

Backpacking Course 113

r: Shane Watts, Troop 604

This course has four parts...















Backpacking in your program

O Buy-into backpacking
O Wilderness First Aid certification
O Start small
O Go light
O Skills over gear
O Destinations and activities
O Conditioning program
O Marketing







Backpacking Skills

- 1) Pack your backpack
- 2) Adjust the fit of your backpack
- 3) Place and pitch your tent
- 4) Stay reasonably dry in the rain
- 5) Hang a bear bag
- 6) Select and prepare food
- 7) Make and break camp systematically



Skill: Gear placement

O Weight high, close and centered O Frequent use items on top/outside O Food above fuel O Break down larger items O Stuff the spaces O Weight loaded: OK – 25-30% of body weight Better – 20% of body weight Best – 15% or less of body weight





MID & LIGHT GEAR

Accessible while stopped & on break

HEAVY GEAR

Used at camp



MID & LIGHT GEAR

Used at camp



Skill: Adjust the fit of you

Most scouts begin to care about the adjustment of their pack straps when pain and fatigue start to set in—usually around mile 3-4.

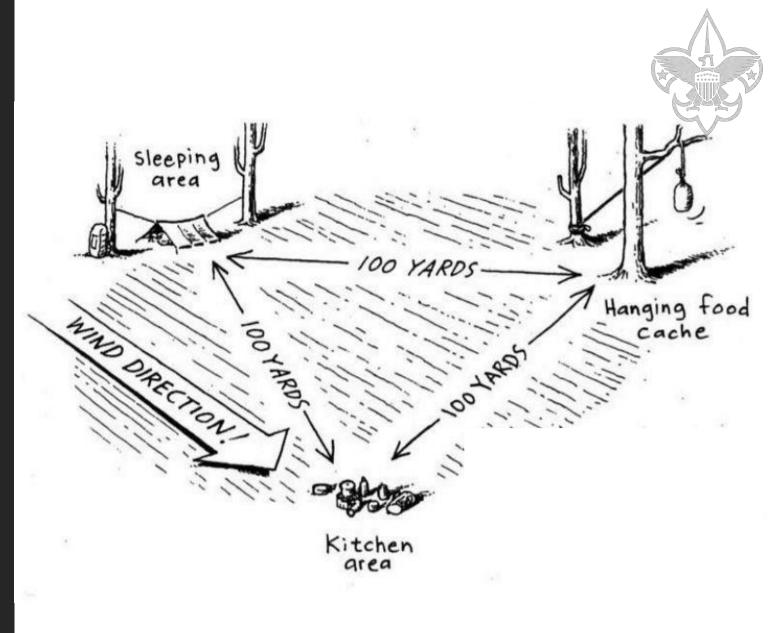
And even then, they only care if they realize that adjusting pack straps can alleviate their suffering.



Skill: Place & pitch a tent

O Five W's

- O Bugs and temperature
- O "Bearmuda" triangle
- O Tight with an air barrier
- O Ventilation
- O Pitching a tent in the rain

