectly adjustable harness, compression straps, load lifters, canted waist belt, amazing frame, so that your shoulders aren't sore, you're STILL putting that load onto your poor knees and feet! Now if you're a young buck/doe, maybe you can get away with carrying 70 lbs, or 50 lbs. But after a few years, you will feel it, and the damage to your knees and ankles may already be done. Carrying less weight will make your ENTIRE body thank you!
- Allows hiking longer/later in life
Our favorite emails from customers are the ones that start out: "I thought I had given up backpacking forever when I turned 75, but now with my new light gear I am planning, and taking, trips again!" Being able to lighten your load means you can keep doing backpacking well into your 'golden years'. And what could make the autumn of your life more 'golden' than backpacking?
- You can get further into the backcountry
If you like to get away from the trailhead, and out past the crowds, having a lighter backpack will allow you to put in effortless strides that eat up the miles, and let you enjoy the solitude of the backcountry away from the hordes. If you want to see some countryside that not everyone can get to, taking less will help get you there.
- Pack more experience into a long weekend
Depending on your personal job or life situation, you may not have a lot of discretionary time. Maybe you can only eke out a 3-day weekend for a

backcountry recharge. There's nothing better to cure WDD (Wilderness Deficit Disorder) like a quick trip. Having a simple, light pack makes for quick getaways from town. A light load allows you to make the most of the time you have available, it extends your backcountry reach, and brings more of the wild within grasp.

- Permits easier off-trail travel
If you like to get off the beaten path, or have never tried it but are looking for something different than the trail experience, having a lighter load will make it easier to leave the trail and start bushwacking. A smaller load is easier to force through brush, and a lighter load makes for easier going up steep talus.
- Safer
That's right, a lighter load, even with a reduced first aid kit, can be SAFER than carrying a heavy pack with a big first aid kit! See discussion under *What about safety?*
- Less gear to keep track of
Gone will be the days when you look like a yard sale in camp, if you've pared your load down to the essentials. You will find you'll be quicker out of camp in the morning because there's just less gear to pack up. The simplicity of less gear will free you up to enjoy your surroundings more, spending less time worrying about your 'stuff'. And isn't that one of the reasons you head to the backcountry in the first place?



Hey, I already own a bunch of [heavy] gear!

Good news! You don't have to spend thousands of dollars to trim your pack weight. To be sure, to get to some of the rarified levels of lightness, some significant coin may help. But a central tenet of going lighter is taking less, making do with less. Leaving stuff at home doesn't cost anything. Some of the ways to save weight don't involve new gear (see more ideas under *I'm ready to start!*):

- Leaving stuff at home

As you analyze the weight of your gear, and think about what you actually use on trips, you'll figure out things to leave at home. Most people take more gear, clothes and food than they actually use or need.
- Looking for multi-use items

This is closely related to leaving stuff at home, above. If you can figure out that a bandanna can serve as a washcloth, bandage, prefilter, emergency hat, and towel, you can then leave some of those other items at home. Other possibilities:

 - Titanium cup that serves as plate, bowl, cooking pot, mug
 - Watch with timer, alarm, compass, altimeter, barometer, thermometer
 - Dr. Bronner's peppermint soap, serving as shampoo, dishwashing, toothpaste and deodorant
 - Hat that provides sun protection, rain protection, a headlamp (with a clip-on flashlight), and even a washbasin
- Borrow or rent lighter gear

Renting light gear is hard, since most rental operations go in for heavier, bullet-proof gear. However, depending on how old and heavy your gear is, you may find that the rental options give you a taste of equipment that is at least lighter than what you have. Another option: make friends with people who have lighter gear than you and see if you can borrow it. Often your friends who are really into lightening their load will have multiple renditions of gear as they lightened up, so you may be able to borrow what was their lightest pack right before they got one that was 2 ounces lighter. Some outfitters like [BackpackingLight](#) and [Andrew Skurka](#) run specific lightweight trips and have some gear that can be rented or borrowed.
- Make your own gear

If you can sew, or are willing to learn, there are many do-it-yourself projects that will significantly lighten your load. Many online stores have patterns or even complete kits for making your own gear. For example, the G4 pack pattern and materials is available for less than \$50 from [Quest Outfitters](#), and while the G4 Yahoo group is no more, if you have questions while you're sewing you may be able to get help on the [BPL DIY Forum](#). Making your own gear allows you to customize it to exactly what you want. Start with easy stuff like stuffsacks and tarps before moving on to backpacks and clothing. Another source for patterns and materials is [Ripstop by the Roll](#).



What about safety?

One way to categorize possible backcountry injury/illness is by three categories:

- You are going to die no matter what you brought
- You are going to live no matter what you brought (though you might be VERY uncomfortable)
- Something you brought will make the difference of you living or dying

Experience shows that very few maladies fall into the third category. Discussions with Search and Rescue (SAR) personnel reveal that most people, when found, had what they needed to be safe. They just didn't have the knowledge or experience they needed. The classic example is hypothermia, where the first thing that goes is the judgment. Victims are found dead having discarded gear that would have saved them if they knew the symptoms and treatment. Heavy packs can actually have a negative impact on safety because of:

- Increased strain on body parts
A body beat down by a heavy load is more likely to have an accident. Weary brains are more likely to make poor decisions.
- Decreased range of party
A lighter party may be able to avoid hazardous conditions, such as crossing a pass before a thunderstorm sets in. A lighter party can have someone go ahead and scout out a safer camping spot. A group of tired, heavily-laden hikers may be forced to make compromises that will impact their safety.
- Limited ability to redistribute gear
If you are in a group with everyone carrying 50 lbs on their back, and someone sprains their ankle, you have limited options. If you're in a group of lightweight hikers with everyone carrying 20 lbs, it becomes easier to redistribute the struggling hiker's load among the rest of you. God forbid, if you have a real emergency and need to go get help, you will be less tired from a light load, and better able to scoot down the trail for help.

REMEMBER! Be Smart! Never reduce your pack weight in excess of your experience.



