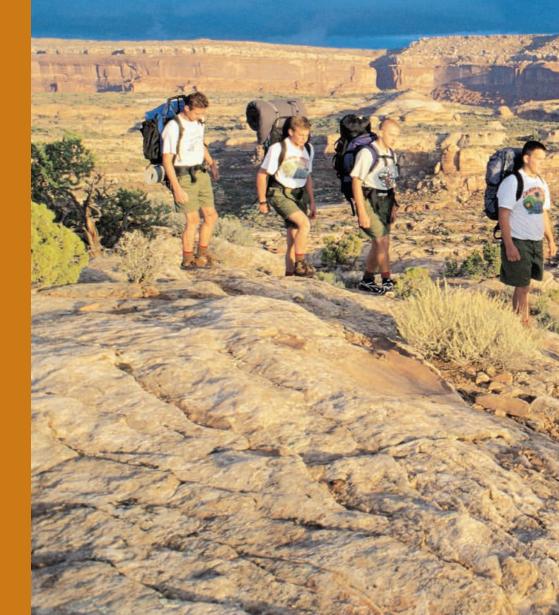
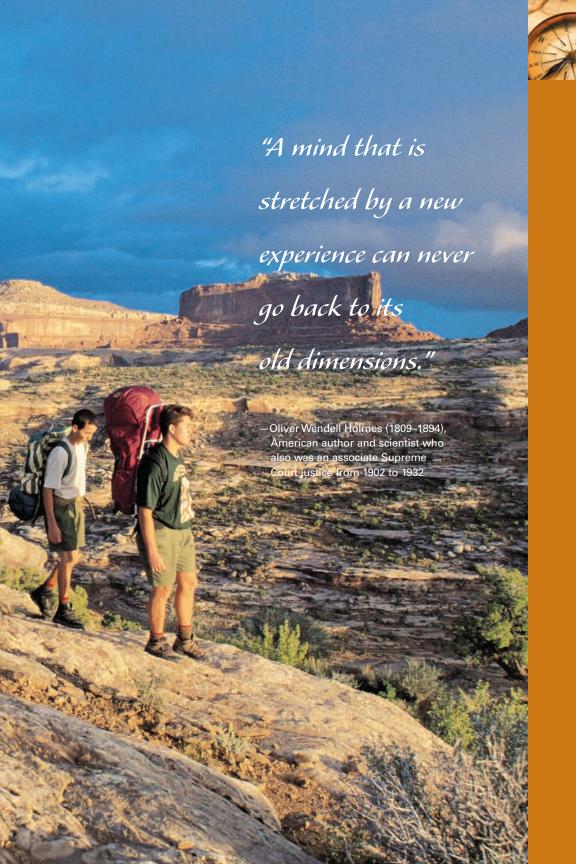


# Trek Adventures







## Gearing Up

"Go light; the lighter the better, so that you have the simplest material for health, comfort and enjoyment."

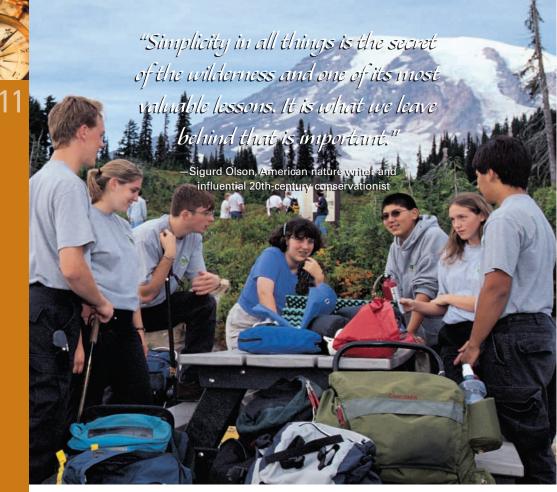
—Nessmuk (George Washington Sears, whose writings about his canoe adventures in the Adirondack Mountains encouraged many readers to set off on treks of their own), Woodcraft, 1884



As a boy wandering the Cascade Range of Washington State, future Supreme Court Justice William O. Douglas rolled his provisions inside a blanket, lashed on his frying pan and hatchet, and hiked with the bundle draped over his shoulder. Author Henry David Thoreau used a 10-foot square of white cloth for shelter on a trip into the wilds of Maine. Naturalist John Muir sometimes explored California's High Sierra carrying little but a blanket, some bread, and a bag of tea. When Scouts hit the trail in the early years of the Boy Scouts of America, many pinned together the edges of blankets to make bedrolls, kept warm with bulky woolen clothing, and set up their camps using heavy military surplus tents and gear.

