

Backpacking Checklist – Favorite Ultralight Hiking Gear from 20,000+ Miles on Trail



This backpacking checklist covers exactly what you need to take hiking, without carrying extra weight or wasting money on useless gear.

I've tested all equipment for 200 nights on the trail, over a 20,000+ mile hiking career, to ensure the best backpacking gear for every scenario.

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Video - Backpacking Checklist / Ultralight Gear

This video covers my ultralight hiking gear listed in the guide below.

https://www.youtube.com/watch?v=Lcd7_AqXe7c

Big Hiking Mistakes to Avoid

This [video covers the following section in depth](#).

Most backpackers make 3 big mistakes & spend their trips tired or miserable.

These mistakes are:

1. Heavy backpack from too much useless gear
2. Decision fatigue from too much useless gear
3. Too tired to enjoy hiking, from items noted above

I made all of these mistakes, but 20,000+ miles on the trail provided some better alternatives.

Let's start with all the stuff you don't need.

This will ensure you don't waste money and carry extra weight.

The backpacking checklist is below that.

Backpacking Gear You Don't Need



Soap: Wash your body with water. Soap is bad for the rivers. Hand sanitizer for hands after the bathroom.

Extra Clothes: Backpackers need two sets of clothes, no duplicates.

- Trail clothes
- Camp clothes

Deodorant: Wash daily & do without it.

Carabiners: Only for technical mountain climbing.

Camp Towels: Heavy! This [light 13" X 17 " swimming towel](#) and your body heat is all you need.

Boots: Wear trail runners instead. They are light, dry quickly, and keep your feet from getting sore.

Bug Repellant: Under high bug pressure nothing works, instead:

- Camp in windy locations.
- Stay on the trail until it cools down.
- [Use a Bug head net.](#)

Music Speaker: Wear headphones.

Water Bottles: Heavy & bulky! [Use water bags.](#)



Camp Chairs: Sit cross-legged on the ground [with foam pad](#)

Cooking Pots, Pans & Plates: Heavy! Cook, eat, and drink with a [titanium pot](#) and [small burner](#).

Carrying Too Much Water: Water is essential to carry, but it's also very heavy.

If you're hiking by streams, lakes, and water all day, carrying 2 liters on your back is crazy. That's 4 pounds!

Don't skip on water. Instead, make calculated decisions on when & where to fill up.

Too Much Gear On Outside of Backpack: Only daily "trail use" equipment should be stored outside of the backpack. Anything stored on the outside can:

- Get lost or snagged
- Get wet/heavy
- Throw off-center of gravity making hiking harder

It also looks sloppy, but I'm OCD about this stuff:)

Let's get into the backpacking gear checklist...

Best Tents & Tarps for Backpacking



Zpacks Offset Duo Tent:

- Weighs 1 pound
- Waterproof (Dyneema Material)
- Holds up in 60 mph winds (tested by me)
- Can fully sit up at 6'2" tall/spacious to wait out long storms
- I've used it for 300 nights on the trail & it's my favorite tent of all time

Zpacks Tarp: Used for all trips when bugs are not bad.

- Weighs 7 oz.
- Very versatile - can set up in multiple configurations.

Ground Sheet for Tarp

MSR Regular Size Tent Stakes: I carry 8 for the tent above. Don't get the small version of these. They won't hold in heavy wind.

Sleep System - Sleeping Bag / Quilt, Pad & Pillow



[Watch the video here.](#)

Down sleeping quilts are lighter and more versatile than sleeping bags.

Inflatable sleeping pads are the best option for the highest warmth-to-weight ratio.

[10 Degree Sleeping Quilt \(950 Fill\):](#) Minimum temperature range 40 degrees to 0 degrees F. I layer down pants and coats at night for lower temp ranges. When its between 30-40 degrees I use the quilt at camp instead of bringing extra layers. This saves weight.

[30 Degree Quilt \(950 Fill\):](#) Minimum temperature range above 40 degrees.

[Pillow:](#) Great way to improve sleep for 3 extra ounces of weight

[3 Season Sleeping Pad:](#) All conditions & seasons less snow camping. (Regular/wide size)

[Winter Sleeping Pad:](#) Snow camping or very cold weather.

[Ear Plugs:](#) On stormy or windy nights it can be very hard to sleep. These are essential to always have in your kit.

Best Backpacking Backpack



Simplicity is essential for backpacking backpacks.

Don't buy complex packs, with a million weight-adding features & straps from REI, Deuter, or Osprey.

