

# Gear Shopping for High Adventure

## How much will I spend?

### Backpacking:

Backpack:	\$100 to \$470
Boots:	\$100 to \$225
Sleeping Bag:	\$90 to \$400
Sleeping Pad:	\$20 to \$50
Rain Parka:	\$100 to \$400
Rain Pants:	\$75 to \$250
Socks:	\$5 to \$15
Zip Off Pants:	\$20 to \$80
Shirt:	\$10 to \$80
Fleece:	\$35 to \$150
Water Bottle:	\$9
*Stove:	\$35 to \$150
*Pots:	\$10 to \$70

### Canoeing:

Dry Bag:	\$15 to \$30
Draining Boots	\$30 to \$70

### Biking:

Bike:	\$400 on up
Helmet:	\$15 to \$60
Padded Gloves:	\$5 to \$15
Bike Shorts:	\$20 to \$85
Bike Jersey:	\$20 to \$80

\*not needed by all

### Websites:

[www.troop285sa.org](http://www.troop285sa.org):

[www.bpbascamp.com](http://www.bpbascamp.com):

[www.rei.com](http://www.rei.com):

[www.rei-outlet.com](http://www.rei-outlet.com):

[www.northernmountain.com](http://www.northernmountain.com):

[www.sierratradingpost.com](http://www.sierratradingpost.com):

Troop 285 Website has many other websites for reference

Backpacker Magazine: Great resource for gear and general knowledge.

REI: Great customer service and sales. Locations in Houston and Austin

REI – Outlet: Seconds or last year's model. Great prices.

Northern Mountain Supply: Name Brand Equipment and great sales

Liquidator at good savings. They have name brand equipment, which are seconds or year old inventory. Great return policy.

## Buying A Better Pack

There's no single piece of equipment more crucial to your backwoods enjoyment. Here's how to make the right choice.

1. Measure your torso. To get a proper fit, you must know your torso length. To find out, drape a soft tape measure from the seventh vertebra (the bony protrusion at the base of your neck) down along the contour of your spine to the low point between your hipbones.
2. Check those hips. When trying on packs, make sure you get the hipbelt positioned properly-that is, directly on the crest of the hips, not around the waist. The majority of the load will be carried by the hipbelt, so make sure it's comfortable and fits snugly, without slipping.
3. Practice patience. Your backpack may be your most important piece of gear, so take your time with the selection process. Before you leave for the store, toss all your usual backpacking gear into a duffel bag. Once you narrow down the options, load the packs and walk around the store for 20 minutes to make sure that the gear all fits inside and that the pack carries the load comfortably.
4. Treat yourself. Buy the best pack you can afford-as long as it fits. Durability and quality rank right behind fit as important considerations.
5. Know your load. Determine what and how much you'll be carrying. Are you planning to spend, at most, 1 or 2 nights out at a time? Will you be hiking in the winter? For short outings in the summer, you can get by with a smaller pack, but snowy trips require more capacity, plus external gear-lashing options.
6. Consider your trails. If you plan to hike mostly on well-maintained backcountry trails, you might find an external frame pack more comfortable. If your hiking will take you off-trail or into rough, rising terrain where balance is crucial, an internal frame will offer greater stability and comfort.
7. Think versatility. If you like to go for an evening scramble after you set up camp, look for a pack with a daypack conversion option.
8. Respect your idiosyncrasies. Packs are like spouses: You shouldn't get one hoping it will change your bad habits. If your personal motto is "A place for everything and everything in its place," look for an external frame style with lots of pockets. If you want to grab your water bottle on the go, don't frustrate yourself by falling for that nifty new pack with pockets that are just out of reach.
9. Plan with your partner. If you are hiking with a partner or group, figure out how much community gear (tents, stoves, food, etc.) you'll be carrying. Then buy the smallest pack that'll work so you don't have room to carry all the excess junk that usually shows up at the trailhead.
10. Think drink. If you favor a hydration tube for your fluid needs, find a pack ready-made to handle a bladder. If not, look for deep water-bottle pockets that can hold a quart-size bottle.

## How Big Should My Pack Be?

Capacity ratings can be used to gauge the pack's target usage. Our testing shows that the accuracy of capacity specs vary greatly from manufacturer to manufacturer. You can get around this inconsistency by bringing all your gear (in a duffel bag) with you to the store when you shop for a new pack. Below are general guidelines for evaluating capacity usages.

**2,500 to 3,000 cubic inches.** This size works as a high-volume daypack or an ultralight overnight bag. These packs will hold a light sleeping bag and the minimum of camp essentials (light stove, pot, small tent) for short, warm-weather trips.

**3,000 to 4,500 cubic inches.** You'll find this size ideal for three-season weekend trips. They'll hold all the camp essentials as well as some warm clothes and enough food for a couple of days.