While food, clothing, and shelter are still the basic needs of outdoor travelers, equipment and clothing for the outdoors have become tougher, lighter, and more versatile than ever before. Surplus gear and inexpensive clothes can still form the bulk of a group's outfit, while groups with specific requirements can find items designed to fit the most demanding activities. Add what you need for safety and comfort, and you'll be prepared for any trek.

Whatever you take probably will ride in a pack on your shoulders, or be loaded onto livestock, or be stowed aboard a sled, kayak, raft, or canoe. The lighter the load, the easier it will be to carry. The more you can do without, the less complicated your camps and the greater your ability to enjoy the outdoors without leaving a trace. John Muir's blanket, tea bag, and crust of bread is too little for most of us today, but he had the right idea—keep it light, keep it simple, but include all the essentials.



#### **Shakedown**

Get together several days before you depart on a trek and conduct a *shake-down*. Spread all your equipment, clothing, and provisions on the floor or on a ground cloth outdoors, then consider each item. Is it essential? If so, place it beside your pack. If not, put it in a separate pile. Can you cut down on weight by sharing small containers of some items with others (sunscreen, insect repellent, etc.)? Check off each item on your lists of food and gear to be sure you have all the basics and your portion of the group equipment and provisions, but nothing more.

Next, take a look through the pile of nonessentials. Some of the items could make your trip more pleasant, but you'll have to decide whether they are worth the extra weight. In the case of a plant identification book, binoculars, or a camera, the answer might well be yes. Ounces add up quickly, though; the more thorough your shakedown, the lighter your load will be. A review *after* a trip can make you aware of items you didn't use and might want to leave at home next time.

For more on deciding what foodstuffs to carry on a trek, see the chapter titled "Outdoor Menus."

#### **Outdoor Essentials**

The outdoor essentials form the core of gear and provisions for any outdoor journey. While you might go on many trips without using some of the

essentials, you will find them of tremendous value when situations develop that you must manage using only what you have on hand.

#### The Outdoor Essentials

- Pocketknife
- · First-aid kit
- Extra clothing
- Rain gear
- · Water bottle
- Flashlight
- Trail food
- · Matches and fire starters
- Sun protection
- Map and compass



#### A Timely Piece of Gear

Many outdoor travelers consider a watch another basic essential. Knowing the time of day allows you to note your progress and calculate when best to start back or begin making camp. A watch with an alarm can be vital if you intend to get up early to set out on the next leg of a journey.

#### **Pocketknife**

**Why:** Cut a cord, trim a bandage, slice some cheese, whittle a tent stake, tighten a screw on a camp stove—a pocketknife is the all-purpose tool for the out-of-doors.

**What:** Choose a quality knife that includes among its tools one or two cutting blades, a can opener, and a screw-

driver. Keep it sharp and clean.

#### **First-Aid Kit**

Why: Carrying a few first-aid items on treks will allow you to treat scratches, blisters, and other minor injuries, and to provide initial care if more serious emergencies arise.

**What:** Each member of the group should carry basic first-aid items in a self-sealing plastic bag.





#### Personal First-Aid Kit

- Adhesive bandages—6
- 3-by-3-inch sterile gauze pads—2 Soap—1 small bar
- Adhesive tape—1 small roll
- Tweezers

- 3-by-6-inch moleskin—1
- Antiseptic—1 small tube
- Roller bandage

#### Patrol/Crew First-Aid Kit

Each patrol or crew should carry a first-aid kit commensurate with the type of outdoor activity, the location of the outing, and the level of training of the assigned first-aider. This kit should include items for protection against blood-borne pathogens including latex gloves, a mouth-barrier device (for rescue breathing), and goggles or other eye protection. Symptoms and treatment given, along with the time and date, should be recorded using a crew first-aid log. For more on being prepared for emergencies, see the chapter titled "Managing Risk."

#### **Extra Clothing and Rain Gear**

**Why:** Weather conditions in the outdoors can change, sometimes with surprising quickness. Have the clothing you need to deal with extremes of weather-heat, cold, and storm.

