

# March 2021

## Scouts, BSA Leader's Roundtable

### Theme: **Backpacking**

Scout's BSA Roundtable Commissioner: Mark Penner

Sub for tonight: Ray Ritch

#### **Handouts**

Page	Title
1	Forms for planning your outing's itinerary
3	Trip Plan
5	Emergency Response Plan
6	Duty Roster
7	9 Things to know about Cold-Weather Hiking
13	Prepare for hiking with these 4 simple foot exercises
15	How to pack a backpack
18	Cold Packing List
19	Warm Packing List
20	Paddling Packing List
21	Bicycling Packing List
22	Make hiking less tiring with these simple strategies
26	Make your own hiking stick
29	How to buy the right backpacking tent

Handout available online at [www.ritch.net](http://www.ritch.net)

# Forms for planning your outing's itinerary

*By Aaron Derr*



Paperwork? For a backpacking trip? When it comes to backpacking and other outings, keeping good paperwork is part of Being Prepared. You'll need a trip plan, an emergency plan and a duty roster.

Download our templates below to help you get started.

## **TRIP PLAN OR ITINERARY**

Don't leave home without an itinerary, or a plan. In advance, figure out how far you're going each day. There are different factors to take into account, such as: Is the terrain uphill or downhill? If canoeing, how high, fast or slow is the water? On multiday hikes, are there water sources nearby every day?

Put your itinerary in writing and leave a copy of it with someone at home.

And remember: Plan to get to your campsites with plenty of daylight left. It's much easier setting up when you can see what you're doing.

- [File No. 1: Trip Plan, Microsoft Word](#): Modify it yourself to fit your trip.
- [File No. 2: Trip Plan, PDF](#): Print our file and fill in the details for your trip by hand.

## **EMERGENCY RESPONSE PLAN**

Before you leave for any trip, try to anticipate what could go wrong. Altitude sickness? Flooding? Avalanche? A serious injury? Provide copies to a handful of responsible adults who won't be going on the trip.

- [File No. 1: Emergency Response Plan, Microsoft Word](#): Modify it yourself to fit your trip.
- [File No. 2: Emergency Response Plan, PDF](#): Print our file and fill in the details for your trip by hand.

## DUTY ROSTER

Your duty roster should help you organize the responsibilities of each member — or each patrol — as you progress along your trek. Come up with a list of duties (water purification, cooking, cleanup, etc.) along with a list of the Scouts who will perform them. That way everybody knows from the start what they're in for.

- [File No. 1: Duty Roster, Microsoft Excel](#): Type in your own job names and the names of who will perform them.
- [File No. 2: Duty Roster, PDF](#): Print out file and write down the names of the jobs and the Scouts by hand.

# Trip Plan

Destination: \_\_\_\_\_

Dates: \_\_\_\_\_

Who's Going: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

## Itinerary

Day 1 \_\_\_\_\_

Day 2 \_\_\_\_\_

Day 3 \_\_\_\_\_

Day 4 \_\_\_\_\_

Day 5 \_\_\_\_\_

Day 6 \_\_\_\_\_

Day 7 \_\_\_\_\_

Day 8 \_\_\_\_\_

Day 9 \_\_\_\_\_

Day 10 \_\_\_\_\_

Gear List: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Permits Required: \_\_\_\_\_

# Leave No Trace

List how each principle of LNT can be applied to this trip.

Plan Ahead and Prepare

---

---

---

---

Travel and Camp on Durable Surfaces

---

---

---

---

Dispose of Waste Properly

---

---

---

---

Leave What You Find

---

---

---

---

Minimize Campfire Impacts

---

---

---

---

Respect Wildlife

---

---

---

---

Be Considerate of Other Visitors

---

---

---

---







## COLD-WEATHER OUTING



- Long-sleeved shirt
- Long pants (fleece or wool)
- Sweater (fleece or wool)
- Long underwear (polypropylene)
- Hiking boots or sturdy shoes
- Socks (wool or synthetic)
- Warm parka or jacket with hood
- Stocking hat (fleece or wool)
- Mittens or gloves (fleece or wool) with water-resistant shells
- Wool scarf
- Rain gear
- Extra underwear (for longer trips)

### COLD-WEATHER EXPERT ESSENTIALS:

- Bandana
- Sorel boots
- Wind parka with hood
- Side-attaching suspenders

### 2 THINGS YOU DIDN'T KNOW YOU NEEDED:

- Rubberized gloves
- Headlamp

## THE SCOUT OUTDOOR ESSENTIALS

They're called Essentials for a reason. Every packing list starts with these items.