They are heavy, complicated, and don't work well.

When selecting a backpacking & photography backpack, I look for:

- Simplicity (no extra straps or pockets)
- Low weight (2.5 lbs or less)
- Waterproof (Dyneema material)
- Durability (Dyneema material)
- Storage compacity (modular & works for all trips)

I Recommend Hyperlite Mountain Gear Backpacks



I've put these packs through the wringer over the past 9 years. Nothing else even comes close.

They are light, tough, waterproof, and very efficient for packing.

- [Unbound 55 without Hip Belt](#): Used when I'm carrying my [Ultralight Camera](#) setup or doing trips without a camera.
- [Northrim 70L](#): My go-to pack for all trips less than 10 days when carrying [Z7 full-size camera setup](#).
- [Porter 85L](#): My go-to pack for pack rafting and 10+ day trips.
- [Porter Back Pocket for Pack](#): Great for storing water, snacks & quick access gear.

Stuff Sacks & Equipment Organization



I don't use stuff sacks to organize my gear. They are heavy and unnecessary.

Instead, I line my pack with a trash compactor bag and put all of the down / camp layers inside that.

[Scent Free Trash Compactor Bags](#)

I use pods to organize my small essentials and food for the day.

[Hyperlite POD \(4400, 70L\) Large Size](#)

Clothes & Layering Systems

[This video covers my layering system.](#)

Correct layering is essential for keeping you warm & dry in all conditions.

Incorrect layering leads to increased pack weight or dangerous scenarios where you can't stay warm and dry.

No one piece of gear should perform the same function as another piece of gear.

- When it's cold layers are added.
- When it's warm layers are removed.
- If it's wet or snowing the shell coat and pants are added over whatever you're wearing.

Layering Basics

Base Layer (Keeps Skin Dry & Ventilated): This is the layer directly next to your skin.

- The goal of the base layer is to keep your skin dry by removing moisture.
- It will keep you cool in warm temperatures and warm in cool temperatures.
- You'll wear a base layer year-round, no matter what season.

Middle Layer (Warmth & Insulation): During cool summer nights, autumn, or winter you'll also need a middle layer.

- The goal of the middle layer is to keep you warm but also allows the skin/body to breathe.
- Good middle layers are breathable material that also provides warmth such as fleece or down.
- I prefer to carry a down jacket as well as a fleece as denoted below.

Top Layer / Shell (Weather Protection): The goal of the top shell layer is to protect you and all of your layers below from the weather.

- The top layer is just as important as your other layers if not more so.
- If your middle or base layers are completely wet they won't work very well.

Go Gear - What to Wear on the Trail



Below is my base layer of "go gear".

It is worn on the trail, every day of the trip, during every season.

Go Gear will get sweaty, wet, and dirty.

You get used to this very quickly.

Bringing duplicate pieces of "go gear" is too heavy and unnecessary. Skip it!

Trail Hat: Light weight trucker hat.

GPS Watch: Essential for knowing distance covered, elevation covered, and current weather trends such as pressure, temperature, sunrise & sunset times. My favorite feature of this watch is the topo maps. Instead of pulling out a phone to navigate, looking at the watch is much easier and saves a ton of time.

Long Sleeve Trail Shirt: Merino wool, light weight, cool in hot weather, and warm in cool weather. Hood is essential for sun and cold.

Running Shorts: Stretchy durable material that takes a beating is essential for backpacking & climbing.

Socks: Darn Tuff socks have a lifetime warranty. If you get a hole, just send them back in for a new pair.

Compression Socks: Great for long days on the trail.

Trail Runners (Altra Lone Peaks): Stop wearing boots. They are heavy, don't provide better ankle support, and become very heavy when wet.

Trail runners are light, dry quickly, give your feet a better "feel" for the trail, and work well in all seasons. I even wear them in the winter.

Trekking Poles: Essential for reducing stress on legs and covering long days on the trail. Also essential for off-trail travel & holding up the Zpacks Duplex Tent.

Thermal Sitting Pad: Weighs 3 oz. Reduces your calorie burn by decreasing heat loss while sitting. Very comfortable. Taken in every season.

Camp Clothes & Cold Weather Layering



Layers are listed from the skin or base layer first to the outer layer last.

- If you are going to use a layer on the trail, it has the chance of getting wet.
- Make sure you don't need that wet layer for staying warm at night.

Top Layers

Base Layer Shirt: Merino wool insulates even when wet. Also very soft. 320 weight for cold weather and 250 weight for spring / summer.