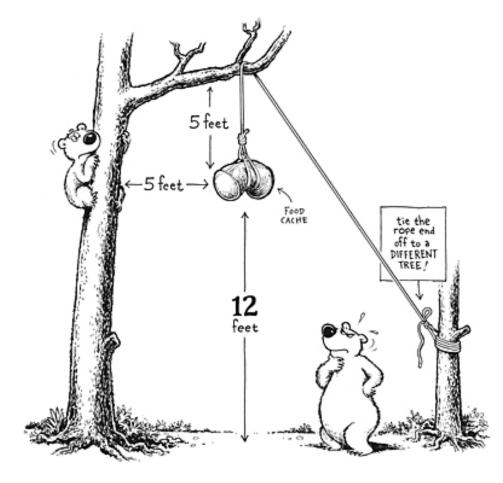




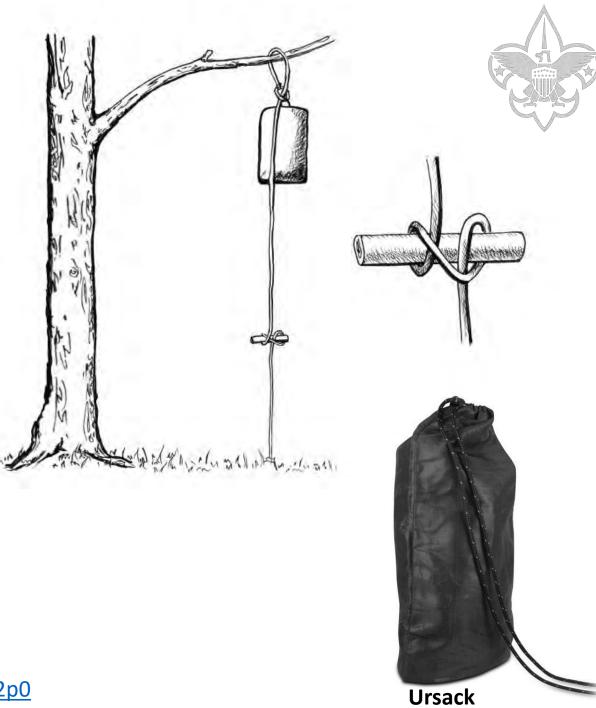
Skill: Backpacking in the rain

O Embrace reality O Stay warm and comfortable, if not dry O DWR your rain gear O When to put on rain gear O Shorter breaks, more snacks O Keep your important stuff dry O Pitch your *backpacking* tent right O Keep wet stuff outside O Dry before you lie

Skill: Hang a bear bag



How To Video: PCT-style bear hand - <u>https://youtu.be/yAhWqbtd2p0</u>







food

O Your food philosophyO Freeze dried vs. regularO Cook vs. non-cook

O Practice stove and meals at home
O Eat heavy/bulky food first
O Calorie-dense, durable foods
O 2,500-3,000 calories per day (1.5-2 lbs)

Food

Divide into 4 categories

- Breakfast (~500 calories)
- Lunch (~500 calories)
- Dinner (~500 calories
- Snacks (~1,000 calories)

Count calories (~2500 per day) Place snacks into labeled bags to ensure you eat enough but don't over-eat



Skill: Backpacking systems

O Have a gear storage system
O Have a packing system pack the same every time
O Practice, practice, practice
O Duty roster
O Promote performance

It's Demo Time!

Gear Storage System





what's in my backpack?



About Lightweight Backpacking

- 40+ pound backpacks are not fun, especially if you're 12 years old and only weigh 80 pounds.
- Heavy backpack = I'm tired. This hurts. Backpacking is too hard—I don't like it.
- Light backpack = Hey, look at that! Whoa, that's awesome! Let's go!
- Only take what you will use.
- Prepare for possibilities; pack for probabilities.
- Don't pack your fears.



Gear Bag Storage

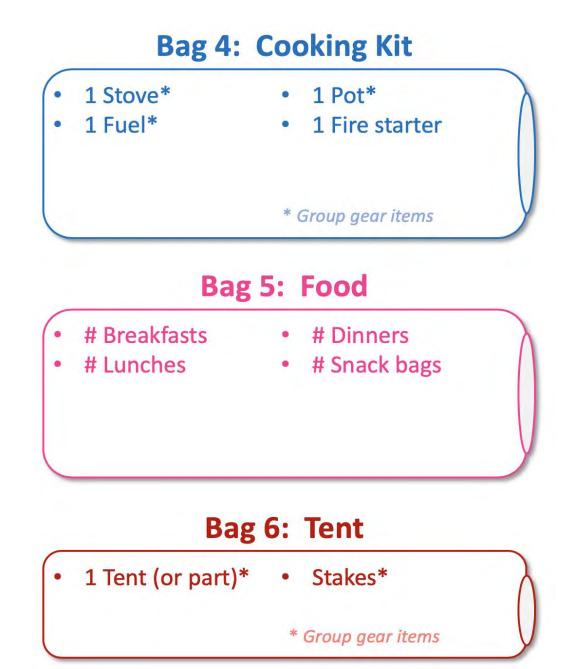
System^{Bag 1:} Clothes & Sleeping

- 1 Underwear
- 1 Sleeping bottom

- 1-2 socks
- 1 T-shirt
- 1 Insulating layer Sleeping bag
- 1 Sleeping top
- Sleeping bagInflatable pillow