What about comfort?

The choices you make in lightening your load based on comfort will depend on how you “do” backpacking. Which describes you better:

- I want to hike in a few miles and then base camp, for fishing or doing day hikes
Guess what? You might not bother too much about lightening your pack load! You will be happier taking in some plush sleeping pads, some warm clothes, and lots of food. Since your emphasis is on ‘camp’, you might as well make it comfortable.
- I like to walk, traveling more or less all day
Since you are happiest when walking, you will want to make choices that reduce your pack weight as much as possible, so you will enjoy the time spent walking as much as possible.

So think about how many hours a day you want to walk, whether you want to do a continuous hike or base camp, and take that into account when making choices. But if you like to hike, the greatest comfort will be created by choices that lighten your pack!



I'm ready to start!

You're a believer. You've done some reading, maybe hiked with somebody who had an amazingly light pack. Whatever the reason, you're convinced of the benefits of going lighter, you just don't quite know where to start. The first thing to remember is it's a process. Don't expect to achieve miracles right away, just start down the trail and learn and lighten as you go. One of the most powerful things you can do is to adjust your expectations. If you try to duplicate your everyday home experience in the backcountry, you are going to be carrying a heavy pack. So let's start that journey. We'll cover the following:

- [Data is your friend \(weigh everything\)](#)
- [Taking less 'stuff'](#)
- [Multiple use items](#)
- [Taking lighter 'stuff'](#)
- [The 'BIG 3'](#)
- [Knowledge is Power!](#)

Data is your friend (weigh everything)

To figure out how to get somewhere, first you need to know where you are. You need the brutal truth about the weight of your gear. Don't fall into the trap of assuming something is negligible, that's a rare case indeed. Generally, if you watch the ounces, the pounds will take care of themselves.

- Get some scales

You may be able to start this process with scales that you have around the house. But eventually you will probably end up with more than one scale. I have a kitchen scale I use for food weighing, a postage scale for most gear items, a scale that reads to the nearest tenth of a gram for really small items, and a digital hanging scale for loaded pack weights.
- Weigh all your gear

Take out every piece of gear you've taken on a trip or might take on a trip. Weigh each piece of gear, and write down the weight with the accurate description. Don't write down 'shirt', and be wondering later which shirt it was. Be sure to weigh component parts of your gear. For instance, weigh the trekking pole baskets apart from the trekking poles. Don't just put down the first aid kit at 8 oz, weigh all the pieces. Break *everything* down into its component parts.
- Weigh your pack

Get into the habit of weighing your pack before trips. Take the hanging digital scale with you, and weigh it last thing before you close the car trunk at the trailhead. This will give you a true weight, not a weight at home before you stick in a few 'just in case' items into your pack! If you have a competitive nature, you might enlist your hiking friends in this exercise also. A common way to list pack weight is 'base pack weight'. While definitions vary, generally this is the weight of the pack without food and water (since this depends on the length and locale of the trip), but including containers you use to carry food and water, all your gear including stuff generally carrying in your pockets, but not including the clothes you would normally be wearing in the middle of

the day (no rain gear, jackets, etc). Since you're just tracking your own progress, your personal definition will work if it is consistent. If you find yourself cheating, you can always go to the 'from skin out (FSO)' method, which includes ALL gear and clothing, but no food and water. The FSO weight, of course, is not quite as convenient to ascertain at the trailhead unless it is pretty remote.

- Analyze

List all your gear and the weights. If you are handy with a spreadsheet program, that is a great tool for accomplishing this list. Then you can sort the items by weight, so that the heavier stuff is on the top (or bottom). Take a look and analyze the total of your standard gear list for a trip. Most people are surprised to find how many individual items they take with them. Sometimes people look at an item of gear they always take with them, and realize they can't remember the last time they actually used it. Look at how the weights of clothes add up. Compare the weights of different options you have, like a down vest compared to a fleece vest. Spend some time looking the list over and see if you can write down a couple of observations/ideas based on what you see.



Taking less 'stuff'

So now that you've weighed everything, you have some data to start with. It's time to dive in a start figuring out practically how to take less so you can do more.

- Leave things at home

One of the easiest (and cheapest ways to reduce pack weight is to leave stuff at home! If you see something you never use but always take, consider going without it. If it's a first aid item, you will want to think carefully about it, but the same logic can be applied. Consider the ramifications of not having it, the 'worst case scenario', if you will. If you can live with that, then leave the gear at home. Consider the particulars of the trip to fine-tune your gear list. If you are heading out in the late fall, insects are unlikely to be an issue, so you can leave your head net and insect repellent at home. If you are hiking in the desert, maybe you don't need the snow baskets on your trekking poles. If you can figure out how to eat everything with a spoon, you don't need to take a fork. Taking less items saves weight.

- Take smaller quantities

The other part of taking less stuff is taking smaller quantities. You would be surprised at how quickly the seemingly minor weights of soap, sunscreen, skin lotion, and insect repellent add up. Strive to only take what you expect to use on a particular trip. Comb the travel sections of the stores you shop for small sizes or samples of products. Buy mini containers and decant products into them after labeling. You can some hard-to-find mini items like sunscreen, lip balm, pain salve, insect spray and outdoor salve at the [Gossamer Gear](#) website. Check out [Minimus.biz](#) and [Litesmith](#) for a huge variety of items available in tiny quantities. Also look for free small samples at your dentist, doctor and dermatologist.