**What:** See the discussion of outdoor clothing later in this chapter.

#### Water Bottle

**Why:** The amount of water you need to carry depends on the activities of the day and the sources of water you will encounter. While heat and humidity can make you more thirsty, it is very important to drink plenty of fluid in cold weather, too.

What: Water containers should be light, unbreakable, and secure.

• **Disposable water bottle.** A recycled plastic soda or water bottle is cheap and available at any grocery store. Secure a piece of parachute cord to the bottle with duct tape to form a carrying loop.

- One-liter, widemouthed plastic water bottle. Easy to fill and to clean; available at most outdoors or camping supply stores.
- Collapsible water jug. If you will be camping in a site where water must be carried some distance, a collapsible one-gallon plastic jug can be very convenient. It also protects stream and lake banks from excessive damage due to frequent trips to get water.

For information on treating water you collect outdoors, see the chapter titled "Hygiene and Waste Disposal."



#### Flashlight

**Why:** Even the best-planned trips sometimes take longer than expected. A flashlight will help you set up camp in the dark or find your way home after the sun has gone down. Carry spare batteries and an extra bulb for your flashlight.

**What:** Several types of flashlights are useful during treks.

- **Headlamp.** By keeping your hands free, a headlamp is terrific for night-time hiking and mountain travel, and for dealing with nighttime emergencies.
- **Penlight.** A rugged penlight designed for the outdoors casts a narrow, bright beam, takes up little space, and doesn't weigh much. It is best suited for use in camp rather than for lighting your way on the trail.
- Regular flashlight. A regular flashlight can serve all of your trek needs, but some are heavy. Regular flashlights are most helpful on trips when you are not limited as to how much you carry.

#### Trail Food

**Why:** You'll burn a lot of energy in the outdoors. A stash of trail food will keep you going through planned activities and is especially important if a trip lasts longer than expected.

**What:** Choose high-energy foods. Make your own trail mix with nuts, raisins, and diced dried fruits. Bring along a small bag of granola and an apple or an orange.

For more about food for the outdoors, see the chapter titled "Outdoor Menus."





**Why:** Plan your clothing, shelter, and meals well enough so that you can conduct your activities without relying on an open fire, but be prepared to build one in an emergency.

**What:** Carry several fire starters that are reliable, durable, and protected from the elements.

- Butane lighters. Stow them in self-sealing plastic bags.
- **Matches.** Store these in plastic bags or in empty plastic medicine bottles with secure lids. Matches can be further protected from moisture by dipping them one by one in melted paraffin.
- **Stubby candles, pitch pine, lint,** and other personal favorites for starting fires in difficult circumstances can be sealed in plastic bags.

For guidelines on deciding when a fire is appropriate and how best to build one, see the chapter titled "Using Stoves and Campfires."

#### **Sun Protection**

Why: Sunburn is a common injury among people who enjoy being outdoors. Repeated burns can cause long-term damage and the potential for skin cancer. People with lighter skin are most at risk, though others are not immune.

What: Discourage sunburn by using plenty of sunscreen with a *sun protection factor* (SPF) of at least 15. (An SPF of less than 15 provides insufficient protection; an SPF greater than 30 adds little extra safety from the sun.) Reapply sunscreen after swimming or if you are perspiring. A broad-



Sunscreens with zinc oxide provide extra protection against the sun's harmful rays and can be applied to areas—like the nose—that burn easily.

brimmed hat, a long-sleeved shirt, and long pants provide even more protection. For travels across snowfields, in deserts, and on open water, wear sunglasses for your comfort and safety.

For more on dealing with the sun, see the chapter titled "Hot-Weather Travel and Camping."

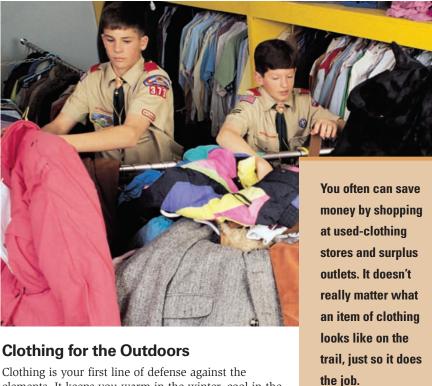
#### **Map and Compass**

Why: The deeper you travel into the backcountry, the more important a map and compass become. Use them to find your way through unfamiliar terrain, when visibility is poor, and where expected trail signs are missing. Even when a map and compass aren't essential for route finding, practicing with them is fun and will help prepare you for times when you must rely on them.