- Pocket knife
- First-aid kit
- Extra clothing
- Rain gear
- Water bottle
- Flashlight
- Trail food
- Matches and fire starter
- Sun protection
- Map and compass



## EXTRAS

- Watch
- Camera
- Notebook
- Pen or pencil
- Sunglasses
- Small musical instrument
- Swimsuit
- Gloves
- Whistle
- Nylon cord
- Insect repellent
- Repair kit
- Hiking stick or trekking poles
- Binoculars
- Fishing gear
- Animal identification books, plant keys, geological studies, star charts etc.

## KEEPING CLEAN

- Toothbrush
- Toothpaste
- Dental floss
- Soap
- Comb
- Waterless hand cleaner
- Small towel
- Washcloth
- Toilet paper
- Trowel for digging cathole latrines

## COOKING/EATING

- Large plastic cereal bowl or kitchen storage bowl
- Spoon
- Cup or Insulated mug
- Water treatment system
- Backpacking stove with fuel
- Large pot and lid (2.5- or 3-quart size)
- Small pot and lid (1.5- or 2-quart size)
- Lightweight frying pan (10 to 12 inches in diameter)
- For melting snow, add one large pot and lid (6 to 10 quarts)
- Hot-pot tongs



## WARM-WEATHER OUTING



- T-shirt or short-sleeved shirt (lightweight)
- Hiking shorts
- Underwear
- Socks
- Long-sleeved shirt (lightweight)
- Long pants (lightweight)
- Sweater or warm jacket
- Brimmed hat
- Bandana
- Rain gear
- Extra underwear (for longer trips)

### WARM-WEATHER EXPERT ESSENTIALS:

- Water
- Rain suit
- Boots
- Backpack that fits

### 2 THINGS YOU DIDN'T KNOW YOU NEEDED:

- Personal blister kit
- Parachute cord, 20 feet

## THE SCOUT OUTDOOR ESSENTIALS

They're called Essentials for a reason. Every packing list starts with these items.

- Pocket knife
- First-aid kit
- Extra clothing
- Rain gear
- Water bottle
- Flashlight
- Trail food
- Matches and fire starter
- Sun protection
- Map and compass



## KEEPING CLEAN

- Toothbrush
- Toothpaste
- Dental floss
- Soap
- Comb
- Waterless hand cleaner
- Small towel
- Washcloth
- Toilet paper
- Trowel for digging cathole latrines

## COOKING/EATING

- Large plastic cereal bowl or kitchen storage bowl
- Spoon
- Cup or Insulated mug
- Water treatment system
- Backpacking stove with fuel
- Large pot and lid (2.5- or 3-quart size)
- Small pot and lid (1.5- or 2-quart size)
- Lightweight frying pan (10 to 12 inches in diameter)
- For melting snow, add one large pot and lid (6 to 10 quarts)
- Hot-pot tongs

## EXTRAS

- Watch
- Camera
- Notebook
- Pen or pencil
- Sunglasses
- Small musical instrument
- Swimsuit
- Gloves
- Whistle
- Nylon cord
- Insect repellent
- Repair kit
- Hiking stick or trekking poles
- Binoculars
- Fishing gear
- Animal identification books, plant keys, geological studies, star charts etc.



## PADDLING OUTING



- PFD (a.k.a. life jacket)
- Paddle
- Lightweight rain gear
- Sunglasses with strap
- Sunscreen, non-oily cream
- Water bottle with clip
- Swim trunks
- Wide-brimmed hat
- Towel
- Baby powder or Gold Bond (to cut down on chafing)
- Insect repellent
- Flip flops
- Fishing license

### PADDLING EXPERT ESSENTIALS:

- Dry bag
- Dry box
- Fishing hat
- Polarized sunglasses

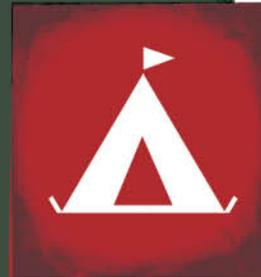
### 2 THINGS YOU DIDN'T KNOW YOU NEEDED:

- Lightweight long-sleeve shirt and long pants
- Dive booties

## THE SCOUT OUTDOOR ESSENTIALS

They're called Essentials for a reason. Every packing list starts with these items.

- Pocket knife
- First-aid kit
- Extra clothing
- Rain gear
- Water bottle
- Flashlight
- Trail food
- Matches and fire starter
- Sun protection
- Map and compass



## EXTRAS

- Watch
- Camera
- Notebook
- Pen or pencil
- Sunglasses
- Small musical instrument
- Swimsuit
- Gloves
- Whistle
- Nylon cord
- Insect repellent
- Repair kit
- Hiking stick or trekking poles
- Binoculars
- Fishing gear
- Animal identification books, plant keys, geological studies, star charts etc.