Fleece Hoody: 7 ounces. Very warm and versatile.

Light Down Jacket: Worn at camp or on-trail rest breaks during late spring, summer or early autumn, in all ecosystems.

Medium Down Jacket: Worn at camp or on-trail rest breaks during early spring, late autumn, and winter.

Down Vest: I have not tested this vest for 200 nights on the trail yet. So far, I love it. Currently experimenting with the warmth benefit of a vest instead of a light down jacket for layering with medium down jacket. So far, on the 3 trips I've done with this vest, I'm going to use it instead of the light down jacket.

Heavy Down Jacket: Layer the medium down jacket with the light down jacket or down vest. My preference is medium down jacket + vest.

Rain / Wind Shell Jacket: I don't recommend Goretex jackets unless it's very cold weather where wind protection is essential. Goretex is heavy and takes too long to dry once wet.

Bottom Layers

Long Underwear: Merino wool insulates even when wet. Also very soft. 320 weight for cold weather and 250 weight for spring / summer.

Down Pants: Worn at camp during trips with lows in the 30s. Lighter than another pair of long underwear.

I don't recommend heavy-down pants. They are too warm unless you're in arctic winter environments.

Wind / Rain Shell Pants: Worn at camp or on the trail during windy, cold, or wet conditions.

Gloves & Hats

Light Gloves without Fingers: Worn on any trips above 30. Great for photography.

Light Gloves with Fingers: Any trips between 30 to 20F.

Winter gloves: Below 20F. Order a size up on these and layer them with wool gloves above.

Merino Wool Hat: All trips, no matter the season.

Camp Socks

Thin Socks: Worn at camp during spring and summer.

Thick Socks: Worn solo in cold weather. Layer over thin socks for very cold.

Camp Shoes & Sandals

Bread Bag Technique: Don't bring camp shoes or sandals. They are too heavy!

1. When you get to camp, dry your feet and put on your dry camp socks.
2. Over your camp socks, put on two bread bags.
3. Put trail shoes back on over bread bags.

Your feet and socks will stay warm and dry inside the bread bags.

Your body heat will dry your trail shoes.

Down Booties: For snow or very cold weather trips down booties are essential to keep your feet warm.

Cold weather and snow also means longer nights and more time spent hanging out around camp after dark.

Being able to sit outside in the snow, with warm body and feet makes the trip way more enjoyable.

Small Essential Equipment



This section covers task-specific small items that are required for every backpacking trip.

Keep them in a small storage stuff-sack, close to the top of your bag for easy access.

Hyperlite POD (4400, 70L) Large Size: Holds all small essential equipment.

Small External Battery Charger: 3 days of charge for Nikon Z7, Go Pro, and phone.

Large External Battery Charger: 7 days of charge for Nikon Z7, Go Pro, and phone.

Headlamp

Small Camp Towel: Use this to wash, then wring it out to dry 90% of the moisture off your body. Put warm dry clothes off and let your body heat dry the rest.

Floss

Toothbrush & Paste

Headphones

60 Feet of Utility Cord: Dyneema cord is light. Use it to hang food, create make-shift splits for first aid, repair gear & more.

Mini Bic Lighter: Light camp stoves & make fires.

Mosquito Net: Only taken during high bug pressure times.

Chapstick

Sun Protection Lotion: Use a 2 oz jar and fill it with lotion to reduce weight.

Sun Glasses: Essential for snow trips. Recommended for all trips.

Tyvek Tape: Essential to repair & patch tents, sleeping pads, packrafts, or any other piece of equipment. Strong & light. Backroll a small amount, just enough for trip.

First Aid Kit for Hiking

Here's my complete guide on [What Should Be in a Hiking First Aid Kit](#), it also includes a video.

Toilet Kit & How to Use It



Bathroom Technique

Pee anywhere off the trail preferably on rocks or gravel.

Poop using the following technique.

Carry out all dirty toilet paper with you.

1. Locate an area with soft organic matter at least 200 feet away from any water sources.
2. Organic matter will decompose human waste, rocks and sand will not.
3. Dig a hole 6-8" deep, with 6-8" diameter.
4. Upon completion, backfill the hole and firmly stamp it down.

Equipment List

Gallon Ziplock Freezer Bag to hold the following.

Duece Bathroom Shovel: Weighs less than an ounce. Strong. Works well!

Toilet Paper - Thin Ply: Backroll it and only take enough for the trip. Keep in a small ziplock bag.