**What:** You will need a compass with a good-sized baseplate, a topographic map of the area in which you intend to travel, and the knowledge to use them both separately and together.

For more on selecting and using compasses and maps, see the chapter titled "Navigation."



elements. It keeps you warm in the winter, cool in the summer, dry in storms, and protected from insects, sun, and wind. To help decide what you need, learn about the materials from which clothing is made.



#### Wool

For generations of outdoor travelers, wool was the fabric of choice. Of course, that's about all there was for making warm clothing. Wool still is terrific for many cold-weather adventures because it is durable and water resistant, and will help you stay warm even when the fabric is wet. A wool shirt or sweater will ward off the chill of summer evenings, too. Wool also is an excellent choice in hiking socks, hats, and mittens. If wool irritates your skin, you might be able to wear wool blends or wear woolen layers over clothing made of other fabrics.

#### Cotton

Cotton clothing is cool, comfortable, and a good choice for hot-weather shirts and shorts in dry climates. If cotton becomes wet, though, it loses its ability to insulate, and it can be slow to dry in cold weather. In hot weather, the evaporation from wet cotton gives a cooling effect. Wearing cotton clothing can be a real danger on cool days, especially when mist, rain, and wind bring with them the threat of hypothermia. (For more information on hypothermia, see the chapter titled "Managing Risk.")

#### **Synthetics**

Outdoor clothing made of fleece, polypropylene, and other manufactured fabrics can be sturdy and comfortable, and can maintain warmth even when wet. Look for synthetics in underwear, shirts, sweaters, vests, jackets, pants, mittens, and hats. Lightweight nylon shorts and shirts are ideal for hot weather because nylon dries quickly. Waterproof and breathable synthetic fabrics are used in parkas and rain gear, and in the shells of mittens and gloves.

#### **Layering System**

For the most comfort in the outdoors with the least weight in your pack, use the layering system. Choose layers of clothing that, when combined, will meet the most extreme weather you expect to encounter. On a chilly autumn day, for example, you might set out from the trailhead wearing long pants, a wool shirt, a fleece sweater, mittens, and a stocking hat. As you hike, the effort will cause your body to generate heat. Peel off the sweater and stuff it in your pack. Still too warm? Loosen a few buttons on your shirt or slip off your mittens and hat.

When you reach your campsite and are no longer exerting yourself, stay warm by reversing the procedure, pulling on enough layers of clothing to stay comfortable. After the sun goes down, you might want to add an insulated parka and fleece pants or long underwear.

You also can use the layering system to keep cool in hot climates by stripping down to hiking shorts, a T-shirt, and a brimmed hat. Lightweight long pants and a long-sleeved shirt will shield you from insects, brush, and the sun.

For more on managing your clothing to stay comfortable in challenging weather, see the chapters titled "Cold-Weather Travel and Camping" and "Hot-Weather Travel and Camping."

#### The WWW of Layers



A wicking layer, warmth layers, and a windproof layer make up the WWW of an outdoor clothing system.

Versatility in your clothing is the heart of a successful layering system. Several shirts, a sweater, and a jacket will allow you to adjust your clothing in many more ways than would a single heavy coat. The *kinds* of layers matter, too:

**Wicking layer.** The layer closest to your body is made of synthetics that can *wick*, or draw, moisture away from your skin.

Warmth layers. Intermediate layers have effective insulating properties to trap the warmth your body generates.

<u>Windproof layer</u>. An outer layer prevents wind from blowing away the heat trapped in the other layers of your clothing.



Wool gloves with water-repellent shells are ideal for cold weather.



/	Basic Cold-Weather Clothing Checklist		
•		Long-sleeved shirt	
		Long pants (fleece or wool)	
		Sweater (fleece or wool)	
		Long underwear (polypropylene)	
		Socks (wool or synthetic blend)	
		Warm hooded parka or jacket	
		Stocking hat (fleece or wool)	
		Mittens or gloves (fleece or wool) with water-resistant shells	
		Wool scarf	
		Rain gear	

/	Basic	Warm-Weather Clothing Checklist
		T-shirt or short-sleeved shirt (lightweight)
		Hiking shorts
		Underwear
		Socks
		Long-sleeved shirt (lightweight)
		Long pants (lightweight)
		Sweater or warm jacket
		Brimmed hat
		Bandannas
		Rain gear





Conventional
wisdom holds
that a pound of
weight on your
feet is equal to
about 5 pounds in
your pack. Don't
buy more boot
than you need.

