



ACADIANX
Explore Your World

Beginner to Advanced Backpacking Series



Level 3 – Base Camp with Day Hike

Type: Base Camp with Day Hike

Duration: 4 – 5 hours of hiking

Distance: 10 miles

Goals: Long distance hike with elevation changes and moderate terrain. Overnight primitive camping.

Topics: Backpacking Clothing; Backpacking Gear; Gear Care.

1 Backpacking Clothing

1.1 Footwear

The footwear you utilize are among some of the most important pieces of equipment that you bring into the backcountry. With every step, they are the direct interface between your body and the landscape.

1.1.1 Hiking Shoes

There's a good argument that no piece of gear is more important than footwear. In general, the market is moving away from stiff, high-top models to more agile hiking boots and shoes that are light and comfortable. In virtually all categories of hiking footwear, we think Salomon nails it: the fast and flexible X Ultra 3 Mid GTX is the top hiking boot on the market in our opinion, and the X Ultra 3 GTX is a lower-cut and lighter version for those that prefer to go that route (note: Salomon recently released a new X Ultra 4 for spring 2021, and we will report back with our feedback). And a growing number of thru-hikers, ultralighters, and even casual backpackers wear trail running shoes on their hiking adventures. No matter the style, if you're breaking in new kicks, it's a good idea to pack blister treatment like Moleskin to help with any hot spots or uncomfortable rubbing.

1.1.2 Hiking Socks

It doesn't matter what hiking boot or shoe you choose if you don't have a good pair of socks to accompany it. Our favorite socks all are made of merino wool, an extremely comfortably material that offers premium temperature regulation, moisture wicking, and odor

resistance. The height and level of cushion of your sock can vary, but for hiking trips we like the Darn Tough Micro Crew Cushion. With a premium build and lifetime guarantee to back it up, you can't go wrong with Darn Tough.

1.2 Clothing

When you step outdoors, the ancient art of layering becomes your smart-technology thermostat. This tried-and-true strategy lets you regulate comfort by slipping layers on and off as your activity level or the weather changes.

How to layer: To understand layering your clothing for outdoor activities, you need to know the function of each layer:

1. **Base layer** (underwear layer): wicks sweat off your skin
2. **Middle layer** (insulating layer): retains body heat to protect you from the cold
3. **Outer layer** (shell layer): shields you from wind and rain

Even if you don't wear all three layers at the outset, it's a good idea to take all layers on every outing: You can peel off layers if things heat up, but you can't put on layers that you didn't bring along.

1.2.1 Hiking Pants

Whether you need serious protection while bushwhacking or a more breathable model for warm conditions, your hiking pants matter. Most backpackers want their pants to be durable, comfortable, and offer good freedom of movement with a little stretch. In 2021, many pants have features like weather-resistant fabrics, articulated knees, zip-off legs, and an assortment of pockets. Our favorite all-around hiking pant is the prAna Stretch Zion (and women's prAna Halle), which hits a really nice balance of comfort and performance. And if you expect your trip to be particularly wet, consider packing a separate pair of rain pants to stay dry around camp.



1.2.2 Hiking Shirt

Similar to hiking pants above, your shirt choice largely is a matter of personal preference. The good news is there are plenty of options, from high-end and lightweight wool shirts like the Smartwool Merino 150 to much cheaper synthetics from a number of brands. You can also go short or long sleeve, the latter of which is nice for sun and bug protection or in cooler conditions.

1.2.3 Rain Jacket

Even if there's no rain in the forecast, it's always a good idea to carry a waterproof shell on a backpacking trip. The two main categories are rain jackets (the most common and economical choice) or full-on hardshells, which are built for extended forays in tough conditions. For most summer backpackers, a lightweight rain jacket like the Marmot PreCip Eco will do the trick, which weighs just 10.1 ounces and offers decent wind and waterproofness and breathability. If you're really pushing the limits, see our article on the best hardshells.