## KEEPING CLEAN

- Toothbrush
- Toothpaste
- Dental floss
- Soap
- Comb
- Waterless hand cleaner
- Small towel
- Washcloth
- Toilet paper
- Trowel for digging cathole latrines

## COOKING/EATING

- Large plastic cereal bowl or kitchen storage bowl
- Spoon
- Cup or Insulated mug
- Water treatment system
- Backpacking stove with fuel
- Large pot and lid (2.5- or 3-quart size)
- Small pot and lid (1.5- or 2-quart size)
- Lightweight frying pan (10 to 12 inches in diameter)
- For melting snow, add one large pot and lid (6 to 10 quarts)
- Hot-pot tongs



## BICYCLING OUTING



- Repair kit
- Screwdrivers sized for your bike's various screws
- Allen wrenches and box wrenches for your bike
- Chain rivet extractor
- Spoke wrench
- Chain lube
- Tire patch kit
- Spare inner tube
- Mini pump

### PADDLING EXPERT ESSENTIALS:

- Multi-tool
- Hydration pack
- Sunglasses
- Gloves

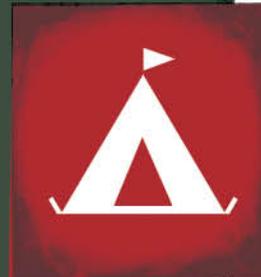
### 2 THINGS YOU DIDN'T KNOW YOU NEEDED:

- Energy bars
- Zip ties

## THE SCOUT OUTDOOR ESSENTIALS

They're called Essentials for a reason. Every packing list starts with these items.

- Pocket knife
- First-aid kit
- Extra clothing
- Rain gear
- Water bottle
- Flashlight
- Trail food
- Matches and fire starter
- Sun protection
- Map and compass



## EXTRAS

- Watch
- Camera
- Notebook
- Pen or pencil
- Sunglasses
- Small musical instrument
- Swimsuit
- Gloves
- Whistle
- Nylon cord
- Insect repellent
- Repair kit
- Hiking stick or trekking poles
- Binoculars
- Fishing gear
- Animal identification books, plant keys, geological studies, star charts etc.

## KEEPING CLEAN

- Toothbrush
- Toothpaste
- Dental floss
- Soap
- Comb
- Waterless hand cleaner
- Small towel
- Washcloth
- Toilet paper
- Trowel for digging cathole latrines

## COOKING/EATING

- Large plastic cereal bowl or kitchen storage bowl
- Spoon
- Cup or Insulated mug
- Water treatment system
- Backpacking stove with fuel
- Large pot and lid (2.5- or 3-quart size)
- Small pot and lid (1.5- or 2-quart size)
- Lightweight frying pan (10 to 12 inches in diameter)
- For melting snow, add one large pot and lid (6 to 10 quarts)
- Hot-pot tongs

# 9 Things to Know About Cold-Weather Hiking

*By Aaron Derr*

*Photographs by Price Chambers*

Winter hikes are always interesting for Crew 365 of Evansville, Indiana.

They do most of their recruiting in the fall. By the time their first winter outing comes around, they have lots of new members and some of them have never spent the night outdoors.

And, yes, it gets cold in Indiana in the winter.

Winter hikes are an opportunity for the experienced Venturers — many of them are Eagle Scouts — to teach the new Venturers — some of whom are brand new to Scouting — how to thrive in the cold.

Here's what they told us about how they do their winter outings.



## #1 CHOOSE A FUN LOCATION

Crew 365, chartered to the University of Evansville, goes to Shawnee National Forest in Southern Illinois every January. But Shawnee National Forest is a big place — more than 265,000 acres. That means each year they can choose a different trail, and each year is a completely new experience.

**Last winter, the group hiked in Lusk Creek Wilderness on the Indian Kitchen and Bear Branch Creek trails, and saw an epic waterfall at Burden Falls Wilderness.** It's an easy enough adventure for the newcomers to handle, but it's scenic enough to keep things interesting for the veterans.

On this day, it was just warm enough for some of the snow to melt and then refreeze as icicles several feet long.

"It's absolutely gorgeous," says Madelyn Reinagel, the crew's vice president of activities. "It's really stunning. All of the ice formations just added to it."



## #2 GEAR UP

**Having the right stuff is important year-round. It's extra important in winter.**

Get the right winter sleeping bag. Grab the correct noncotton clothing. Don't leave home without extra pairs of wool socks. Crew 365 helps its crewmates with that.

"As long as you're a member of the crew, you can borrow any piece of gear you might need," says Matt Waters, the crew's vice president of high adventure and also an Eagle Scout. "We bring extra hats along. We bring sleeping bags and pads and tents. If you're a member, you can check it out for the weekend and bring it back."