Bag 2: Ditties





Backpacking Checklist

Personal Equipment: Clot	ning (NO COTTON!)	Location
1 Long sleeve trekking shirt	Lightweight synthetic	Worn
1 Pants or shorts	Lightweight synthetic fabric. Pants with zip-oof legs are great!	Worn
2 Underwear	Synthetic—no cotton; should be a dark color	Worn, Bag 1
2-3 pairs of socks	Light-to-mid weight synthetic running or hiking socks-no cotton	
1 Hat with a brim		Worn
1 pair shoes	Trail runners. In good condition. This should be the only pair of shoes you bring on this trip.	Worn
1 pair running gaiters	Not required but highly recommended if you're wearing trail runners to keep bits of gravel out of your shoes. Recommend:https://dirtygirlgaiters.com/shop/ -or-http://www.simblissity.net/levagaiter.htm	Worn
1 Rain shell	Waterproof (not merely water resistant)	n/a
1 Rain pants (optional)	Recommend DriDucks (if you don't already have rain pants). No heavy plastic/rubber rain pants.	n/a
1 Insulating layer	e.g. fleece or down sweater. Avoid heavy windproof fleece-blocking wind and rain is the job of your rain shell.	Bag 1
1 T-shirt	Synthetic	Bag 1
1 Set sleeping clothes	1 lightwieght top and bottom; 1 lightweight knit cap	Bag 1
1 Pair gloves or mittens	Synthetic, lightweight—glove liners work.	n/a
1 Bandana	Yes, this one item may be cotton.	n/a
Personal Equipment: Slee	p System	
1 Sleeping bag	Lightweight summer bag 20-35 degrees EN rating. Down or synthetic fill are fine.	Bag 1
1 Dry bag for sleeping bag & clothes	Roll-top dry sack made of silnylon-type fabric, just big enough to fit your sleeping bag and clothes. Alternatively, you can line the inside of your pack with a trash compactor bag.	Bag 1
1 Sleeping pad	Recommend Thremarest Ridge Rest or insulated inflatable pad	n/a
1 inflatable pillow (optional)	If you choose to bring a pillow, please bring an inflatable pillow that weighs only a few ounces and takes little space.	Bag 1

Backpacking Checklist (cont.)

ersonal Equipment: Gea		
Backpack	45-65 Liters, <3 lbs empty	n/a
2 Water containers	Must equal 2-3 liters capacity. Don't bring a single 3 liter container—you'll want one 1 liter container for holding flavored drinks, which must then be bear bagged at night.	n/a
1 Personal hygiene kit	Should fit in a Ziploc sandwich bag. Includes: Small soap (unscented Dr.Bronerscan double as toothpaste), Small toothbrush, Personal medications (prescription meds needlabels)	Bag 2
5 gallon-size Ziploc freezer bags	n-size Ziploc freezer Make sure they are freezer bags, not the thinner sandwich bags.	
1 Small knife	Must be folding knife with <3 inch blade. Smaller is better.	n/a
1 Headlamp	Make sure it has fresh batteries	n/a
1 Compass		n/a
1 First aid kit	(very) Smallshould fit in a Ziploc half-sandwich bag	Bag 2
1 Sunscreen	Sunscreen Recommend repackaging into smaller container. A good hat and long sleeve shirt can alleviate the need to take too much sun screen.	
1 Sunglasses (optional)	Polarized is a bonus, but recommend keeping it cheap here.	n/a
1 Lip Balm	Chapstickor similar with SPF of 25+	n/a
1 Bug repellent	Small, or repackaging into smaller container.	Bag 2
2 Fire starters	Small lighter, magnesium striker or waterproof matches	Bag 2, Bag 4
1 Toiletry kit	One roll of toilet paper and one small hand sanitizer in a gllon-size Ziploc freezer bag	Bag 3
1 Hand sanitizer	Small container that won't leak	Bag 3
1 Spoon	Long handle	Bag 4

Backpacking Checklist (cont.)

1 Stove	Lightweight backpacking stoves (1 stove for every 3-4 people)	Bag 4
1 Fuel	Canister fuel. 20 oz for 12 people for 5 dinners	Bag 4
1 Pots w/lid	One 4 liter pot and one 2 liter port per patrol	Bag 4
1 Tent (tent part)	Tent parts to be divided with your tent mates	Tent Bag
1 Water Filter	1 high quality pump filter +1 Sawyer Squeeze as backup per patrol	n/a
1 Trowels	1 per patrol	n/a
1 Detail maps	Coated; 1 per patrol member	n/a
1 GPS tracker	1 per patrol	n/a
1 Bear bags + line	3-4 per patrol	Food Bag
ood (1 of each item	per day)	
# freeze dried dinners	Pro-Pack preferred	Food Bag
# Breakfast-in-a-bag	A hearty/granola cereal in a Ziploc freezer bag with three table spoons of powedered milk	Food Bag
# lunches	First lunch will be eaten at the trailhead Monday and does not need to be packed away.	Food Bag
# days of snacks	Should be packaged and labeled per day. Good variety. Equals 1,200-1,500 calories per day.	Food Ba