1.2.4 Down or Synthetic Jacket

For early mornings or when you're finished backpacking for the day, your insulation piece is critical (and we often sleep in ours for extra warmth). A lightweight down jacket is the ultimate in terms of warmth-to-weight ratio and packability, while synthetic-insulated jackets won't stuff down as small but insulate better when wet. Our favorite overall down jacket is the Patagonia Down Sweater, which is extremely versatile, well-built, and durable. If you care more about breathability and weather resistance than weight, packability, and maximum warmth, a synthetic like Arc'teryx's Atom LT or Patagonia's Nano-Air will be a better option.

1.2.5 Baselayers

Baselayers often get overlooked, but they are an easy and compact way to add warmth while hiking or in your tent. Most baselayers are made of either ultra-soft and odor-resistant merino wool, or durable but less comfortable (and less expensive) polyester. Our top pick for 2021 is the Smartwool Merino 250 1/4-Zip, which is warm, soft, moisture-wicking, odor-repelling, and even UPF 50+. Put simply, that layer pretty much does it all. As far as synthetic alternatives go, Patagonia's Capilene collection leads the charge and is offered in a range of styles and thicknesses.

2 Backpacking Gear



2.1 Packing System

The packing system is the vessel or vessels that will effectively carry and organize everything you need (not necessarily everything you want) when you exploring the backcountry.

2.1.1 Backpack

Similar to tents, backpacking packs range from ultralight to fully featured models designed for comfort and carrying large loads. When deciding on volume, most overnight packs run from 40 to 75 liters, and your decision should come down to the length of your trip, how bulky your gear is, and how much you like to bring along. For most backpackers, we recommend a pack in the 60- to 70-liter range, and our favorite model for 2021 is the men's Osprey Atmos AG and women's Osprey Aura AG. This pack is comfortable, durable, breathable, and has great organization. If you plan to encounter any inclement weather on your trip, it's also worth bringing along a dedicated rain cover (some packs come with them, but many do not) or waterproofing your gear by lining the interior of your pack with a trash bag.

2.2 Shelter System

The shelter system is everything you need to create a temporary shelter in the backcountry.

2.2.1 Tent

Your tent serves both as protection from outside elements and a refuge while sleeping in the backcountry. In terms of weight, most 3-season backpacking tents range from 2 to 5 pounds for a two-person model (the most popular size), although there are a number of minimalist shelters that are even less than that. And keep an eye on things like interior space, durability, and doors and vestibules. Our top backpacking tent choice for 2021 is the Big Agnes Copper Spur HV UL2, which checks all the boxes we look for in a competitive and well-rounded design: it's lightweight at 3 pounds 2 ounces, spacious, well-built, and easy to set up. For added protection against rocks and roots (and especially given these tents' generally thin floor fabrics), we also recommend bringing along a footprint, which typically is sold separately (the Copper Spur's costs an additional \$70).

2.3 Sleep System

In order to keep yourself safe and comfortable with a good night's sleep you need to employ a decent sleep system.

2.3.1 Sleeping Bag

The last thing you want after a long day on the trail is a restless, cold night. A quality sleeping bag is one of the most expensive purchases you'll make, but it can last for many years if treated well. Sleeping bags can be roomy or streamlined, from plush mummy bags to lightweight summer quilts, and are available in both down and synthetic builds. If you have the budget, we love down-specialist Feathered Friends and the Hummingbird UL 30 in particular. REI makes a number of very competitive bags as well, including the popular Magma.



2.3.2 Sleeping Pad

Once you've chosen your bag, next up is your sleeping pad. In addition to comfort considerations, sleeping pads help insulate your body from the cold ground (the higher the R-value, the more insulation a pad offers). In terms of pad models, Therm-a-Rest has been leading the charge for decades, and their lightweight and well-built NeoAir XLite is a popular choice for backcountry travelers (we see it used more than any other pad by far). We've also had good luck with Sea to Summit's air-sprung designs—including the Comfort Light Insulated and Ether Light XT Insulated—which are extremely comfortable and offer competitive insulation and durability. And comfort-oriented backpackers might also consider packing a lightweight, inflatable pillow (most weigh just a few ounces).

2.4 Kitchen System

The cooking system is everything you need in order to prepare a warm meal or hot drink and consume it like a civilized human being.