## #3 DON'T SWEAT IT (LITERALLY)

**Sweating is good when it's hot. The process of sweat evaporating from your skin sucks the heat off your body and cools you.**

When it's cold, sweating is bad. You want to hold on to that heat. How is it possible to break into a sweat when it's freezing cold? You'd be surprised.

You start off your hike nice and comfy, but once you start moving, your body heats up.

"We definitely make sure people know they need to dress in layers so they don't get cold," crew president Katie Mearns says. "If any of us feel it's getting warm, we say, 'Hey, guys, you can take off some layers if you're getting hot.' You don't want them to sweat."

## #4 DRINK UP

**Everybody likes drinking water when it's hot. It takes a special kind of dedication to drink the same amount when it's cold.**

During the summer, moisture exits your body through sweat. In winter, when the air is drier, it comes out through your breath. You know how you can see your breath in the cold air? That's water your body is losing.

"As we're walking," Katie says, "we'll stop and let everyone catch up and say, 'Hey, guys, now is a good time to drink some water.'"



## #5 CONSIDER THE CABIN

Normally, Crew 365 sleeps outdoors on their outings. At this event, the forecast called for a nighttime windchill of around 10 degrees. The youth leaders got together and decided those were no conditions for inexperienced campers. They elected instead to reserve an inexpensive rustic cabin.

It wasn't exactly the Hilton: The cabin had beds but no heater. It was still cold. Just not 10 degrees cold.

"It was very, very basic," says Tyler Wintermute, another Eagle Scout and the crew's treasurer. "It sheltered us from the wind. But it still got pretty cold in there."

The crew spent the night much as they did the day — in layers. Extra blankets if they got cold; if they got too warm, they could easily discard a layer.



## #6 CONSIDER THE CAMPFIRE

You can get along fine without a campfire, even when it's cold. Campfires can char plants, blacken rocks and otherwise ruin the ground.

However, in situations where campfires are appropriate — like in areas with an established campfire ring — there's nothing like it to bring a group together on a cold night.

"It's a unique experience. Scouts is one of the only organizations that can provide it," Matt says. "You're able to share stories and experiences of things you've done in the past. You can reminisce about the previous day. You can really get to know some of the people you're with."



## #7 LEAVE NO TRACE

**The goal of every outing should be to leave the area in better shape than it was when you got there.**

One Crew 365 member took this to the extreme on their latest Shawnee adventure. When he came across a discarded car mat — of all things — in the middle of the woods, he felt like he had no choice.

“We had a talk about Leave No Trace,” Katie says. “If we saw anything that was trash, we picked it up and carried it out with us. So he picked up (the mat) and carried it out with us.”



## #8 FIND SOMETHING COOL TO SEE

**The most famous Garden of the Gods is the National Natural Landmark in Colorado Springs, Colorado.** But Garden of the Gods Recreation Area in Shawnee National Forest is just as awe-inspiring, even if it is lesser known.

Scientists say it was the shore of an ancient sea 320 million years ago. Now it's a series of amazing sandstone rock formations, with incredible views of the surrounding wilderness.

On the final day of their camping trip, Crew 365 hiked the Garden of the Gods Observation Trail.

The trail is only about a quarter-mile long, but it takes time, because you're walking between — and sometimes hopping over — the rocks.

“It's the highlight of the trip,” says Spencer Willem, an Eagle Scout and the crew's vice president of outings. “You can just see forever. It's an uninterrupted view for miles.”



## #9 BE COOL (NOT LITERALLY)

**Assuming you have the proper equipment**, there's one thing that can make or break your winter hiking experience: your attitude.

Instead of adding a layer, do you complain the first time you start to feel chilly? If so, you could be in for a long weekend.

"At the end, the (inexperienced Venturers) were proud of themselves for powering through the trip and getting through any kind of cold they experienced," Madelyn says. "It's a good sense of accomplishment."

# Prepare for Hiking With These 4 Simple Foot Exercises

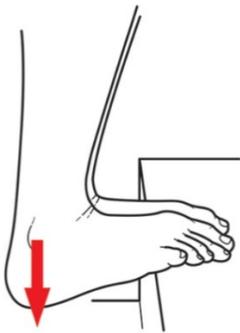
*By Clay Swartz*

*Illustrations by Robert L. Prince*



Training for a big hike? Perform these simple exercises a few times a week to reduce the risk of ankle sprains, aching arches and other foot-related injuries.

## Achilles Stretch



Stand on a step with your heels hanging off. Let your heels slowly drop over the edge for 15 seconds before bringing them back up to step level. Repeat five times.