Gear Bag Storage

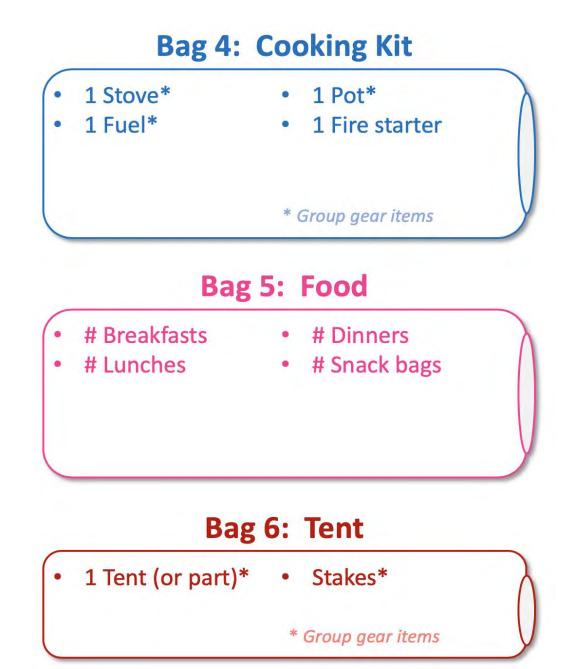
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- 1 Sleeping top
- Sleeping bagInflatable pillow

Bag 2: Ditties





Gear Worn

ltem

Shirt (long sleeve)

Shorts or pants (zip-off legs are great!)

Underwear

Socks

Hat (with brim)

Shoes

Running gaiters (optional)



Gear Stored Separately

Item	Recommended Location
1 Sleeping pad	Main compartment
1 Rain shell	Top of main compartment or outer mesh pocket
1 Gloves/mittens	Inside rain shell pocket
1 Bandana	Inside pot or an outer pocket
2 Water containers	Side pockets
1 Water filter*	Side or mesh pocket
2-5 Ziploc bags (1-gallon size)	Main compartment
1 Knife	Shorts/pants pocket
1 Headlamp	Shoulder pocket
1 trowel*	Outer mesh pocket
1 Map	Outer mesh pocket
1 GPS*	Shoulder strap
Snacks for the day	Hip belt pocket

* One per patrol, so scouts may carry one but not all, of these items.

It's Demo Time!

Let's Pack My Backpack



Backpack

- O Price: Depends, but generally mid-range
 O Volume: 45L-65L
- O Weight: 2-3lbs
- O Torso length: Fits or is adjustable
- Nice features: External mesh, diagonal pockets, hydration port
- O Know how to pack and wear it





Backpack Baseline Sample

- O Gregory Denali 100 www.gregorypacks.com
- Volume: 100 liters
 Weight: 6 lbs 10 ounces
 Recommended max load: 60+ lbs
 Three torso and hip belt sizes
 Bells and whistles
 Price: \$400





Backpack – Top 5 Picks





Backpack – Top 5 Picks



Pack	Differentiators	Vol.	Material	Weight	Price
<u>Gossamer Gear</u> - Mariposa	Simplicity, 3 torso & hip belt sizes	60 L	Nylon	2 lb	\$255
<u>Osprey</u> – Exos 58	Comfort, AirSpeed back panel	58 L	Nylon	2 lb 10 oz	\$220
<u>ULA Equipment</u> – <i>Circuit</i>	Big, custom options (straps, belt, color)	68 L	Nylon	2 lb 9 oz	\$235
<u>Granite Gear</u> – Crown2 60	Affordable, durable, adjustable hip belt	60 L	Nylon	2 lb 2 oz	\$199
Hyperlite Mountain Gear – Junction 3400	Light, bombproof, nearly waterproof	55 L	DCF	2 lb	\$345