#### Footwear for the Field

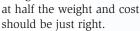
Many outdoor treks involve miles of trail hiking. Other treks, including kayaking, rafting, mountain travel, and cross-country skiing, require specialized shoes or boots, but even then you might find that you need to walk some distance to reach a river, a mountain, or a snowfield. No matter how you spend your time in the outdoors, you'll probably want to have a pair of good, durable hiking boots. In most cases, that will mean boots made of leather or trail shoes composed primarily of nylon.

#### **Leather Boots**

Your feet and ankles can take a pounding when you are traveling over rugged terrain, especially if

you are carrying a backpack. Most leather boots have a steel shank between the upper and the sole for stiffness and lateral stability—important factors when you are toting heavy loads or traveling cross-country. Leather boots also can shed water and insulate your feet in cold weather.

A drawback of leather boots can be their weight. For serious mountaineering, you might want stiff, rugged boots. For most trail hiking and camping, though, flexible leather boots



#### Trail Shoes

A wide range of lightweight footwear builds on the technology of athletic shoes beefed up for use on trails. Combining nylon uppers with rugged soles, some trail shoes are cut higher like hiking boots, and some are cut below the ankle like running shoes. They offer varying degrees of stability, durability, and protection from the elements. This type of shoe is best suited for treks when you are carrying a day pack or a lightweight backpack.



#### **Selecting Footwear**

Trek adventure footwear must fit extremely well. Boots or shoes that are too tight or too loose are an invitation to blisters. Spend as much time as you need to find the footwear that is right for you and for the activities you intend to enjoy.

When you go to a store to try on trekking footwear, put on the socks you will use in the outdoors. Find a clerk who is knowledgeable about the activities you will be doing, and who also knows a lot about how to fit shoes. Lace up a pair of boots or shoes, then walk around the store. Kick your toes forward—they should not jam against the front of the boot. Kick your heel back into the heel pocket—your foot should feel secure. The widest part of your foot should not slip, nor should it feel squeezed. Try several other models, giving each the same careful tests.

#### **Breaking In Boots**

Regardless of the design and material of your new boots or shoes, wear them several times before using them in the field. Gradually extend the length of the walks on which you wear them, and soon they'll feel like a natural part of your feet.

#### **Caring for Outdoor Footwear**

Clean your boots or shoes after every outing. Use a stiff brush to remove mud, or wash them off with water and mild soap, then allow footwear to dry at room temperature. (Placing shoes too close to a campfire can dry out leather and damage nylon.) The manufacturers of leather boots might recommend treatment with a boot dressing or waterproofing agent; follow their instructions.

#### Socks

Hiking socks made of wool or a blend of wool and nylon are terrific. Synthetic liner socks worn underneath them increase comfort and reduce the chances for blisters to occur by wicking moisture away from your skin.

#### Gaiters

Gaiters shield your feet and lower legs from rain, dew, dust, and mud; help keep gravel and snow out of your boots; and help prevent spreading seeds of noxious plants.

## SPECIALIZED FOOTWEAR

Outdoor sports and activities can best be enjoyed when your footwear matches your challenges. Ski touring, horseback riding, canoeing, kayaking, rafting, caving, and cold-weather camping all benefit from the right boots or shoes.



# Sleeping System

For the best possible rest, put together a sleeping system keyed to the temperatures and weather conditions you expect to experience.

#### **Sleeping Bag**

The cloth part of a sleeping bag is called the shell. The shells of most modern sleeping bags are made of nylon. Some use a breathable fabric that fends off mist and light rain. Fill material inside the shell traps your body heat and holds it close to you. Choices of fill materials are goose down and synthetic fibers.