## Bottle Roll



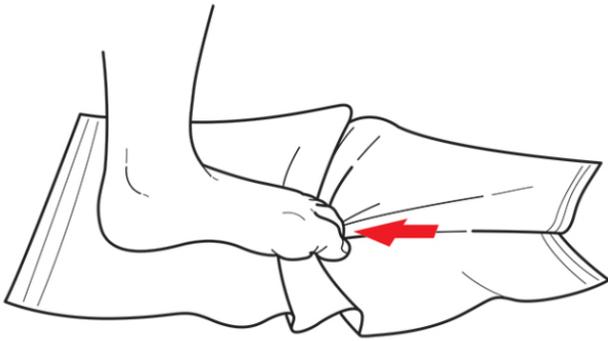
Fill a plastic bottle with water and freeze it. Slowly roll your foot on the bottle, stretching your arches and toes as you do it. Perform for 10 minutes with each foot.

## Toe Grab



Place five small objects (like marbles) and a cup on the floor. With a bare foot, pick up the objects one at a time with your toes and place them in the cup. Repeat four times with each foot.

## Towel Curl



Spread a thin towel flat on the floor, and place one bare foot on it. Keeping your heel in place, pull the towel toward you by grabbing it with your toes and arch. Repeat five times with each foot.

# How to Pack a Backpack

When it comes to experiencing the outdoors, nothing beats backpacking. But carrying around all that gear on a trail isn't easy. Here are some ways you can make it easier by packing the right way:

- Stuff you won't need until reaching camp should go deeper in your pack.
- Put rain gear, first-aid kit, a sweater, dry socks and other essential items near the top or in a side pocket where they are easily accessible.
- Keep cooking fuel in a side pocket so it's isolated from the rest of your supplies.
- Keep your tent where you can quickly reach it if you need to get a shelter up fast.
- At the end of your trip, review your gear list to see if there is anything you can do without next time.

Once you have your pack loaded, adjust the waist belt and shoulder straps so that most of the weight rides on your hips. Don't try to carry the pack with your muscles. Throughout the day, you can adjust the straps to shift the weight to ease any discomfort.

And leave the frozen chicken at home

## THE WELL-PACKED PACK



## WHAT SHOULD GO IN YOUR PACK?

The contents of your pack will depend on the type of outing, but our **packing checklists** can help keep you from forgetting any of the essentials.

# THE SCOUT OUTDOOR ESSENTIALS

They're called "essentials" for a reason. Every packing list starts with these 10 items.

1. A **pocketknife or multitool** can be handy in a wide variety of situations. It's useful for tasks as large as building an emergency shelter or lighting a campfire with poor fuel, or as small as repairing a damaged backpack. Keep your knife sharp and clean, and don't forget to first earn your Whittling Chip (for older Cub Scouts) or Totin' Chip (for Boy Scouts).
2. A **first-aid kit** can be a lifesaver. Literally. A few items will allow you to treat scratches, blisters and other minor injuries. They should also allow you to provide initial care while waiting for help for more serious injuries.
3. Bring **extra clothing** to match the weather. Multiple layers are better than a single massive jacket, because layered clothing is adaptable to a wide range of temperatures.
4. **Rain gear** is very important. Rain can come in a hurry, and getting your clothes drenched is more than just uncomfortable, it can lead to hypothermia, a potentially fatal condition.
5. A **flashlight**, headlamp or a rugged penlight is important for finding your way in the dark. Bring extra batteries, too.
6. **Trail food** is good for maintaining your energy. Bring more than you think you'll need in case you get stuck (or lost) in the woods.
7. **Water** can prevent dehydration, heat exhaustion and heatstroke. Use a lightweight, unbreakable container with a secure lid.
8. **Matches and/or a fire starter** may be used to light fires for heat, or for signaling for help. Store matches or lighters in resealable plastic bags.
9. **Sun protection** might include sunblock, sunglasses, lip balm and a wide-brimmed hat.
10. A **map and compass** are probably the most important tools you can carry in case you get lost.

## KEEPING CLEAN

Here are some hygiene items you may want to pack, depending on the outing:

- Toothbrush
- Toothpaste
- Dental floss
- Soap
- Comb
- Waterless hand cleaner
- Small towel
- Washcloth
- Toilet paper
- Trowel for digging cathole latrines

# COOKING AND EATING

Here are some cooking and eating items you may want to pack, depending on the outing:

- Large plastic cereal bowl or kitchen storage bowl
- Spoon
- Cup or insulated mug
- Water treatment system
- Backpacking stove with fuel
- Large pot and lid (2.5- or 3-quart size)
- Small pot and lid (1.5- or 2-quart size)
- Lightweight frying pan (10 to 12 inches in diameter)
- For melting snow, add 1 large pot and lid (6 to 10 quarts)
- Hot-pot tongs

# EXTRAS

Here are some extras you may want to pack, depending on the outing:

- Watch
- Camera
- Notebook
- Pen or pencil
- Sunglasses
- Small musical instrument
- Swimsuit
- Gloves
- Whistle
- Nylon cord
- Insect repellent
- Repair kit
- Hiking stick or trekking poles
- Binoculars
- Fishing gear
- Animal identification books, plant keys, geological studies, star charts or other guides

# Make Hiking Less Tiring With These Simple Strategies

*By John Haviland*

*Illustrations by Johnathan Carlson*



Up one hill and down another: Before you know it, your pack weighs a ton and you're panting like a dog. But a hike does not have to be this tiring. A steady pace will conserve energy by ironing out all those ups and downs.