2.4.1 Stove & Fuel

Whether you're making gourmet dinners or eating prepackaged dehydrated meals, you'll need a way to heat it all up. Backpacking stoves range from inexpensive and compact (some weigh less than 2 ounces) to robust and powerful. Key considerations include the fuel type (options range from isobutane/propane canisters to multi-fuel stoves), and stove design (simple screw-on stoves that require a pot to all-in-one stove systems). Our top overall pick for 2021 is the MSR PocketRocket 2, which checks in at just 2.6 ounces, boils water fast (boil time is listed at 3.5 mins.), and costs a very reasonable \$45 (pot not included). If you're just getting started and want an all-in-one option for boiling water, JetBoil's Flash is pricier and heavier at \$110 and 13.1 ounces respectively, but overall performance is excellent (and it's more wind-resistant than the PocketRocket).

2.4.2 Cookware

Given the increase in the quality of dehydrated backpacking meals, many people use an all-in-one stove system to boil water and eat their meals straight out of the bag. For these folks, a separate pot isn't necessary and all you need is a spork for eating and possibly a lightweight cup for coffee, tea, or other beverages. If you use a simple screw-on stove, you will need a separate pot for cooking and a dish to eat your food out of. Backpacking cookware options range from budget to ultralight and pricey, but there are a good number of middle-of-the-road systems from brands like GSI Outdoors, MSR, and Snow Peak as well.

2.4.3 Food

Don't forget dinner (or lunch, or breakfast, or snacks). The good news for backpackers is that dehydrated food has gotten pretty darn good of late: it's less salty, more nutritious, and tastes better than ever. And a nice perk: dehydrated meals mean less cooking and no dishes to clean—simply boil water and eat. Our personal favorite brand is Good To-Go, which does a great job at mimicking real food. Other top options include Mountain House, Backpacker's Pantry, and

AlpineAir. These companies also make hot breakfasts (we just eat bars or trail mix sometimes instead), and lunch can be anything from pre-made sandwiches to cheese and crackers or just trail mix. Regardless of your food choices, it's a good idea to lay out your food meal by meal to make sure it's all there, and we always pack an extra meal or two in case the trip takes longer than expected or we get extra hungry. And you can never have too many bars (or backup Clif Shot Bloks for an energy boost).

2.5 Navigation System

2.5.1 Map and Compass with App or GPS

Paper maps are the classic choice for navigation, while GPS (via watch or handheld device) have become popular among those who like the extra peace of mind. In addition, many smartphones now have hiking apps that can serve roughly the same purpose of a GPS (make sure to check on connectivity requirements beforehand). Regardless, it's very important to get oriented for your trip and always have a good idea of where you are on the trail.

2.6 Electronics System

2.6.1 Headlamp

A headlamp is a small yet vital piece of gear (if you ever forget one, you probably won't do it a second time). Some folks require a high-performance headlamp for climbing or other nighttime adventures, but most backpackers can get a quality light that is plenty bright for around \$40. Our top overall pick is the Petzl Actik Core, which strikes a nice balance among brightness, durability, and affordability. When making your decision, keep an eye out for lumens (the amount of light emitted by the headlamp) and battery life (the manufacturer-provided number should be thought of as the absolute maximum). And make sure to always pack extra batteries (or a way to recharge) in case yours run out of juice on the trail.

2.7 Personal Gear/Tool Systems

2.7.1 Repair Kit

No matter how light you prefer to travel, we always recommend having a repair kit on hand. You can swap items based on your needs, but our repair kit usually contains a small roll of duct tape (often wrapped around a tent pole repair splint), some utility cord, extra batteries, an extra lighter or waterproof matches, a small stove repair kit, an additional garbage bag or large Ziploc, and a knife or multi-tool. Depending on your trip's length or remoteness—or how exposed you'll be to the elements—we also recommend taking along repair tape (like Gear Aid's Tenacious Tape), zip ties, a sewing kit and safety pins, and seam sealer.