Multiple use items

Somewhat related to taking less stuff is looking for multiple use items. If you can find a piece of gear that does more than one function, you can leave something else at home. Now, they may not be *perfect* for all the functions, but if you decide it does a serviceable job, it's a great way to lose weight. Some examples to get your creative juices flowing:

- Titanium cup

If you're willing to plan ahead and adapt, you may find that you can use the same titanium cup or pot as:

- Cup (for cold drinks)
- Mug (for hot drinks)
- Bowl (for soup, cereal, etc)
- Plate (for hot meals, as long as you don't mind if your food groups touch)
- Pot (for boiling water, or simmering food if the cup is big enough)
- Group gear (I've done trips where we both ate right out of the pot we cooked in, and neither of us took a plate or bowl)

- Watch

It may not seem like they weigh much, but carrying a separate compass, thermometer, timer, alarm, etc can add up, not to mention the hassle of keeping track of a bunch of small stuff. If you pick the right watch it can serve as:

- Watch
- Timer (to keep track of when your water is ready to drink, or how far to the next turnoff)
- Alarm
- Compass (be sure to set the declination)
- Altimeter (handy on the PCT for tracking progress and finding trail junctions)
- Barometer (for anticipating changes in weather conditions)
- Thermometer (for data points so you know how well your sleeping bag works)

- Bandanna

This is one item that won't set you back a lot of money, but carefully chosen and used, can be your:

- Bandanna
- Washcloth (use one corner)
- Towel (use everything except the one corner, hand squeegee yourself first)
- Bandage
- Hat (to keep the sun off, or as a little extra insulation)
- Handkerchief (snot of course renders some of the other uses less desirable)
- Prefilter for water
- Signal tool (if you pick red or similar color)

- Dr. Bronner's soap

If you haven't heard of Dr. Bronners, you must have lived a very sheltered existence indeed, and it's time to expand your horizons. Many hikers prefer the peppermint style. And while the writing on the bottles can provide for hours of entertainment or thought-provoking discussions, this is very concentrated, so decant into smaller dropper bottles. It's biodegradable, but use responsible Leave No Trace manners in the backcountry. This miracle soap can be used as:

- Soap (okay, no surprise there)

- Shampoo (keeps your scalp fresh)
- Dishwashing (rinse well)
- Deodorant
- Toothpaste (1 drop only for beginners!)
- Pants

It's nice to have the perfect pair of pants or shorts for every condition, and maybe your trail companions would appreciate different colors and patterns, but if you choose wisely and accept some minor compromises, you may find that one pair of pants can serve as:

 - Rain pants (obviously they need to be waterproof/breathable)
 - Sun pants (okay, not perfect, but if you mostly use shorts, and they are really breathable, they will do in a pinch)
 - Wind pants
 - Laundromat suit (on longer trips, when you're in town, it's nice to have something to wear when you're washing everything else)
 - Shorts (if you have zip-off pants)
- Hat

The right hat can provide:

 - Sun protection
 - Rain protection
 - Headlamp (with a small light clipped to it)
 - Washbasin (if it's waterproof, or with a plastic bag inside)
 - Bug protection (when it supports a head net)
- Ground cloth

A thin emergency blanket/bivy, particularly if you choose the ones that are gold colored on one side, can serve as a ground cloth, emergency warmth/shelter, and a signal tool (the gold color is not generally naturally occurring and will not look like other natural reflections from the air like the silver side will). Of course, the Gossamer Gear polycryo ground cloth, besides being even lighter and having the advantage of letting you see pebbles through it before you sleep on them, can serve as a solar still in an emergency situation.
- Sunglass tether

The Hides sunglass tether also serves as a sunglasses case, and a polishing cloth.
- Sleeping pad

Many Gossamer Gear packs are designed to use your sleeping pad as part of the pack frame. It can also serve as a sit pad during breaks. With the proper knowledge, a sleeping pad can be an important piece of first aid equipment. It can also make a cool toboggan for sliding off a snowbank into an alpine lake.
- Sleeping socks

A nice pair of fleece sleeping socks, besides providing extra warmth for your feet at night, can be pressed into duty on cold mornings as makeshift mittens. They may also make great protection for storing sunglasses when not in use.



Taking lighter 'stuff'

Once you've figured out what you can leave at home, either because the function is covered by some other multiple-use item, or you've just plain figured out how to do without it, it's time to start making sure that the stuff you *do* bring is the lightest stuff you can find, or at least the lightest you can afford. Light stuff doesn't always have to be pricey. Here's some items you might want to consider:

- Spoon
You got down to one spoon, so don't take a big metal one. Most outdoor stores sell nice lexan spoons. Many hikers prefer the feel of a bamboo spoon, but the Dairy Queen spoons are super light, and nice and long for eating out of meal bags. The McDonalds McFreeze spoon is also light, and much more durable. Keep your eyes open and see what you come up with.
- Flashlight
Thru-hikers have hiked hundreds of miles at night with a Photon Microlight. There are lots of options out there now, but consider carefully how much light you really need and what kind of features are really necessary. If you get a tiny light that can clip onto your hat, you don't need the heavy head strap. Lithium batteries are a little lighter and will last longer in the cold. With recent changes in technology, the weight penalty is not great for upgrading to the Petzl e+lite or Bindi.
- Rain gear
Frogg Toggs, Rainshield and Driducks are very breathable and very waterproof products that are quite affordable. For a more permanent solution, Berghaus makes amazingly light rain jackets.
- Footwear
Lifting boots on every step can take a toll, and minimize the benefits of carrying less weight on your back. Most lightweight backpackers use running shoes for hiking. With less weight on your back, there's also less weight on your feet. If you use trekking poles, they help with balance and can keep you from twisting your ankle. Lighter loads will allow you to be more focused on your surroundings, and being not as tired will help keep you from stumbling as much. Also, using running shoes will help strengthen your ankles. Many Gossamer Gear ambassadors are sold on the Altra trail shoes, for their zero drop and roomy toe box.
- Cup
If you're not ready to use your cooking pot for your cup, take the lightest cup you can find. You can make a thin plastic cup cut by trimming a large drink cup from a fast food place. Just make sure there is something inside it when packed, so it would hold it's shape and not crack.
- Cooking
There's a bunch of options for light alcohol or esbit stoves. And you can make your own for free!
- Water treatment
Traditional filters are heavy, and prone to clogging. Ultraviolet treatment is nice, but relies on batteries, and can sometimes malfunction. Chemical treatment such as aquamira will effectively treat water, with no waste and for a fraction of the weight. Usually mini dropper bottles can carry a 4 – 5 day supply. If you still want a filter, the Sawyer Mini will get the job done without carrying a ton of weight.