## FIND YOUR STRIDE



Everyone has a different stride (natural pace). Find yours during the first steps of a hike. It should be smooth — with **rhythmic breathing**, **swinging arms** and a **consistent length** to the step.

Maintaining that pace can be difficult. Slower hikers ahead on the trail slow your pace. Faster ones tempt you to hurry along.

Spreading out your group helps you maintain your pace. But for safety, your pace can't be any faster than the slowest hiker in your group. It's important that the group stay together."

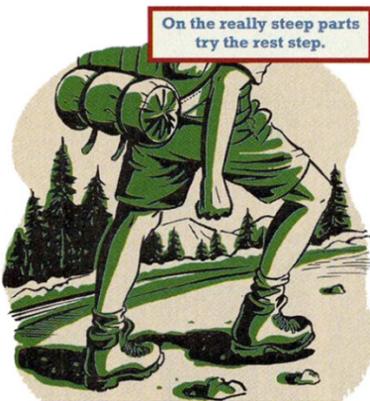
If not, when Scouts come to a fork in the trail they'll get separated. And if a problem arises with hikers at the rear, the ones in front won't know about it and will keep going.

# HEADING UPHILL ...

**Shorten steps** on steep portions of the trail but still retain your rhythm.



Also, **step over objects** in the trail instead of stepping on them. Stepping up on logs and rocks in the trail all day is like climbing an extra thousand feet straight up.



On the really steep parts of the trail, try a **rest step**. With each climbing step, straighten either the forward or trailing leg and lock the knee. Pause for a second, letting the bones of the locked leg bear your weight. This gives the leg muscles a short rest between steps.

## ... AND BACK DOWNHILL

The uphill struggle is rewarded with a downhill coast. But stay in control. Experts say they see way more injuries to hikers going downhill because they're not in control.



A slight **bend in the knees** absorbs the shock to the feet and leg joints when coming downhill. Placing the feet flat on the ground provides more boot sole surface to grip the ground.



**Sidestep downhill when  
the going is rough.**

If the going's real rough you might even want to **side-step down** the trail.

## REST FREQUENTLY BUT NOT TOO LONG

Time between rest stops varies. In dry conditions or in areas with elevation changes, you may want to rest every 20 or 30 minutes. No matter what, try to stop at least every hour to readjust packs and drink some water.

Limit rests to **five minutes** or so. Any longer and muscles tend to tighten, making it harder to resume your hiking rhythm.



Sit and give your feet a break while resting. **Face downhill** so your pack rests on the ground, not on your aching back.

Leave the pack on, but loosen the hip belt and shoulder straps. That eliminates lifting the pack and struggling back into the belt and straps.

With a break and a drink, you're ready to hit the trail again with a steady step.



## USE A WALKING STICK FOR ROUGH SPOTS

A walking stick lends a supporting hand while crossing streams or rough spots on a trail. Many hikers use the enduring wooden staff.

Modern trekking poles made of metal and/or plastics are lighter and provide a molded grip. Some hikers clutch a trekking pole in each hand. The swinging poles help help keep a fluid pace.

You can carve your own wooden walking stick.