Sleep System

Sleeping bag
Fill: Synthetic or down?
EN rating: 20-35 degrees
Weight: 2-3 lbs

Sleeping pad
Type: Air or foam?
R-value: 2.5–5
Weight: 1–2 lbs











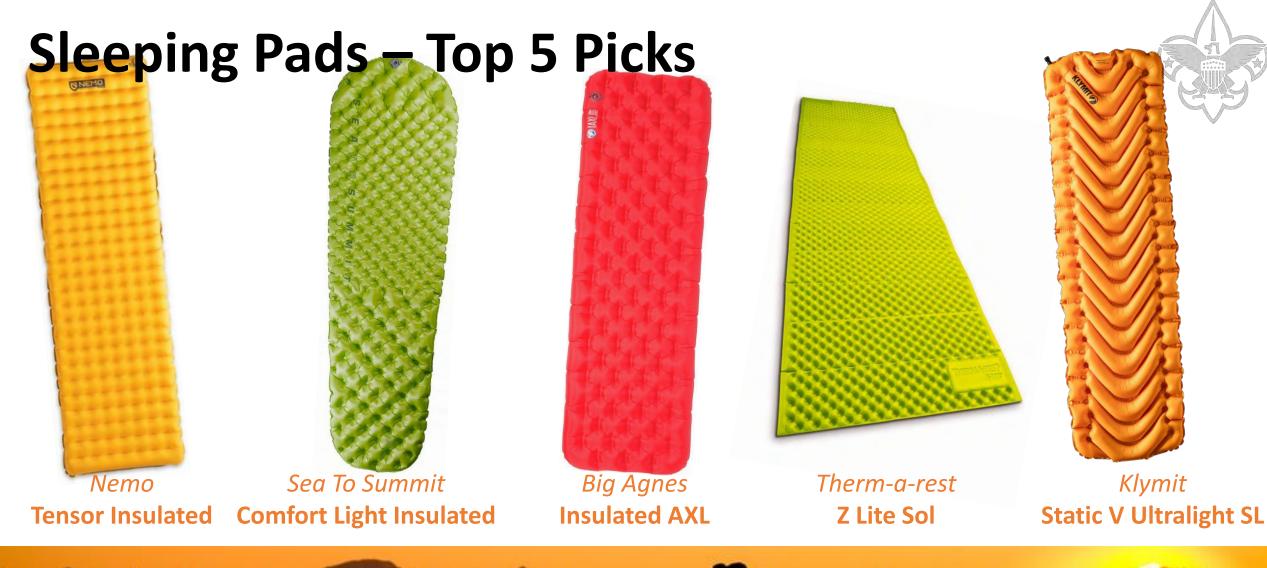


Sleeping Bags – Top 5 Picks



Sleeping Bag	Differentiators	EN Rating	Fill	Weight	Price
<u>REI</u> – Magma 15	Great value, warmth-to-weight	15 °	Down 850	1 lb 12 oz	\$369
<u>REI</u> – Igneo 17	Duck down = lower price, footbox	17 °	Duck down	1 lb 15 oz	\$299
Kelty – Cosmic Down 20	Great budget down bag, heavier	20 °	Down 600	2 lb 13 oz	\$160
Enlightened Equipment – Revelation 20	Quilt, versatility, lightweight, comfort	20 °	Down 850	1 lb 4 oz	\$285
NEMO - Disco 15	Roomy comfort, vents, heavier	15 °	Down 650	2 lb 11 oz	\$280







Sleeping Pads – Top 5 Picks



Pad	Differentiators	Packed	R-Value	Weight	Price
<u>Nemo</u> – Tensor Insulated	Comfortable, quiet, light	9.5 x 4	10°-20°	14 oz	\$160
<u>Sea To Summit</u> – Comfort Light Insulated	Dual-chamber, fast inflate/deflate, comfortable	9 x 4.5	4.2	1 lb 6 oz	\$170
<u>Big Agnes</u> – Insulated AXL	Super light, comfortable, expensive	6.5 x 3	n/a	12 oz	\$180
<u>Therm-a-rest</u> – Z Lite Sol	Cheap, light, bulky, not so comfortable	20 x 5 x 5	2.6	14 oz	\$45
Klymit – Static V Ultralight SL	Price, thick materials, durability	8 x 5	4.4	1 lb 4 oz	\$68



Tents

- O Type: Backpacking (dome or hybrid)
- O Quality: Mid-to-high
- O Size: 2-3 person
- O Weight: ~ 2 lbs per person
- Nice features: Air vents, double side entry, roomy vestibules, vertical walls
- O Fly: Full-length (no toupee tents!!!)