The 'BIG 3'

When you weighed all your existing gear, put it in a spreadsheet, and ranked it by weight, you probably noticed the three heaviest things were your pack, tent and sleeping bag. Since these three contribute the most to your overall pack weight, it's worth taking a look at these to shave some major weight.

- Pack

There are a number of great pack options out there, both by cottage manufacturers and mainstream manufacturers. Think about what kind of trips you are going to take with the pack:

- how long
- what kind of terrain
- season (temperatures, precipitation)
- on trail or off-trail
- arid areas (need to carry more water)

Try and stretch yourself. Just as nature abhors a vacuum, a big pack cries to be filled. If you get a compact pack, it can be a tool to help you lighten your pack load. Some of the superlight packs weigh under half a pound, and are surprisingly robust. But, as with much lightweight gear, one of the tradeoffs is taking better care of it. There are people out there doing long trips with the Gossamer Gear Murmur or similar small packs! Instead of asking how much weight a pack will carry, ask yourself how *little* weight you can put in the pack! Start with where you are. Even people starting out should be able to fit their gear in a Gossamer Gear Mariposa, which weighs less than two pounds.

- Tent

Not so many years ago, a 4 pound tent was considered lightweight. There are now so many more options. What you need for shelter depends somewhat on the kinds of trips you take, but largely upon your comfort level. You need to consider:

- size of sleeping group (1-, 2-, 3- or 4-person)
- time of year (3-season or 4-season)
- bug protection needs

You can now get a roomy, single wall tent for one person for about a pound, and a 2-person tent for about 1.5 pounds, so there's no reason to carry much more weight than that. To save even more weight, consider moving to a tarp shelter (see additional discussion under *Ready for the next level*).

- Sleeping Bag

There's a ton of options when it comes to sleeping bags:

- Down vs. Synthetic (down is lighter/warmer, as long as it stays dry, but now there is even waterproof down)
- Blanket/quilt vs. Bag
- Zipper vs. Half Zipper vs. No Zipper (zippers add weight)
- Breathable vs. Vapor Barrier
- Insulation on Bottom?
- Hood vs. No Hood

See some of the research resources listed in *Knowledge is power* to get more information in this area. In general, the lightest option is going to be down. A higher fill

power will be lighter and warmer. See some advanced sleeping bag strategies under *Shave a few more grams.*



Knowledge is Power!

One of the main things you are doing when lightening your load is trading knowledge and experience for weight. The more you know, many times the less you can take.

- Trip planning

The more you know, either from research or from traveling in the area previously, the lighter you can go. Some of the considerations:

- Location (have you been there before, or have others in the group, in the same season)
- Route (is the trip on a trail that others will be traveling, or is it in remote, off-trail wilderness)
- Who you are traveling with (what are their pack weights? How much experience to they have? Do they have any medical training?)
- Anticipated conditions (temperature, precipitation, bugs, bears, sun)
- Water (are sources plentiful? Do you have recent intel on the locations? Are there high creeks to cross?)
- Bailout points (are there locations to take out in an emergency? Do you have the maps for them?)
- Bear canisters (are they required for the area you are traveling in?)

- Books

Even in this day of internet access, books can be a great way to learn from the experience of others. Both how-to books, and books about trips taken by lightweight hikers are useful sources of information. Some of my favorites:

- Lighten Up!, Don Ladigin
- Ultralight Backpacking Tips, Mike Clelland!
- Long Trails, Liz Thomas
- Lightweight Backpacking 101, Ryan Jordan et al
- Lightweight Backpacking and Camping, edited by Ryan Jordan
- Beyond Backpacking, Ray Jardine

- Gear lists

Reviewing other people's gear lists is a great source of ideas. You get a glimpse of how they have solved the gear equation. Just make sure it's a list they have actually used, and not an 'armchair' gear list. Many trip reports online include gear lists. Often trail journal sites will include gear lists.

- Online resources

As you check out websites, you will see links to still other sites, so you can quickly bookmark a number of sites with useful information. There are also online groups and forums devoted to ultralight backpacking.

- Wilderness First Aid

You have to carry your brain when you're backpacking, and it doesn't weigh any more no matter how much you stuff into it! Packing it with information will allow you to become lighter, as you learn techniques that allow you to improvise. Most people carry heavy first aid kits that they don't know how to use. This is a case where knowledge of what to do in a medical situation is invaluable. Find the nearest provider near you, and consider taking:

- Basic first aid
- Advanced Life Support (ALS)
- Wilderness Advanced First Aid (WAFA) (usually about a 3-day course)
- Wilderness First Responder (WFR) (usually a 4 – 6 day course)

- Courses

Once great way to gain experience is to take trips with companies that provide a safe and engaging experience. It's hard to find programs that stress lightweight backpacking, but it's becoming more common. Some options:

- Wilderness Trekking School by BackpackingLight
- Andrew Skurka
- NOLS

- Teach others

As you gain a little knowledge, one of the great ways to learn more is to teach others what you have already learned! Consider volunteering for your local Boy Scout troop, get involved in the Sierra Club or other local outdoor programs, and participate in online forums.

- Hike!

There's no substitute for actually getting out there! Be an intentional backpacker. Take notes when you're on a trip (keep pen and paper handy so you jot things down as they occur to you). Record what worked, and what didn't. Note what gear other people had that seemed to work, or what food that looked tasty. Then review your notes before a hike. Have your gear packed up and ready to go at a moments notice, so if an opportunity arises, you're ready to take advantage of it. Find people with lighter packs than you to hike with, so you learn from them.