**4,500 to 6,000 cubic inches.** This size is the mainstay among the backpacking community. Perfect for long weekends or weeklong outings. These packs comfortably hold all the essentials, additional warm clothes, plus any extra camp comforts you might want to bring along.

**6,000-plus cubic inches.** Whether planning a month-long expedition or just a week of snowshoeing, you'll need this size to swallow all the extra gear and clothing for the adventure. They're also useful for folks who end up with the bulk of their family's communal gear (e.g., tent, stoves, food) during family trips.

# Pack Fitting 101

Following these seven commandments will guarantee pack nirvana:

## Fit Thy Torso

Your height does not determine your torso length! To measure your torso, drape a soft tape measure from the seventh vertebrae (the bony protrusion at the base of your neck) down along the contour of your spine to the low point between your hipbones. To find that point, place a hand on each hip with your thumbs pointing in. The line connecting your thumbs is what you're measuring to. If your torso is less than 18 inches long, you'll typically take a small suspension system; 18 to 20 inches calls for a medium; 21 inches or more requires a large.

**Console Thy Hips** That's a hipbelt, not a waistbelt. It should ride on your hips, transferring the weight to your skeletal structure. It's because of this belt-to-bone contact that the belt is padded. Make sure the pads don't touch in front; you'll need some room to cinch it.

## Suit Thy Yoke

Some shoulder straps sprout from the harness in a Y, others in an H. Some you can adjust to suit your neck and shoulders. The straps should anchor to the pack just below the crest of your shoulders. From there, they should make a close-contact wrap of your shoulders. The bottom of the strap should rest at least a hand's width below your armpit so that it doesn't ride up. If the straps don't match the contours of your neck and shoulders, they will pinch and bruise.

## Adjust Thy Load-lifters

At the ideal angle of 45 degrees, load-lifter straps will help you move the weight around on your shoulders, or even off of your shoulders and onto your hips. Once your hipbelt and shoulder straps fit just right, feel for a strap that runs from the top of your shoulder strap up to the frame and tighten it.

## Don't Choke On Thy Sternum Strap

This webbing and buckle connect the two shoulder straps, guiding where the pressure falls on your shoulders. Move the strap up or down to its most comfortable position.

## Clear Thy Head

Load the pack too full and high, and you won't be able to look up at the birds or clouds. Adjust the lid pocket so it leans away from your head.

## Reconcile Thy Load

Your best bet when shopping is to pretend you're heading out on a long, cold hike. Load everything you'll need into a duffel, including food (allow 11Z2 to 2 pounds per day), and try to fit it into the packs you've chosen as finalists. Then march around the block a couple of times.

# Buying Backpacking Boots that Fit

**7 out of 10** hikers wear poorly fitted boots and don't even know it. That adds up to a lot of unnecessary blisters and sore feet--for some, even sore knees and ankles. The solution is simple. Learn proper footwear fitting and you'll kiss sore feet goodbye. Start here!

**Legendary** backpacking author Colin Fletcher has four rules when choosing boots: **1)** Pick out a quality boot. **2)** Get a good fit. **3)** Get a good fit. **4)** Get a good fit. His no doldrums bottomline: "You want to walk in comfort; you do not want to get unnecessarily tired; you want to keep your feet as dry as possible."

## The Right Fit

### 5 questions you just gotta ask a boot salesperson.

Ask veteran backpackers what they consider the most critical piece of gear, and nine out of ten will say "boots" without hesitation. Happy feet are the first step towards a happy trip. That's why the experts insist you invest a bit of time in the store to make sure you a) pick the best boot for your foot and b) get the boot properly fitted for each foot.

What's a conscientious consumer to do? Here are five specific questions to ask your bootfitter.

#### 1) Will you measure my feet (please!)?

Dana Davis, ace bootfitter from Summit Hut in Tucson, Arizona, says that the first step is always to get an accurate measurement using a Brannock device. "If a fitter doesn't start by measuring and inspecting a customer's foot, that may be a sign that they're not well schooled in boot fitting."

#### 2) Can you customize the fit?

Davis, along with most of the best bootfitters in the country, has been trained by bootfitting guru Phil Oren in modifying boots to perfectly fit anybody's funky foot. "Every size nine foot is shaped differently," says Davis. "If you have a bunion, we can make a pocket to accommodate it so there's no additional chafing. If you have a narrow heel or a low volume foot, we can add different types of padding to secure the foot inside the boot." The key is to stay in the proper size for your foot length, not bump up or down to the next size to solve a volume issue.