#### Goose Down

*Down* is the fluffy feathers geese grow next to their skins. It provides the most warmth for the least weight of any fill material used in sleeping bags and insulated clothing. Its major drawbacks are its expense and the fact that

The key to camping comfort is to carry a good sleeping bag that will help you keep warm at night but not become a burden to carry during the day.

it loses its loft and can no longer keep you warm when it becomes wet. Although down must be sheltered from the elements, usually with a good tent, it can be the best choice for cold-weather camping in relatively dry conditions and for treks requiring very light gear.

#### Synthetic Fibers

Synthetic fill is made of polyester fibers spun in various ways to provide warmth-trapping loft even when wet. The disadvantages of some synthetic-filled bags are their weight and bulk.



Simple quilting. Loses heat where the stitching passes through the fabric.

Double quilting. Two quilts fastened together in an offset way to eliminate cold spots. Material tends to be heavy.

Box wall. Prevents the filling from moving about.

Slant wall. Prevents down from moving about and gives it room to expand.

Overlapping tube or V-baffle. Very effective, but because it uses a lot of material, it tends to be heavy.

#### Packing and Caring for Your Sleeping Bag

Stow your sleeping bag in a stuff sack lined with a plastic trash bag. That will protect your sleeping bag even in bad storms or the capsizing of a kayak, canoe, or raft.

Air out your sleeping bag at the end of a trip. Keep it in a large cloth laundry sack or hang it in a dry, out-of-the-way spot until your next adventure.

Don't store a sleeping bag in its stuff sack; fill that is compressed for a long time loses some of its loft and insulating capacity.

With ordinary use, a sleeping bag should not need to be cleaned very often. If it has become excessively soiled or has lost a good deal of its loft, though, you might be able to restore it by laundering. per the manufacturer's directions. Some bags can be laundered using a mild, fragrance-free detergent, and washing the bag in cold water in a commercial-sized washing machine. Run the rinse cycle a second time to remove any soap residue. A wet bag is heavy and prone to damage; support its full weight as you move it from the washer to a drier. Dry it on the coolest setting and expect the drying process to take from two to five hours.



#### Sleeping Bag Comfort Ratings

Manufacturers often assign a *comfort rating* to a new sleeping bag—an estimate of the lowest temperature that bag is designed to address. People differ in the amount of insulation they need to stay warm, so use comfort ratings as a general, rather than absolute, guide. Sleeping inside a tent can enhance a sleeping bag's insulating power. A fleece *bag liner* can add another 10 degrees to the warmth of a bag and help keep it clean.

Bags shaped to be snug against your body tend to be warmer than looser bags. Added features, such as collars, hoods with drawstrings, and tubes of fill material backing the zippers, will further slow the loss of body heat.

## Sleeping Pad

What you have beneath you at night is as important in keeping you warm and dry as what's on top. A *sleeping pad* will prevent the cold ground from drawing away body heat, and gives you a comfortable surface on which to sleep. Your best choices are *foam pads* and *self-inflating pads*.

#### Foam Pad

**Unroll** your

so it can fluff

up as much as

possible. In humid

or rainy weather,

however, leave

the bag in its

stuff sack until

bedtime so it

won't absorb

Foam pads vary in the degree of insulation and comfort they provide. Closed-cell foam pads tend to be effective at preventing heat loss, but at the expense of comfort. Open-cell foam pads are softer, but might not be as warm or as durable. Though lightweight, bulky foam pads can be challenging to stow in a pack.

#### Self-Inflating Pad

The choice of many outdoor travelers, a *self-inflating* sleeping pad is an airtight nylon shell covering open-cell foam. It provides maximum insulation and warmth. Self-inflating pads often are more expensive and heavier than

other kinds of pads, and they should be accompanied by a small repair kit for patching punctures.

Sleeping bag

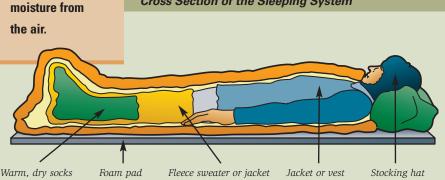
Using Your Sleeping System

Just as you wear layers of clothing that can be adjusted to meet changing weather conditions, you can set

do to meet changing weather conditions, you can set up your sleeping system for night temperatures any time of the year. Start with a good general-use sleeping bag and leave the zipper open on warm evenings. If the night is cold, zip the bag to your chin and pull the hood snugly around your head. For more warmth, put on long underwear, a stocking hat, dry socks, and mittens. Add a fleece sweater or jacket, too, or wrap it around your hips and thighs.