I've done some lightening, I want to take it to the next level

So you've started the journey. You've poked around on the internet, read a couple of books, and have made some changes in your gear. Your Christmas list now consists of gear that you didn't want to buy for yourself. Initially, it seemed like the weight just melted out of your pack, as you applied the principles of leaving stuff at home, finding multiple use items, taking less stuff, and finding ever-lighter options for the stuff you did take. But now you've found yourself at a plateau. You've enjoyed some big benefits from lightening up, and inspired some others along the way, but you're hungry for more. Without knowing what your base pack weight is currently, let's look at a couple of ways you might break through to a lower pack weight:

- [Make the move to a tarp](#)
- [A hard look at clothing](#)
- [Food and water strategies](#)
- [Sleeping pad secrets](#)
- [Changing your hiking schedule](#)

Make the move to a tarp

You may have traded in your heavy tent for a lighter tent, but if your base pack weight is pretty low, even the light tent is still probably a significant portion of your load. If you can jump to a tarp, you're likely to cut that weight in half! There are a number of advantages to tarps:

- More flexible

Most tarps allow you flexibility in how you set them up. You can set them up high for more headroom. If it's windy you can pitch one end to the ground to provide a windbreak. If it's stormy, you can pitch it low to the ground. In the middle of a rainy day, you can pitch it as a dining or rest fly.
- Better connection to the outdoors

If you are used to a tent, sleeping under a tarp the first few times will feel terribly exposed. You will likely find that eventually your preferences will flip, and after tarping it for awhile, you will feel terribly confined within a tent. Under a tarp, you are able to peek out under a tarp and see what's going on, and you have a better connection to the sights and sounds around you. Plus, if you need to get out in a hurry, any direction works from under a tarp!
- Builds skills

Generally anyone can set up a tent, once they figure out where to put all the poles in the sleeves. A tarp is a thinking man's (or woman's) shelter. Think of the satisfaction you'll get from arranging the perfect pitch, with varying lengths of line, trekking poles, branches, etc.

Like much of ultralight backpacking, as you take less weight, you have to use your brain more. It'll feel weird at first, but make yourself do it for a few times, and it will get more comfortable. Here are a couple of outline strategies for tarping:

- Bug strategies

OK, if you know you are going to be in an area of heavy bugs, a tarp may not be the best idea for that trip. However, there are some coping mechanisms for dealing with most situations.

- Dry camp (camp away from water)
- Camp on windward side of ridges (to catch a breeze to keep bugs at bay, and set your shelter up to grab the breeze)
- Sleep with your headnet on (wear brimmed hat to keep off face)
- Take ear plugs so you don't hear the mosquitos
- Dose with Tylenol PM so you don't hear the mosquitos
- Don't forget the DEET

○ Drainage strategies

Many people fear if they don't have a tent with a bathtub floor, they will get wet if it rains. Here again, you need to be smart when using a tarp.

- Pick your ground carefully (look for gently convex ground that drains away in all directions. Or at least, don't pick low spots)
- Where possible think about where rain that falls off your tarp is draining (hopefully not towards you, that's the plan).
- Remember that even with just a groundsheet, some water can flow under/around you. Water does not jump, so in most cases will not get up from the ground onto the top of your groundsheet



A hard look at clothing

Most people take too many clothes backpacking. Now, if you're trying for the perfect look for your Instagram feed, maybe you need a change of outfits. But otherwise, take a hard look at your clothing choices, and consider if some of the following strategies could help you reduce weight. The extreme view is that if you're not wearing every piece of clothing you have at night, the coldest part of the day, then you brought too much clothing.

- Driducks
A Driducks, or similar, rain jacket is an awesome piece of clothing. It is superbly breathable and amazingly waterproof, incredibly light, and it's even inexpensive!
- Insulation
If you adjust your hiking style (see *adjusting your hiking schedule* below), you would be amazed at how little insulation you need. When you're moving, the body generates a good amount of heat. Many early season thru-hikers hike for days through snow in just long pants and wet running shoes and keep comfortable. Once you stop, you have about 20 minutes before the wet feet start to get cold, and you either need to get into the sleeping bag, or start moving again. With a Driducks jacket sized up, you can drape your sleeping bag around you, under the jacket, and have a puffy jacket around camp without carrying any additional weight.
- Convertible pants
Convertible pants are a great solution that give you the option of natural ventilation during the warm parts of the day, but the option of sun protection, bug protection, brush protection, and, in the cool of the morning or evening, a little extra warmth. Admittedly, a super light pair of running type shorts and a really light pair of long pants could be no heavier.
- Mesh liner/quick dry underwear
For guys, a pair of shorts or pants with mesh liners provides nice ventilation, and is lighter than carrying a change of underwear. If your favorite pants don't come with mesh liners, use a pair of lightweight, washable, nylon briefs like the ones from Ex Officio (double duty as swimwear).
- Socks
For years the advice was to carry at least three pairs of running socks: one on your feet, one clean one waiting for switching out, and one that was drying from having been washed. Now, you'll have to experiment for yourself, but some people go with only one pair, and either wear them damp after washing, or hike for awhile with no socks at all while they dry. Everyone seems to have their own strategy, and every foot is different. Many hikers find they're best off with a thin nylon (Coolmax or similar) pair of socks, low cut to save weight of course. Wright makes double-layer socks that can help people prone to blisters, available in a variety of materials and weights and cuts.
- Clean clothes in car
One nice trick is to stash some clean clothes for the ride home in the car trunk. It makes for a little bit less smelly ride back, and you don't have to worry so much about how dirty or stinky you get on the trail.
- 'Bounce bag' in car
You know the feeling, you want to go as light on clothing as you can, but you're not sure about the weather. You've been watching the forecast for the projected temperatures, but there's no substitute for being at the trailhead. So instead of make your call at home, take a couple of options in a 'bounce bag' in the trunk. That way, if it looks warmer or colder than you thought, you have options for your final packing. This can

save you from putting extra weight in when packing at home, due to the uncertainty over actual conditions.

- Lightest clothes

Beside not taking too many items of clothing, you for sure want to take the lightest items you can find. For warm hats and gloves, check out Possumdown, merino or light fleece. There are a growing number of superlight down insulation pieces from Montbell and others that could help you shave a few ounces.