# How to Make Your Own Hiking Stick

*By Steven Maxwell*

**SAFETY FIRST:** Ask an adult to help with tools you haven't used before.

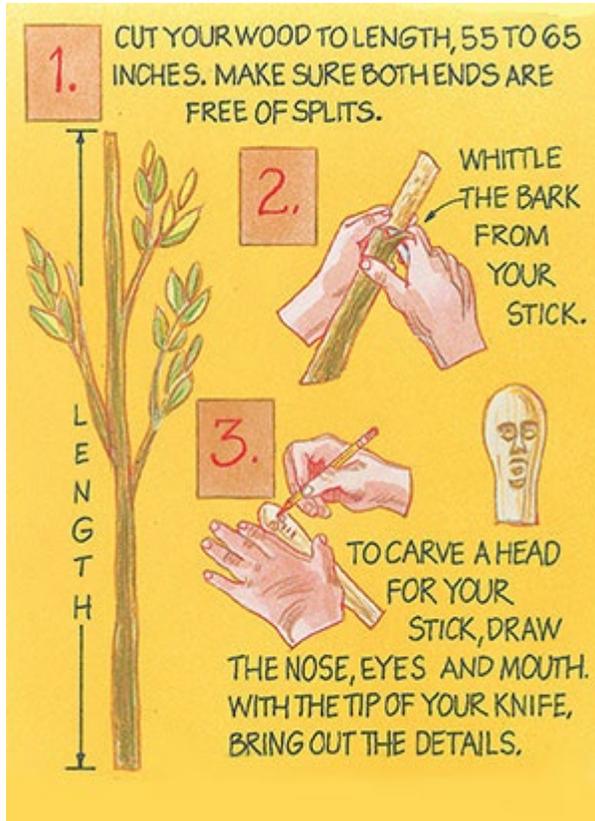


Walking sticks make hiking more fun. Also called hiking poles or hiking staffs, they let your arms get into the act, so you cover ground more easily. Even better, they help you keep your balance, which means that heavy pack will stay on your back instead of tumbling down some deep ravine — and maybe taking you with it! Here's how to create your own walking stick or hiking pole.

## WHAT YOU'LL NEED:

- A straight tree or tree branch that's 1-1/2 to 2 inches thick at its big end, and 55 to 65 inches long (DO NOT CUT ANY TREE; see Step 1.)
- A 1-inch-long piece of 3/4-inch diameter copper water pipe
- Five-minute epoxy glue
- A small saw to trim the stick to its final length
- A sharp pocketknife
- A spokeshave and a wood-burning tool (both optional)
- Adult help and/or supervision

## WHAT YOU'LL DO:



**Step 1:** Cut your wood to length, making sure both ends are free of splits.

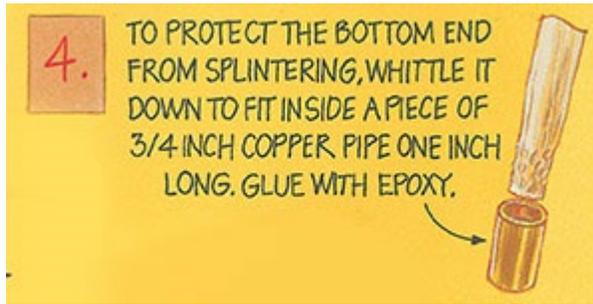
You can use dead, dry wood, but it's hard to carve and makes a weak walking stick. If possible, use fresh wood; hardwood from deciduous (leafy) trees is better than evergreen softwood because it is less gummy.

To choose the right size, stand with your arms at your side and the stick should be about 6 or 8 inches taller than your elbow. Pick an even longer stick if you'll be tackling steep terrain. If you're really just planning on walking with your stick, a shorter one will do.

*Note: Scouts never cut just any live tree! Take wood only from approved sources, such as a conservation project that thins out a timber stand or trail-building and trail-improvement projects.*

**Step 2:** Using your pocketknife, whittle the bark from your stick, revealing the bright wood beneath. This job takes patience, especially when you are working around knots. Keep at it. You may discover your stick has an inner layer of bark, as well. Carve it away too, or your stick will darken as it dries.

**Step 3:** Now is the time to carve a head for your stick, if you want one. Using a pencil, draw on the nose, eyes and mouth, then slowly and carefully use the tip of your knife to bring out the details. If you rush this part of your work, you risk slipping and cutting yourself.



**Step 4:** To protect the bottom end of your walking stick from splintering, whittle it down until the piece of copper pipe slips snugly onto it. Secure the pipe permanently with five-minute epoxy.



**Step 5:** Your walking stick is now ready for immediate use. However, if you'd like to carve it to a smoother finish and apply a protective coat, you'll need to let it dry indoors for about a month. Use sandpaper or a spokeshave (if you have one) to make its surface even smoother.



**Step 6:** Optional: Add your personal mark to the walking stick using a wood-burning tool. When you have the stick carved to your satisfaction, apply a stain or other such finish and a protective coat of polyurethane.

Take your walking stick with you on all your hikes. Whenever you pick it up, the stick will remind you of your past outdoor adventures and make you wonder what excitement lies ahead.

# How to Buy the Right Backpacking Tent

By Michael Lanza

Backpacking tents come in many sizes and shapes. Here are some tips for choosing a tent that will keep your backcountry nights comfortable.