Make a pillow in any weather by arranging some extra clothing (in bear country, clean clothing only) in a stuff sack or inside a sweater with the sleeves tied together.

Cross Section of the Sleeping System





#### Shelter

Desert campers need shelters that are open and airy yet will shade them from the sun. Long-distance hikers, kayakers, and cyclists need shelters that are lightweight yet appropriate for many variations in the weather. The safety of mountaineers and winter campers can depend largely on tight, strong tents that will withstand the force of wind-driven snow and sleet.

Fortunately, there are shelters available for almost every traveler. Among the options for modern outdoor adventurers are tarps, bivouac bags, and tents.

#### Tarp

A tarp is the simplest of outdoor shelters; it weighs just a few pounds and can be set up in dozens of ways. Use it as your primary shelter or as a dining fly to protect your group's gear or cooking area from sun and storm.

Rig it the way you want with lengths of parachute cord at the corners and as a ridgeline. A tarp has no floor, which can pose challenges in soggy terrain, nor does it have netting to keep insects at bay. Still, for a flexible shelter in mild or hot climates, a tarp is hard to beat.





#### **Bivouac Bag**

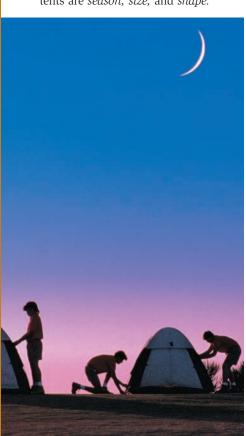
The bivouac bag, originally intended as an emergency refuge for mountain climbers forced to spend nights on cliffs far from their camps, is a waterproof envelope that slips over a sleeping bag. Most bivouac bags are made of fabrics that shed rain, dew, and snowmelt, yet allow body moisture to pass through into the night air.



Bivouac bags are very light, but they also are confining. That's something to consider if you intend to travel where you might need to stay inside for a day or two waiting out a storm.

#### **Tent**

Most campers rely on tents for their shelters. The great variety of tents on the market allows you to select one matched to your adventures. In addition to noting a tent's weight, among the factors to consider when comparing tents are *season*, *size*, and *shape*.



#### Season

Three-season tents are intended for use in the spring, summer, and autumn. Many have mosquito-netting panels to allow plenty of warm-weather ventilation.

**Four-season tents** are built to withstand the strong winds and snow loads of winter. Some have extra poles for added stability, and they tend to be heavier than three-season tents.

**Convertible tents** have panels that can be zipped closed over mosquito-netting vents. Leave them open for ventilation on warm nights, then close them to block the wind and spindrifts of snow during cold-weather trips.

#### Size

Tents are marketed as suitable for one, two, three, or four sleepers. Consider the way you will most often travel and the sort of group with whom you will camp.

#### Shape

The *A-frame* tent, essentially a pup tent made light and strong with modern materials and engineering, is roomy and usually has a waterproof floor and mosquito-netting vents and doors. Breathable fabric allows moisture to escape from inside the shelter, while a waterproof rain fly protects the tent from exte-

rior moisture. A two-person A-frame tent weighs 5 to 9 pounds and will keep a couple of hikers and their gear dry.

Flexible poles have allowed tent makers to develop *dome*-shaped tents. These tents stand up well in rain, wind, and snow, and the spaciousness of their interiors makes them great for two to four campers. A dome tent can be flipped upside down in the morning to dry the bottom of the tent floor.

Tent designers are constantly trying to improve their products by altering or combining basic tent shapes,



A-frame tent

adding features, and even removing basic features.

The resulting *hybrid* tents sometimes look odd, but occasionally there are real advances





#### Choosing a Tent

With so many tents on the market, you'll want to shop around until you find the shelter that is just right for you. If you can, borrow or rent different tents and use them on overnight treks to see what they are like. Ask a salesperson to help you pitch tents in the showroom, then crawl inside and check them for size, comfort, quality of construction, and ease in setting up and taking down.

If possible, choose a tent that will blend in with the outdoor surroundings. Earth-toned shades of green, brown, gray, or blue help reduce the visual impact of a campsite.