2.7.2 Trekking Poles

We're seeing more and more trekking poles on the trail, and it's no secret why. This simple addition to your backpacking kit takes a lot of pressure off your knees and feet and makes hiking easier overall. Take your pick between folding and telescoping options, aluminum



and carbon, and foam and cork grips. Our top choice for 2021 is the Black Diamond Trail Ergo Cork, an impressively high-quality pole that strikes a nice balance between comfort and durability. If you're on a budget, a cheaper option like REI's Trailbreak (\$60) will get the job done, but don't expect it to hold up well to long-term abuse or particularly technical terrain.

2.7.3 Backpacking Chair

A backpacking chair is a really easy item to leave in your car because it seems unnecessary at the trailhead, but you'll be jealous of your campmates who brought one. At just 1 pound all-in, an ultralight chair like the Helinox Chair Zero gets you off the ground, offers nice back support, keeps your rear dry, and packs down small enough to fit in the water bottle holster of your pack. For the lightest and cheapest way to get off the ground, Therm-a-Rest's Z Seat is essentially a square piece of foam to cushion you from rocks or other trail hazards. All that said, if the hike is long or there are enough natural things to sit on (downed trees and large rocks), we often pass on bringing a chair.

2.7.4 Gaiters

When hiking through the backcountry there are a bevy of items that can find their way into your boots such as rocks, sticks, dirt, and sand through the top opening of your shoe. The main purpose of the gaiter is to cover this gap and also to protect the upper foot and lower leg from moisture especially when in snow.

2.7.5 Camp Shoes

When a long day of backpacking is over, nothing feels better than taking your sweaty hiking shoes or boots off for some fresh camp footwear. We've seen just about every type of camp shoes you can imagine, from Crocs and outdoor sandals to minimalist trail runners and even down booties. It's true that bringing extra shoes adds weight to your pack and you can survive without them, but they sure make a nice luxury item to bring along for the trip.

2.8 Health, Hygiene, & Safety Systems

2.8.1 Water Filter

The choices for backcountry water treatment are numerous: there are gravity filters, pumps, UV and chemical options, and emergency straws. In addition, some filter water while others offer full-on purification, which is best in high-use areas where animal or human waste is a concern. We've used just about every type of water filtration system on the market, and our favorite is the Platypus GravityWorks 4L. This system is fast and convenient: you simply fill up the dirty water bag, hang it from a branch or rock, and let gravity do the work. For solo backpackers and day hikers, a minimalist pump, inline filter, or simple chemical drops may do the trick.

2.8.2 Water Bottle or Reservoir

Water storage is essential for hydration on the trail. Some people prefer standard bottles, while others carry a reservoir in their pack with a hose for convenient drinking while on the go. Water bottles

come in a variety of styles, from BPA-free plastic and stainless steel to soft-sided collapsible bottles. If you're looking for a lightweight and affordable option, the classic Wide Mouth Nalgene remains one of our favorites, year after year.

2.8.3 First Aid Kit

Regardless of the length of your backpacking trip, bringing some kind of first aid is a smart idea. At the very least, we carry basic medications, band aids and/or bandages, and duct tape (you would be amazed at the versatility of duct tape, and we just wrap a small amount around a pencil or stick to save weight). If you're looking for a full kit, REI sells a number of them, including an ultralight and waterproof Adventure Medical Kit for less than \$20.

2.8.4 Hygiene Kit

Your hygiene kit is everything you need to take care of yourself and keep yourself clean. Typically, this will be comprised of 4 smaller kits and items:

1. **Pack Towel** – This is a specially made quick drying towel that is light weight.
2. **Bathroom Kit** – The items you may need to stay as civilized as possible while in the backcountry can include toilet paper, sanitary wipes, a small digging trowel, "blue bags," and hand sanitizer.
3. **Foot Care Kit** – Your kit needs to be able to effectively prevent blisters as well as treat them once they form.
4. **Dental Kit** – This will usually just involve a small tube of toothpaste and a toothbrush cut in half to save space.

2.8.5 Sun Protection

It does not matter where you are going or when, you should always pack with you and wear sunglasses, sun-protection clothing and sunscreen. Not doing so is an example of poor judgement and can result in sunburn and/or snow blindness in the short term. The long-term effects are much more serious and can potentially include premature skin aging, skin cancer and cataracts.