## HOW IMPORTANT IS WEIGHT WHEN CHOOSING A TENT?



A backpacking classic that remains a good value, the 2017 two-door **REI Half Dome 2 Plus Tent** (\$199, [rei.com](https://www.rei.com)) pitches quickly and easily (even on dark, rainy nights), thanks to a hubbed-pole system, and it holds up in wind as well as most competitors. It boasts a roomy 38 square feet of floor space and a 42-inch peak height, plus vertical walls that create more headroom. Tradeoff: At a little more than 5 pounds, it's almost twice the weight of the lightest two-person freestanding tents, and its' bulky to pack. 5 lbs. 1 oz.

Considering all the hours and trail miles you'll spend carrying your tent, you should pay careful attention to its weight. Look for the lightest gear that performs the way you want it to — and that you can afford.

For example, an ultralight tent is a great pick to keep weight down, but it might not be as spacious or as strong in wind as you need. Be sure you understand the tradeoffs of each kind of tent and get what you need.



When you want a lightweight tent that won't tap into your savings too much, look at the **Marmot Tungsten UL 2P** (\$299, [marmot.com](https://www.marmot.com)). Barely north of 3 pounds, this two-door tent delivers more floor area than almost any comparable freestanding, three-season, two-person tent — and costs less than virtually all competitors in the category. Pre-bent poles maximize headroom, color coding makes pitching a snap, large doorways make coming and going easy, and lots of mesh ventilates the interior well — even with the doors sealed tightly. 3 lbs. 4 oz.

### Consider questions like:

Will you typically spend most of each day on the trail? Consider opting for a lightweight tent over one with luxurious extras.

Will you be spending most of your day in camp? Think about comfort and convenience features like gear pockets, extra doors or a cool design.

Will there be severe weather? Go for a tent that will keep you dry in rain and stand up to extreme wind.



In the exclusive club of freestanding tents with two doors and vestibules that weigh fewer than 3 pounds, the **Big Agnes Copper Spur HV UL 2** (\$450, [bigagnes.com](http://bigagnes.com)) stands out for its balance between low weight, good living space and ventilation, and strength. The secret lies in a 40-inch peak height, 88-inch length, large doorways and a hubbed-pole structure that creates steep walls, making the tent feel roomier than its 29 square feet. 2 lbs. 12 oz.

## LOOK AT THE TENT'S DETAILS

The first step in gear shopping is reading reviews and looking at products online. Tent specs can tell you a lot when you know what they mean. Here are some frequently used keywords.

**Capacity:** Backpacking tents usually range from one- to four-person models. Be careful; sizes aren't universal. You and your buddy might not sleep comfortably in a two-person tent.

**Square footage:** This number will tell you how much interior space you'll have. For instance, less than 28 square feet might feel snug in a two-person tent, while more than 30 should offer some elbow room.



For a family hitting the trail on multiday hikes, there's hardly a better value than **The North Face Talus 4** (\$299, [thenorthface.com](http://thenorthface.com)). With two doors and vestibules that will store boots and mid-sized packs, this freestanding four-person shelter has durable but lightweight poles and a fully seam-taped canopy and floor — and weighs fewer than 7 pounds. The 50-inch peak height affords plenty of headroom. Tradeoff: The 50 square feet of floor space is a tight fit for four. 6 lbs. 10 oz.

**Peak height:** Less than 40 inches might mean taller people will brush their head against the ceiling.

**Vestibules:** Not only will these porch-like sheltered areas double as storage space for wet gear and packs, but they also provide the best design feature for preventing condensation inside: cross-ventilation.

**Freestanding:** This makes it easier to pitch (and shake out dirt), but can also add weight. Remember that many non-freestanding tents are just as sturdy when properly staked and guyed out.



If car camping in pleasant weather is the plan, there's no reason to spend a bundle on a tent. The freestanding four-person **Kelty Discovery 4** (\$150, [kelty.com](http://kelty.com)) sets up easily with two classic dome-style crossing poles and clips, has a generous 56 square feet of floor space and offers a 58-inch peak height. Unlike many inexpensive, big family-camping tents, it has a seam-sealed, full-coverage rainfly — so you won't get wet if it rains — and it's reasonably light and compact for this category. Tradeoff: It has only one door. 10 lbs. 7 oz.

## GET INSIDE THE TENT

Just like you shouldn't buy boots or a backpack without trying them on first, be sure to get inside a tent before buying it. After doing some research and creating a short list of your preferred tent models, visit stores that carry them. Pitch each tent. Sit and lie down inside them — ideally with your tentmate(s) — to test it.



The **Sierra Designs Sweet Suite 2** (\$370, [sierradesigns.com](http://sierradesigns.com)) is the ideal combination of lightweight and roomy. The semi-freestanding tent's unique Y-pole setup means the tent provides better-than-average interior space — nearly 30 square feet and a peak height of 40 inches. There are also vestibules in front of both doors, offering another 18 square feet of exterior storage space for wet or stinky gear. Even better: All this weighs only 3 lbs. 10 oz.