#### Guidelines for Choosing a Tent

Answer the following questions before you shop for a tent to help you think through your needs:

- 1. In what weather extremes will you be using your tent?
- 2. How will you transport your tent? (Carry it yourself, split the load with others, haul it by pack animal or watercraft, etc.)
- 3. Do your adventures involve a base camp or do you plan to move to a new campsite every day or two?
- 4. How many people will share the tent?

#### **Ground Cloth**

A sheet of plastic under your tent will protect the floor from rocks and twigs and keep moisture from seeping through. Prevent rain from running between the tent floor and the ground cloth by placing the cloth so that it doesn't extend beyond the area covered by the tent, or by using the cloth to line the interior of the tent.





#### Gear for Cooking, Eating, and Drinking

The gear you need for cooking, eating, and drinking depends upon what you intend to cook, eat, and drink. Expect to carry personal utensils, a cook kit, and one or more stoves.

#### **Personal Eating Gear**

An insulated mug cup that won't burn your lips is just the thing for hot and cold drinks. A large plastic cereal bowl or a kitchen storage bowl is all you need for most meals, and you can dig your way through the majority of trail dishes with nothing more than a spoon.

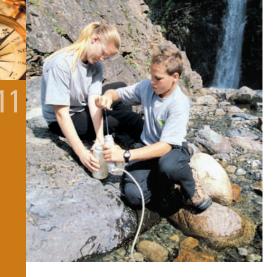
#### **Cooking Gear**

As you plan the menus for an outdoor adventure, match your meals to your cooking gear. One or two lightweight pots will form the foundation of your kitchen. Add another pot or frying pan for more complicated meal preparations. Don't forget the lids; they hold in heat, shorten cooking times, and prevent dust and insects from blowing into your food.

#### Stoves

Backpacking stoves are easy to carry and convenient to use regardless of the weather. Stoves also make it easier for you to leave no trace as you are camping.

For more on cooking gear, see the chapter titled "Outdoor Menus." For more on stoves, see the chapter titled "Using Stoves and Campfires."



#### Water Treatment System

Any water taken from untested sources must be treated. Your options include boiling, treating with chemicals, and filtering. Each method requires planning before you leave home and carrying a few items once you embark on a trail.

For more about treating water, see the chapter titled "Hygiene and Waste Disposal."

#### **Toiletry Kit**

When it comes to toiletries, a small amount will go a very long way. You can, for example, buy the smallest tube of toothpaste you can find, or save a nearly empty tube to carry in your pack.

The following are basic toiletry items to take with you:

- Toothbrush and toothpaste
- Dental floss
- Soap
- · Waterless hand cleanser
- Small towel
- Toilet paper
- Trovel for digging cathole latrines

For more on personal cleanliness, see the chapter titled "Hygiene and Waste Disposal."

#### Other Gear

Specific outdoor activities can be enhanced with specialized gear. Depending on what you will be doing, you might wish to carry some or all of the following items:

- Whistle
- Nylon cord
- Insect repellent
- Notebook and a pen
- Repair kit
- Hiking stick or trekking poles

- Camera
- Binoculars
- Fishing gear
- Animal identification books, plant keys, geological studies, star charts, or other guides

#### Journal

Much like Lewis and Clark did while exploring more than two-thirds of the American continent, many outdoor enthusiasts carry a small notebook and pen to record the events of their travels, to note unusual flora or fauna discovered along the way, to compose a bit of poetry, or to record the distance and time spent traveling each day. A journal offers an opportunity to relive the experience years later and to share it with others.



#### Packs, Panniers, Dry Bags, Duffels, and Saddlebags

Many journeys require special gear for transporting food and equipment. Bicyclists and horse packers might need panniers or saddlebags to hold their supplies, while winter campers might choose to haul their gear on sleds. Waterproof *dry bags* will protect the equipment and provisions of canoeists, rafters, and kayakers even if they capsize. Backpackers carry a wide range of both internal- and external-frame packs.

More information on packs, bags, and duffels can be found in other chapters of this "Trek Adventures" section.

"I never knew a camper who did not burden himself, at first, with a lot of kickshaws that he did not need in the woods; nor one who, if he learned anything, did not soon begin to weed them out; nor even a veteran who ever quite attained his own ideal of lightness and serviceability."

 Horace Kephart, The Book of Camping and Woodcraft, 1906
 (An encyclopedia of living in the open, Kephart's popular book was a favorite of Scouts during the BSA's early years.)