WARNING: Tents must be unpacked, dried and cleaned after each use!!!











Tents – Top 5 Picks



2 Person Tent	Differentiators	Floor	Packed	Weight	Price
<u>REI</u> – Half Dome 2 Plus	Great value, roomy, vertical walls	36 sq ft	20 x 7	4 lb 14 oz	\$255
<u>Big Agnes</u> - Copper Spur HV UL 2	Lightweight, interior space, expensive	29 sq ft	20 x 4	2 lb 12 oz	\$450
MSR – Hubba Hubba NX 2	Lightweight, packs small, durable	29 sq ft	18 x 6	3 lb 7 oz	\$400
Marmot – Tungsten 2P UL	Price-to-weight ratio, interior space	32 sq ft	18 x 7	3 lb 4 oz	\$300
Tarptent – Stratospire 2	Uses trekking poles, sleeps 2+, light, huge vestibules, packs small	36 sq ft	16 x 4	2 lb 12 oz	\$359



Clothing

O No cotton!

- O Shell: waterproof with sealed (taped) seams
- O Layers: base, mid and outer

O 1-2 sets

O Laundering clothes on the trail





Rain Shells – Top 5 Picks











Outdoor Research Foray



Patagonia Torrentshell 3L



Rain Shells – Top 5 Picks



Rain Shell	Differentiators	Barrier	Weight	Price
Marmot - Precip	Good value, lots of colors	NanoPro	11 oz	\$65
REI – Drypoint GTX	3 layer durability, breathable, very stormworthy	3-layer Gore-Tex 10.5 oz \$2		\$250
Frogg Toggs – Ultra Lite 2	Low cost, lightweight, waterproof, not breathable or durable	Polyethylene	6 oz	\$15
Outdoor Research - Foray	Ventilation, versatility	Gore-Tex PacLite	11 oz	\$215
Patagonia – Torrentshell 3L	Great value, pit zips, comfortable, recycled materials	H ₂ No	14 oz	\$149



Footwear

- O Boots vs. ShoesO Weight
- O Wet feet and blisters
- Expense
 Socks
 Gaiters
 Orthotics







Boots vs. Shoes

Weight (biomechanics)
Comfort and blisters
Water
Support
Trail debris
Cost

Blisters & Friction Injuries

O Causes: Shoes, toenails and trail debris



Too small Too big Too stiff Too narrow in the toe box Too wet for too long

O Prevention: Socks and shoes that fit well and are well suited to hiking



Socks

O No Cotton! O Wool or synthetic O Light-to-mid weight O Form fitting O Toe socks



Foot Aches & Pains

- O Supportive shoes
- O Orthotics
- O Carry less weight
- O Foot maintenance
 - Elevate your feet during breaks
 - Swap-out dirty wet socks
 - Keep toenails trimmed
 - Chill your feet in streams
 - Cover hotspots as they occur (athletic tape)
 - Keeping your feet clean
 - Keeping trail debris out of your shoes
 - Use balm or wax









Footwear	Туре	Weight	Price
Altra – Lone Peak	Trail runner	11 oz	\$130
Merrell – Moab 2 Ventilator	Hiking shoe	31 oz	\$110
Hoka – Challenger ATR	Trail runner	9.6 oz	\$130

Stove

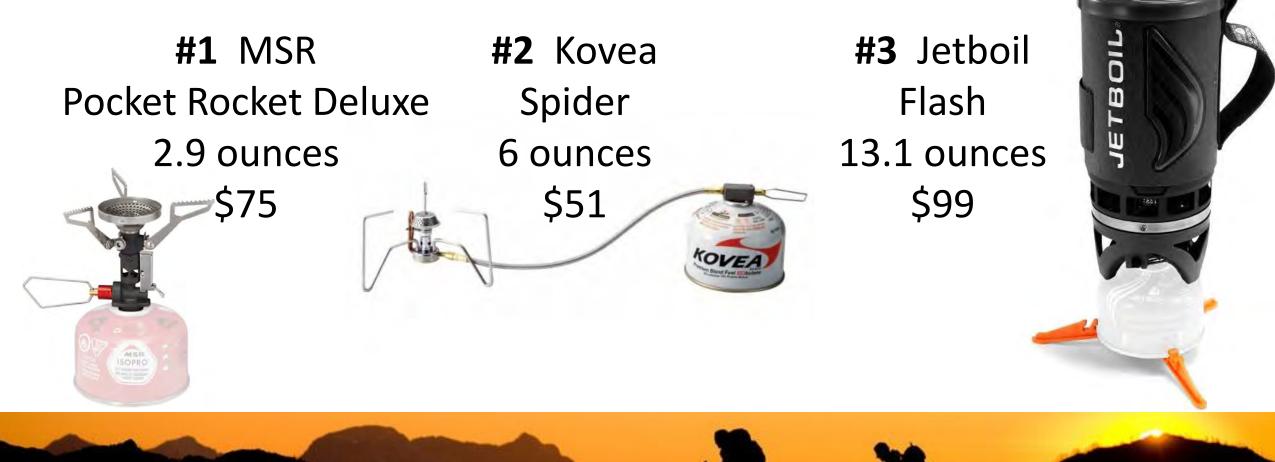
Liquid fuel vs. Canister
No alcohol stoves
What are you cooking?
How big are your pots?
What will the temperature be?
How important is weight?
How far are you going?
How careful are your Scouts?