Hand Sanitizer - Travel Size: Small travel size. Keeps you from getting sick on the trail from dirty hands.

(2) Quart Ziploc bags for dirty toilet paper. Put the dirty toilet paper in one bag, then double bag it to keep things clean.

Poop Bags: All snow trip. Don't poop in the snow. It will melt out in the spring and is disgusting.

Hiking Food & Supplements



I eat 4500 to 5000 calories per day, with the main requirement being 250 grams of protein & high fat.

Optimizing Food for the Trail

The main 3 macro ingredients that make up food are the following. Your body requires fat and protein to live. Carbs are not required by your body to live and should be used as a supplement for specific heart rate zone activities.

- **Fat Energy:** Slow-burning all-day energy, great for zone 1-2 heart rates, like hiking
- **Carb Energy:** Fast burning, short half-life energy, great for higher heart rate zones, 3-5, like running or strenuous high elevation gain hiking.
- **Protein:** Used for muscle and tissue, building & repair.

Most hikers eat too much carb energy, which causes their insulin and glucose to spike, making them tired in low heart rate zones.

Due to a high-carb intake, their protein intake is low, causing them to be sore and stiff.

I eat high-fat and high-protein on the trail and at home, which is optimized for low heart rate endurance events like hiking.

I use natural sugar carbs as a supplement, not a food source.

They should be used sparingly in 100-calorie doses a few times during the day before intense climbs or higher heart rate sections of the trail.

Here's what I Eat on the Trail

- The same meals are eaten every day to make things simple.
- I don't eat big meals such as breakfast, lunch, or dinner, but instead snack all day.
- These meals can be cooked or cold-soaked.
- None of the foods have added sugar, and most are whole foods.

I package them all into single servings in ziplock bags.

Eaten 3X during the day / high protein and fat

I choose either beef or chicken for this meal. So 1/2 cup of meat per meal.

- [1/2 Cup of Freeze Dried Ground Beef](#)
- [1/2 Cup of Freeze Dried Chicken](#)
- [Bone Broth Powder to flavor beef or chicken](#)
- [Olive oil to add to beef or chicken](#)
- [Container for olive oil](#)

Eat while moving in small doses for fast-burning natural sugar carbs

- [RX Blueberry Bars](#)
- [Dried Bananas](#)

High protein snacks

- [Beef Jerky without Sugar](#)
- [Beef Sticks](#)
- [Pumpkin Seeds](#)
- Sharp Cheeses (Will last 5-7 days of hiking without going bad)

Backpacking Supplements

Caffeine Pills: Early starts with no time for coffee. Emergency scenario with all-night evac. As required any other time.

Salt Pills: Cheaper and easier to use than electrolyte pills or packets. Used every few hours during day.

Magnesium: 1000 mg 2 hours before sleep.

Omega 3: 3 grams/pills per day with food.

Creatine: 10 grams per day in morning

Bear Containers & Food Storage



Do what makes you feel comfortable.

Just because I use one method does not mean it will be right for you.

My food is always kept in a Loksak odor-free storage bag inside a stuff sack.

If I need to cache food or leave it alone for a day, then a Ursack Major Bear Bag is used for protection along with hanging it from a tree if available.

I don't use bear containers & sleep with my food by my head, unless in grizzly country.

Bear cans are heavy, bulky, and horrible for enjoyable backpacking trips.

- They are only necessary when in grizzly country.
- Some parks without grizzly bears require them because government & nuance don't mix.

The bear can I used in the past is now a stool for sitting by the campfire.

Cooking System & Stoves



During spring, summer & early fall, I don't carry a stove and use the [cold soaking food preparation technique covered here](#).

During the winter or for shorter trips where I don't mind carrying extra weight, I make the meals noted above, with a Jetboil stove.

Stoves can also be used to melt snow for water on all snow trips in the winter.

Hiking Stoves / Cooking Equipment

[Titanium Pot](#): Very light. Small fuel & burner stove fits inside it. Use with burner below.

[Cooking Stove / Burner](#): Very very light. Use your body to protect it from the wind when cooking. The only time I don't use this is on trips where I have to melt snow for water. For snow trips, [I use a Jetboil](#).

[Cleaning Rag](#): Used to clean pot & spoon after eating. Wrap your small fuel inside this rag and place it in the titanium pot. Then put the burner on top of that. It all fits.