2.8.6 Insect Protection

The front line of your defense strategy is a clothing barrier heavy enough to provide a protective shield, including gloves and head nets in really saturated areas. When the weather gets hot, long shirts and pants made of netting may prove worthwhile.

The next defensive measure is to wear factory-or home-applied permethrin-treated clothes as a chemical barrier and applying a spritz of (non-permethrin) repellent (for example, picaridin) as needed in the field to the outer layer of clothing (whether permethrin treated or not). A robust application to the hat and scarf aids to protect the face and pay specific attention to socks as these little suckers have an uncanny ability to target ankles. Finally, take the time to carefully apply a suitable insect repellent to uncovered skin being particularly careful around the face. And know that sometimes the bugs win the battle and retreating to a tent with a full bug screen may be the only way to preserve your sanity.

3 Gear Care Tips



3.1 Care Tips

Your gear is an investment in your safety and comfort. Keep your gear going season after season with these tips.

3.1.1 The gear closet.

As you begin to acquire your gear it is a good idea to create a gear closet or room in order to properly organize and store your gear and clothing. This helps to maintain your gear and especially useful when formulating a gear and clothing plan for your upcoming trip. It allows you to see all of your resources and select what you need with out digging for what you have. If you loan gear out it also helps to visualize what you are missing so you don't forget. This is also very helpful when the last-minute trip comes up and you need to quickly get your gear together. Plus, it looks cool and gives you something to show off to your friends!



3.1.2 Don't poison your gear

In the field: Be careful with [DEET](#)-based bug repellent, which melts plastics, including membranes, and can damage synthetics and other fabrics. At home: Avoid fabric softener. It coats fibers with waxy chemicals, which clog membranes and damage moisture-wicking properties.

3.1.3 Re-Treat

Your shell's DWR (durable water repellent) treatment will deteriorate over time. Wash the garment, then revitalize it with wash-in or spray-on DWR like [Grangers Performance Repel Plus](#). Apply a treatment when you notice water soaks into the fabric instead of beading off (called wetting out).

3.1.4 Prep for the washing machine

Pre-treat heavily soiled garments with a spray made of one-part OxiClean mixed in 20 parts water (let sit for 10 minutes). Before washing, open all zippers and secure loose straps. Wrap zipper sliders in a piece of cloth secured by a rubber band to prevent washing-machine damage.

3.1.5 Avoid excessive sunlight

Don't worry, this doesn't mean you should only hike at night. But ultraviolet rays are hard on gear, especially fabrics. Over the long term, UV exposure causes fading, cracking or softening, and impaired waterproofing, so you don't want to exacerbate the effect. Hang your camp clothesline in the shade, and if a piece of gear needs to be in the sun—like a tent—use a solar wash (we like [Nikwax Tent & Gear Solar Wash](#)) to mitigate the impact.

3.1.6 Repair rips

Resist the urge to pull leaking down from your sleeping bag or puffy. Pinch feathers back in from behind, clean around the tear with an alcohol prep pad, and trim any loose threads. Patch the hole with repair tape (rounding the edges will help prevent peeling). For torn shells, clean the area and apply repair tape to both sides of the fabric.

3.1.7 Know when to sew

Not all holes can be fixed with tape or iron-on patches. Break out the sewing machine for holes that are 2 inches across or bigger, are in high-wear areas like the knees, or on synthetic material that will melt under heat.

3.1.8 Extend Your Tent's Lifespan

Prolonged use, improper storage, or extreme heat can delaminate your rainfly's waterproofing. When the coating begins to peel, it's time for a new shelter.

- Unless the tent is very old, most brands will replace an entire pole or even just a section. Dead shock cord can also be rethreaded.
- Air out your tent after use. For a deeper clean, wash by hand with tech wash in a bathtub, then hang dry.
- Clean dust and debris from zippers with a hose or toothbrush.
- Don't let poles snap together; the aluminum can chip and make it hard to slide one end over the other.

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