Food and water strategies

When you start to get the weight of your gear down, you begin to reach the point pretty quickly where the heaviest part of the load is food and water. Obviously adequate food and water is important, but since they are both heavy items, you don't want to take any more than necessary. There's nothing worse than coming back from a trip with a couple of pounds of food you didn't eat, knowing that you carried those pounds for every step of the trip! So how can you safely minimize your food and water weight?

- Calories per ounce

Make the food you carry count. I never take food having less than 100 calories per ounce, and am always looking for ways to 'goose' the caloric content of meals. Minimus.biz sells individual foil packets of olive oil that are great for stirring into meals to give them extra staying power. You can also sometimes find them at subway shops or Italian restaurants for to-go orders.
- Make it good

The food has to taste good so you eat it, otherwise it doesn't do you any good at all. Collect recipes from friends, online, or magazines. www.trailcooking.com is a great sources for ideas. Watch what others bring that seems good. For most people, variety is key, so mix it up. Take notes and review them before a trip!
- Know how much you eat

This is probably the biggest key to saving food weight. Before every trip, weigh all your food. Then weigh any food you bring back. Very quickly you will learn how many pounds of food per day you consume. If I know I'm coming out in the late afternoon and will be eating dinner on the drive home, I don't count that as a full day. Once you have your 'food number', stick to it. If you take more, you'll just end up bringing it back. Ideally I like to arrive back at the car hungry (hopefully it's not in bear country and I've been able to leave water and a snack there).

Water weighs about 8 pounds to the gallon, so it adds up quickly. You do NOT want to skimp on water, adequate hydration is key to peak performance, good decision-making, and enjoyment of your trip. Here again, knowledge is power.

- Research

If water sources are limited, the more information, that is current information, that you have, the better off you are. On the PCT in southern California, The [PCT Water Report](#) at is a great reference. If you're using the [Farout](#) guide, be sure to download comments when you have cell service, so you can see current comments on what water sources are running. Comb through trip journals, try to talk to people who have recently been where you are going, or maybe went there in a similar season.
- Monitor

The goal is to carry enough water to get you to the next source. But if you're unsure of the next source, you need to pack extra. Extra water is extra weight. Be smart about this, you don't want to get into trouble. Keep aware of the sources: are they flowing more or less than you thought? If results are different than you anticipated, adjust accordingly. Monitor your urine color to make sure your hydration levels are adequate.
- Have enough carry capacity

I like to have capacity for more water than I expect to carry, in case I need to carry for a longer stretch. Platypus containers weigh very little and pack small.



Sleeping pad secrets

I realize sleeping pads is a personal thing. I know people who absolutely feel they can't sleep on anything less than a thick air mattress, and I've hiked with guys who didn't even bother with a pad at all. If you're willing to experiment, you may be able to get by with very little pad indeed:

- Go with foam

The evazote foam used in the *Nightlight* pads is incredibly light, and a great insulator. In the longer versions, it's bulkier than an air mattress, or a combo thermarest type pad. The foam provides great insulation also. So try out foam. On the convoluted pads, some people like the bumps up, some say it's better bumps down, so try both ways.
- Contour your sleeping area

ONLY do this in a responsible Leave No Trace way, where you have sand that can be smoothed back over, or duff or pine needles that can be replaced. If you choose your sleeping area well, you can create a small crater shaped for your butt. This will spread pressure evenly, supporting the small of your back, and will let you sleep like a baby. The most comfortable night I ever had was when we camped in an area they had been chipping the lower tree limbs. There was a thick bed of wood chips, and I got the butt crater just right. I drifted off and didn't wake up until the sun was streaming in my face!
- Lumbar wad

Sometimes you're not in an area where you can create a butt crater. In those cases, I like to wad up a small piece of unused clothing. A Driducks jacket works well. If you're not in bear country, some food items or even trash in a double ziplock can work. You toss this into your sleeping bag, then when you're lying down, position it in the small of your back. This serves the same purpose, supporting the small of your back and spreading out the pressure of contact with the ground. When you turn on your side, simply move the wad so it is against your side, at your waist, and it will take some pressure of the hip. If you get good at this, the results are amazing.
- Tailbone pad

Since most of the pressure is concentrated on your tailbone (on your back, or hip if you're on your side), you can cut a small foam circle, and toss it in your bag, to get a double thick pad at the pressure point, without having to carry the weight of a double thick pad for the entire pad. Just adjust it when you're in your bag to the correct location, and you're good to go. You can even get fancy and cut a hole out of the middle to make a 'donut' to better distribute weight off the pressure point.
- Better living through chemicals

Okay, not everyone will agree with this, but a mild sleep aid can help take the edge off at night. It helps you drift to sleep, especially the first night or two when all the sounds are unfamiliar. And something like Tylenol PM or Ibuprofen PM can help the aches from a long hard day of hiking. Medicate responsibly.



Changing your hiking schedule

For people who 'get' this, it can be a significant weight savings, simply by changing the way you hike. Most people like to hike all day, or most of the day, get into camp, set up their tent, cook dinner as night falls, and sit around until it's time for bed. This means you are sitting around, not generating any heat from activity, during the coldest part of the day. In turn, this means you are probably bringing long underwear or a puffy jacket that is too warm to hike in, and the only purpose is to wear it around camp. Consider instead:

- No breakfast or later breakfast

The early morning will be one of the coldest parts of the day. It makes no sense to stand around in the cold. The best bet is to pack up quickly, throw a food bar into your pocket, and start hiking. The activity will quickly warm you. Then, when the sun is shining brightly and you come to nice sheltered or scenic place, stop for breakfast.

- Do the main break in the afternoon

In the warmth of the afternoon, it's great to take a long break. It gives you a chance to dry out any damp gear, and it breaks up the day. You can pick a scenic place, near water, which may not be good for sleeping at, but is perfect for cooking the main meal. You can enjoy the meal without shivering. Heck, you might even take a little nap if so inclined.