[Titanium Long Handle Spoon](#)

[Mini BIC Lighter](#): Your stove starter will eventually fail if you're backpacking enough;)

[4 Oz. MSR Fuel](#): 2 days in winter when melting snow / 3-5 days in other seasons.

[8 Oz MSR Fuel](#): 4 days in winter when melting snow / 6-10 days in other seasons.

Water Purification & Storage

[Watch the video here.](#)

Only Carry Water You Need - Cut Down on Weight & Save Energy

At each water fill-up stop:

1. Check your map and locate your next water source
2. Fully hydrate at each water stop. "Camel Up" so your stomach is full.
3. Determine how many miles/hours until your next water source before leaving.
4. Only carry what you need to get there plus a 1/4 liter extra.

[Water Carrying Bags](#): I take 2 bags, equaling 4 liters total, for mountains and all non-desert environments.

For deserts, I carry 4 of these, for 8-liter carry capacity.

I don't recommend Nalgene bottles or bladders with drinking tubes. They are heavy and often fail.

Keep it simple!

Water Purification

I use [bleach](#) for this. It's the easiest method and very fast.

One of these [medium droppers](#) will provide 10 days of clean drinking water.

Here are [the directions](#).

[Water Purification Filter](#)

Only the filter is required. Don't buy any other gadgets that are offered with it.

The filter is heavier but you get instant access to water.

Filters do not protect you from every type of contamination as bleach does.

I prefer drops.

Snow Travel & Cold Weather Camping



If you're just starting out, skip the snow and winter camping.

It's too much gear and extra skill when just starting.

Ice Axe: Any steep ice or snow travel without safe runoff. Does not work if you don't know how to use it!

Micro Spikes: Non-glacier ice travel

Neoprene Booties: These are used to keep my feet warm while hiking in deep snow with trail runners. It's much warmer than wearing boots.

Snowshoes: 6"+ deep snow or more. I use these with my trail runners.

Poop Bags: All snow trip. Don't poop in the snow. It will melt out in the spring and is disgusting.

Wax Fire Starters: Emergency use & standard fires. It's sometimes impossible to find dry wood in the winter.

Rescue Shovel: Great for moving snow to set up camp and avalanche rescue.

Avalanche Beacon: Only works if you learn to use it very well & practice.

Avalanche Probe

Maps & Navigation



Navigation & first aid are the two most important backpacking skills.

Always carry a hard copy map as a backup, a digital map on your phone, and a compass.

All of this equipment is worthless if you're not an expert at using it.

Take a class or go out & teach yourself in a safe area with phone service.

Here is what I use:

[Compass MC-2](#)

Digital Maps: I use and recommend [GAIA GPS](#). It's great for planning on the computer and navigating in the field using a smartphone.

Map Physical: Print maps or buy National Geographic Trails Illustrated Maps.

Bonus Hiking & Camping Tips

[Watch the video here.](#)

Tip 1: Buy the Best Backpacking Gear You Can Afford

Higher quality backpacking gear, although more expensive, performs exponentially better, and lasts much longer.

In the long run, it's much cheaper to invest in the beginning, and enjoy your equipment for years.

Tip 2: Don't Buy All Your Backpacking Gear at Once

Start out with a few basics on a 1-night trip during nice weather.

Take note of items you use and don't use on this trip.

Buy or reduce gear upon returning home.

Repeat this cycle while slowly increasing the trip length & difficulty.

Tip 3: Don't Trust Gear Review Videos IF The Gear Isn't Worn Out

All equipment provided on this page has been tested for a minimum of 200 nights on the trail.

Lots of "gear reviewers" don't backpack and hike for a living.

They review gear for a living. This is their entire income.

This incentivizes them to quickly test gear then recommend it to you to make money.

Sometimes the recommendations work out.

Sometimes they are horrible.

If the gear isn't filthy and worn out, most likely it hasn't been tested very well.

How to 10X Your Learning Speed



The fastest way to master landscape photography is by learning firsthand from someone who has spent over a decade optimizing these skills through trial and error.

Blogs and videos are great for theory, but they cannot replace real-time, field-based instruction.

I offer high-intensity workshops and tours designed for all skill and fitness levels.

In a single 3-day session, I can teach you my entire system—start to finish.

You will receive 1-on-1 feedback in the field that will improve your skills faster than years of self-teaching ever could.

My students often learn more in three days than they have in the previous 20 years on their own.

Stop guessing and start creating portfolio-grade images.

[CLICK HERE & SEE MY UPCOMING WORKSHOPS](#)