#### 3) What type of socks should I be wearing?

"Never underestimate the importance of socks," says Davis. "If your feet are perpetually cold and clammy, merino wool socks are probably best for you. If they're always on the hot side, a synthetic blend will quickly wick sweat away from the foot and keep them cooler and drier." Plus, varying the thickness of socks can also fine-tune the fit of a boot.

#### 4) Do I need custom footbeds or insoles?

"Almost anyone can benefit from footbeds," says Tom Purcell of Marmot Mountain Works in Berkeley, California. "Even someone with a very average, problem-free foot will see a boost in comfort with a quality footbed." Custom molded footbeds always offer the best match for your foot, but even a less expensive off-the-shelf model will help. "For instance, if your arch is high, a footbed can prevent it from elongating or collapsing with each step. Anything that cuts down on movement inside the boot means fewer blisters and a higher comfort level," says Purcell.

#### 5) Do I need waterproof boots?

Of course, if you're a desert hiker, there's no need to spend the extra money on a waterproof liner. But if you hike where there's lots of rain, or you often find yourself sloshing across streams, a waterproof liner (like Gore-Tex) is a wise investment. "Dayhikers who can go home at the end of the day to a pair of dry socks and slippers don't need to worry about liners. But on longer trips it becomes more important to keep your feet dry," says Purcell. "Also," he adds, "Don't neglect the leather just because you have a boot with a waterproof liner." It still needs to be treated periodically to keep it from drying out and cracking

Davis has one last piece of advice: "Remember that you are the one wearing the boots. Bootfitters can guide you in the right direction and make sure that the fit is correct, but if you think a boot is too stiff, for instance, for your comfort level, listen to your gut."

If you can't find a bootfitter near you that can answer all these questions, there are ways to be proactive and get good advice over the phone. The folks at Summit Hut, for instance, will be glad to talk to you about fitting. "There's no substitute for a hands-on custom fitting session, but we can talk through a number of problems over the phone," says Davis.



## The Boot Is Half Full

### Must know secrets on tweaking boot fit.

Your feet tell no lies. If you feel your heel slipping or a pinky toe rubbing or other minor fit problems, then consider using simple techniques to modify your new boots. Brad Winebrenner, expert bootfitter from Nestors in Quakertown, Pennsylvania, says he uses several tricks to fine-tune fit.

### Stretching

Bootfitters can rub, soften, or stretch out troublesome spots with a rubbing bar (see photo above) or a pneumatic stretcher. Most leather and synthetic footwear can be stretched from the inside out, says Winebrenner. Over the past five years he has solved numerous boot dilemmas with a simple push here, stretch there. The usual suspects are funky toe joints, bothersome bunions, bone protrusions, and extra-wide toes. "I usually tell customers to break in new boots naturally for a few days before I'll manually stretch them." For more serious rubs, he corrects the problem spot before customers leave the shop.

### Spacers

Folks who need excess volume gulped up in their boots can consult a plethora of foot spacers found on the market. 5-irons, a flat spacer inserted under the insole, help adjust volume under the foot. Heel shims and other localized spacers target specific gaps. Tongue depressors placed between the laces and tongue fill in extra volume from the top. The biggest secret in all volume adjustment, admits Winebrenner, is to make sure the heel stays in the boot's heel pocket. Also, make sure your toes don't get pushed into the roof of the toe box.

### Lacing

Minimize foot movement inside your boots by using a better lacing technique. The less your feet slide forward and back, the better.

## A Long Life For Your Boots

### Baby your boots with our expert advice below.

Always clean your boots after use," says Dave Page, owner-manager of Dave Page, Cobbler in Seattle, a major repair and warranty center for large retailers and manufacturers. "Take them to a utility sink and scrub them with an old veggie brush. They usually come home wet, so water's fine. Remove the footbeds. Dry the boots at normal room temperature, with no heat. Put a waterproofing treatment or a leather conditioner on them if they look dry. With modern, cemented-sole boots, don't overwaterproof them, and don't use any, I mean any, heat, because it can cause the sole edges to delaminate."

"Boots are pretty maintenance-free and durable," says Rick Applesies of Vasque. "But when you get a boot saturated and muddy, the mud draws a lot of moisture out of the leather as it dries. So after cleaning and drying, use a silicone-based leather treatment to recondition the leather. Silicones are absorbed better than wax treatments and don't tend to clog pores or inhibit leather breathability as much. Things like mink oil will soften leather too much. When boot leathers are tanned, often times stiffeners are put into the leather, and you don't want to lose all the support."

"Never put your boots next to a fire or stove," cautions Dave Smith of Danner Shoe Manufacturing Co. "Two things can happen. Put 'em too close, and you singe or melt or burn the materials. Second, wet leathers will shrink as they dry, and the boot's fit will change. Finally, don't wear your boots when working with pesticides, herbicides, and any other chemicals, since they can cause a sole to peel."