- Hike on, and dry camp

Then, hike on. You'll be fueled by the meal, the cooling evening is great for hiking, and the miles will pass easily beneath your feet. Then you can pick a stealth camp without worrying about cooking. You don't need flat rocks, logs to sit on, or water. You don't need to worry about cleaning up in the cold and dark. You don't need to worry about attracting bears from the smells of cooking. You hop into your sleeping bag warm from walking. And best of all, you saved the weight of the clothes you didn't need to bring because you weren't standing around in the cold.



I'm packing pretty darned light, just looking for some tips to shave those last few grams...

You've done the hard work, and you've reaped the big benefits. Your small, light pack is the envy of others you hike with. You quote gear weights to the nearest hundredth of an ounce. But, as any skilled practitioner, you're always on the lookout for ways to save a couple of more grams. You're willing to try new things if they promise to save weight, even if you decide after trying them that they're not for you. So let's have a discussion about some areas you may not have fully explored yet:

- [Wearing insulation – a good idea?](#)
- [Maximizing your sleeping bag's rating](#)
- [Getting tucked into bed](#)
- [Ultralight cooking options](#)
- [The ultimate cooking option](#)
- [First aid](#)

Wearing insulation – a good idea?

There is some thought that one way to minimize your pack weight is to take a lighter sleeping bag, then take a puffy jacket to make up the additional insulation. In theory, this sounds attractive, but my contention is you can save even more weight by rearranging your schedule so you're not standing around in the coldest part of the day (see *Changing your hiking schedule*), taking no wearable insulation to speak of, and putting the extra weight into a warmer sleeping bag:

- Wearable insulation is inefficient

A sleeping bag is very efficient insulation. It's contoured to your body, and there's no wasted fabric with extra appendages. In fact, if you follow my lead, there's no wasted down on the bottom of the bag, it's all concentrated on the sides and top. So, in my 'regular' sleeping bag, I have about 10 ounces of down in a 18 ounce bag, a ratio of about 56% down, with a loft of about 3". Now look at a jacket, say the Montbell Alpine Light Down Jacket. A size medium weights 11.3 ounces, of which 4.0 ounces is down, a ratio of only 35%, and say a loft of maybe 2" max. Because of all the extra fabric, even a light, well-made jacket of light materials is inherently inefficient compared to a sleeping bag. So the combo of the jacket and sleeping bag yield (assuming the bag is sized to allow the jacket to loft fully) 5" of combined loft, for a weight of about 29 oz. In comparison, my 'warm' bag has about 14 ounces of down in a 22 ounce bag, a ratio of 65%, and a 5" loft. So, for a system that is at least as warm, I've saved almost half a pound! If you carry a nice warm jacket, it's likely way too warm for actually hiking in, so you're really just carrying it to wear around camp anyway. If you revise your schedule so you're not hanging around camp, you don't need the jacket, and the additional weight is much better spent in a warmer bag.
- Michelin man

In a pinch, you can drape your bag around you in camp. If you run the foot through the drawstring, it will hold it together, and if you upsize your shell by a size, the bag will layer nicely under it as a body shawl. Sure, it's not super convenient, but did you notice

I just took a half pound out of your base pack weight? If you were at 8 lbs, that's a 6% reduction, not too shabby!



Maximizing your sleeping bag's rating

When you've gotten to the rarified heights of ultralight backpacking, you find that every ounce counts. The corollary is that you need to wring the maximum performance out of every item in your tiny pack. One way to do this is proper care of your sleeping bag:

- Don't overstuff

I don't use a stuff sack for my sleeping bag. It's a waste of weight, and doesn't allow flexibility in packing the bag. At the beginning of a longer trip, I might have to push my sleeping bag pretty well into the bottom of my pack. But, as the food load lightens, I let the sleeping bag take up as much space as possible inside the pack.
- Keep it clean

Washing your bag with the proper cleanser and equipment, or having it done professionally, will help it maintain maximum loft. Your natural body oils will gradually degrade it's performance without proper care.
- Allow recovery time

If you are stopping in the middle of the afternoon for your main meal, take out your bag, allow it to air out and let the sun drive any moisture out. I like to have my bags made with black fabric on the inside, so I can turn them inside out for maximum solar gain. Also, when I roll into camp, as soon as I have my groundcloth down, I unpack my sleeping bag to give it the most time to fluff up before I climb into it.
- Location, location, location

Where you bed down for the night can easily make a 10-degree difference. If you're at the edge of your bag's performance (which is the light place to be), you will want to learn to avoid katabatic flows. You can research it yourself, but basically cold air settles. You don't want to be in an area that will collect cold air, or in an area that cold air will be whistling through all night. I'm sure you've noticed, hiking in the early morning, how the temperature drops precipitously when you cross a gully. Imagine sleeping in that colder air! Also you will want to be aware of where breezes will form during the night so you can pitch a tarp in the right direction to shelter you from them. You will want to become a backcountry ninja, learning to make maximum use of your environment. Look for sheltered locations which will make a difference in how warm you sleep.

Getting tucked into bed

Usually there's nobody on the trip to turn your bed down and put a mint on your pillow (if this happens on your trips, let me know, I want to come along). If I've got a bag that's going to be at the edge of the temperature rating, I want to do every little thing I can to eke every last degree out of it:

- An evening walk
If for some reason I've been standing around long enough that I'm not still warm from hiking, I will usually head out for a quick walk before going to bed. This gets the blood pumping, and there's nothing worse than climbing into bed slightly chilled.
- Plump your bag
Before I head out on an evening stroll, I go through my plumping routine with my bag. The supreme master at this, at least as far as I've ever hiked with, is Don "Photon" Johnston. Don is a serious, methodical guy, and he has a routine with his sleeping bag that is awesome to behold. I am but a poor student of his form, but my routine is to grab the bag by the two bottom edges, hold it horizontally upside down, and shake. This gets the down in the continuous baffles to shift around so it's on the top of the bag. After I've done this for awhile, I will 'swoosh' the bag around in the air a few times, holding the bag open, so it creates a windsock, and plumps up the top of the bag.
- Nuts on your pillow
Better than mints on your pillow is nuts on your pillow. For a long cold night, I don't want to wake up in the middle of the night shivering. I don't have a lot of fat on my body (although this appears to be changing some with age), so I'm always looking to put some 'fat' or oils *into* my body, to give my metabolism some staying power through the night. I like to eat nuts to provide that fuel to keep the internal furnaces going. You can incorporate into dessert if you take chocolate covered almonds or macadamia nuts (not recommended for desert trips).