Top 3 Stove Picks



Water Purification

Filters
Tablets/drops
Electric (SteriPen)
Boiling



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Top 3 Water Filter Picks

KATADYN

BeFree

#1 KatadynBeFree 3L3.5 ounces\$55

#2 HydroBlu Versa Flow

2 ounces \$20 **#3** Katadyn Hiker 11 ounces \$69

KATADYN



Resources

O CleverHiker.com



- OutdoorGearLab.com
- O BackpackingLight.com



O darwinonthetrail.com









Where to go backpacking

Glacier Peak from Miner's Ridge

2019

Silver Peak Pacific Crest Trail

2020

Find your own hike

www.WTA.org

North Cascades

CLOCATION
North Cascades -North Cascades -Nountain Loop Highway
View map below

Three Fingers

Gain: 4200 ft. Highest Point: 6854 ft.

RATING
 A * * * *
 (13 votes) Log in to rate

🛕 Road Washout: Trailhead inaccessible by car, road walk or mountain bike required

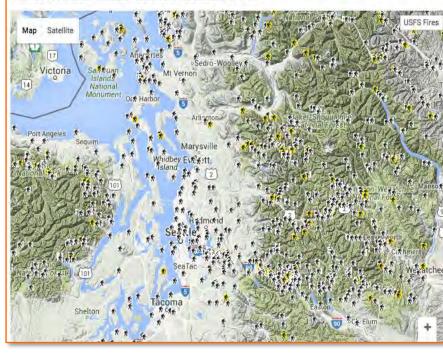


Home » Find a Hike » Hike Finder Map

Find your next hike! Use your mouse to explore the map and click the icons for more details. Search WTA's Hiking Guide or filter results using the panel at right. *Zoom in from the statewide view to see many more results.* The map only displays hikes with trail coordinates. Happy Hiking!

Note: Do you like this website? Please consider donating to WTA.





earch Details Rear

Umtanum Creek Canyon



Begin with a walk over a bouncy suspension bridge above the trout-rich waters of the Yakima

River. This trail meanders up an evernarrowing canyon, bu... <u>Read more</u>

Roundtrip 6.5 miles Elevation 700.0 ft

Gain Features Fall foliage, Wildflowers/Meadows,

Wildlife

Read the <u>full description in our Hiking Guide</u> including directions.