Ultralight cooking options

There's nothing quite like a hot meal on the trail to give you a boost of energy and morale. It can also be an important safety margin during an unexpectedly cold night, or an emergency situation. So what are some ways to avoid adding too much weight for that warm meal:

- Minimize the number of hot meals

It's just common sense, but if you have a hot drink and hot cereal at breakfast, a hot lunch, and soup, a hot meal, and a hot chocolate at dinner, you're going to need a lot more fuel than if you limit yourself to one hot meal a day. It's all about what's important to you. You may decide it's worth an extra couple of ounces a day to have the extra hot drinks and meals. But I've hiked with people who cut down to one hot coffee at the mid morning coffee break, and a hot dinner, and found they didn't miss all the other hot meals and drinks. Part of this can be changing your schedule so you roll out and start walking in the morning, instead of lounging around in the cold.
- Try solid fuel

Esbit or similar tabs pack more heat per ounce than alcohol. You can blow them out and reuse unburned portions of the tabs. Yeah, they do smell a little...so you want to make sure you use them in plenty of air. Yeah, they can make the bottom of your pot black...so you scrape a couple of times on the dirt or sand and squirt a little water on it. Did you say you were serious about losing those last few grams or not?
- Use a light pot (and windscreen, etc)

My personal favorite is the Caldera Keg. I strip it down to just the Caldera, the keg, top and the gram cracker. It's a great system. I usually boil some water for soup, then use the rest of it for a freezer bag meal. I wrap the dinner in my sleeping bag to cook while I finish my first course of soup. Then it's time to tuck into my hot dinner.
- Try natural fuels

This will depend on where you hike. Many areas require you to have a fuel stove. However, in those other areas, sometimes you can just make small cooking fires. This can be especially effective if hiking as a pair and eating out of one pot. Hiking with my buddy Read, we got it down to a system, with one of us lighting and tending a small fire under the pot perched on rocks, and the other finding tiny twigs and arranging them by size. We never used anything thicker than a little finger. The Bush Buddy or similar stoves are a great solution also. Very effective stoves, especially for groups. While the stoves are heavier than other options, especially for groups, and for longer trips, not having the weight of fuel could pay off. Again, be responsible, observe LNT ethics, and obey all regulations. It's not about you; when you're out there, you're representing all ultralight hikers.



The ultimate cooking option

The ultimate 'cooking' option could be to *not* cook. Besides saving the weight of a stove, pot and fuel, it simplifies your load by reducing the total number of gear items. One note, I do not recommend trying this if you are hiking with people who *are* cooking. Some tips to try:

- Take foods that can go either way
One option for easing into it is looking for foods that can be eaten warm or cold. Dried refried beans is an example. It can be mixed up cold and eaten over corn chips or wrapped in a tortilla, or warmed up.
- Use your body heat
If the weather is warm, you can rehydrate and even add warmth to foods by carrying them between the back of your neck and your pack, or using the Gossamer Gear Crotch Pot™. Sometimes just putting rehydrating food in the back pocket of your pack when it's sunny will work wonders.
- Take bars and snacks
Especially if the trip is going to be short, there are many satisfying options in terms of bars and snacks. Everyone has their favorite, but I have not found anything that beats Probars for easy-to-grab, plant-based whole food nutrition.

First aid

First aid kits is sometimes a difficult place for people to lose weight from. They are driven by the 'what if's', and have been drilled to "be prepared". We've talked a little bit about the importance of planning, education and experience (see *Knowledge is Power!*), and this is particularly true of first aid. To really minimize your pack weight, you need to think carefully about every trip, and customize the load accordingly. When planning your first aid gear, there are a number of factors to consider:

- Number and experience of people in party
If you are heading out by yourself, you will not want to cut it as close as if you are going on a trip with 4 other experienced backpackers. Numbers give you redundancy, in equipment, medical knowledge, and decision-making.
- Experience with the planned route in the same season
If you are familiar with the area you will be hiking in, particularly in the same season, you can get by taking less gear than when you are heading into unfamiliar territory, or in a season you have less experience with.
- Bailout points
If your planned trip has a number of points where you can bail out to civilization if things get dicey, you can take more chances than when you are heading into a remote wilderness that has one way in and out.
- Pack weight of participants
If you are in a group with everyone carrying 50 lbs on their back, and someone sprains their ankle, you have limited options. If you're in a group of lightweight hikers with everyone carrying 20 lbs, it becomes easier to redistribute the struggling hiker's load among the rest of you. God forbid, if you have a real emergency and need to go get help, you will be less tired from a light load, and better able to scoot down the trail for help.
- First Aid training of hikers
If you are traveling with a certified Wilderness EMT, or members of your group have a current Wilderness Advanced First Aid (WAFA) or Wilderness First Responder (WFR) certification, or your hiking buddy is an active SAR volunteer, you have a better margin of safety. And of course, since you have to carry your brain anyway, and it doesn't weigh any more no matter how much it holds, you should pursue wilderness first training yourself!
- What first aid items have you used before?
Carefully analyze what you usually use, sometimes use, and have never ever used. You may still want to carry something you have never actually used, but be aware of it. Consider cutting down on the *number* of an individual item you carry (do you need 5 bandaids?) Whatever I use from my first aid kit on a trip, I leave the wrapper in my first aid kit. Then when I get back home, I know what I need to add so my kit is always ready to go. Look out for fancy, heavy cases. I like a small Aloksak waterproof bag, which lets me see where everything is.