Recent Trip Reports

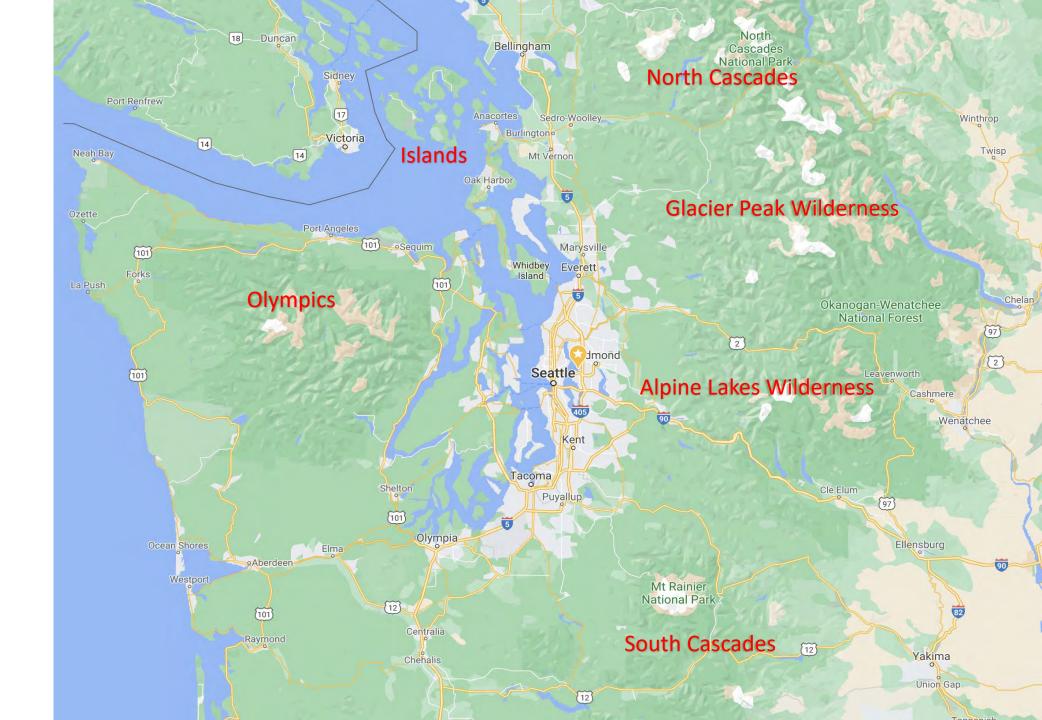
There are 170 trip reports for this hike.

- Sep 13, 2015, by glowingfish
- Jun 06, 2015, by LastGasp
 Features: Wildflowers blooming

Beware of: trail conditions

May 27, 2015, by austineats
 Features: Wildflowers blooming

Reware of trail conditions





Quick & Easy: June Lake

Length: 2.8 miles RT
Elevation Gain: 200 ft.
Highlights: Nearby Ape Caves, Lava Canyon, Mt. St. Helens
Location: Near Mt. St. Helens

Quick & Easy: Barclay Lake

- Length: 4.4 miles RT
- Elevation Gain: 500 ft.
- Highlights: Log bridge, lake with mountain views
- Location: Hwy 2 near Baring, WA



Quick & Easy: Snow Lake

 Length: 8 miles RT
 Elevation Gain: 1,800 ft.
 Highlights: Amazing views, before and at lake
 Location: I-90 near Alpental resort, Snoqualmie Pass



More Adventurous: Gravel Lake

- Length: 14 miles RT
- Elevation Gain: 2,700
- Highlights: Kendall Katwalk, Stunning mountain views
- Location: I-90 near Snoqualmie Pass

More Adventurous: Lake Ingalls

Length: 8-12 miles RT
Elevation Gain: 2,700

● Highlights: Stunning views of Mt. Stewart, mountain goats, Lake Ingalls

O Location: Salmon La Sac/Teanaway





More Adventurous: Dorothy & Bear Lakes

- Length: 7.5 or 11.5 miles RT
- Elevation Gain: 1,600 ft.
- Highlights: Two beautiful lakes, exciting stream crossing
- Location: Hwy 2, south of Skykomish

More Adventurous: Big Heart Lake

Length: 14.6 miles RT
Elevation Gain: 3,300
Highlights: Alpine lakes, waterfalls, big views
Location: Hwy 2 near Skykomish



50 Miler: Goat Rocks Wilderness

• Length: 24-50+ miles

- Elevation Gain: Depends on route
- Highlights: The "knife edge," amazing mountain views
- Location: Goat Rocks wilderness, near White Pass, WA

50 Miler: Enchanted Valley/LaCrosse Basin

Length: 50+ miles
Elevation Gain: 10,000

 Highlights: Wildlife, waterfalls, mountain valleys and views

• Location: Near Lake Quinault



50 Miler: North Cascades "Triple by Pass"

Length: 50 miles
Elevation Gain: 13,000
Highlights: Easy, Park Creek and Cascade passes, insane mountain views, Horseshoe Basin, Sahale Arm

 Location: North Cascades, 21 miles past Ross Lake on Hwy 20

50 Miler: Spider Gap-Buck Creek Pass Loop

Length: 54 miles
Elevation Gain: 14,300
Highlights: Spider Meadows, Spider Gap, Buck Creek Pass, High Pass, alpine lakes, big views

• Location: Central Cascades

Bookpooking Course 113

Instructor: Shane Watts, Troop 604