

ultralight backpacking



course 620

shane watts, instructor



subtitle:

before you drill holes in your toothbrush, cut-off your pack straps, or attempt to use a 2 ounce disposable rain poncho for a tent, kindly consider the following...

We'll cover:

- definitions & rationale
- ultralight principles
- the big three four
- what's in my pack?
- tips & tricks
- gear recommendations
- resources



definitions & rationale





definitions

- **base weight:** full pack weight minus food, water, fuel
- **lightweight:** base weight ≤ 20 lbs
- **ultralight:** base weight ≤ 10 lbs
- **super ultralight:** base weight ≤ 5 lbs
- **stupid light:** not taking necessary gear given the conditions

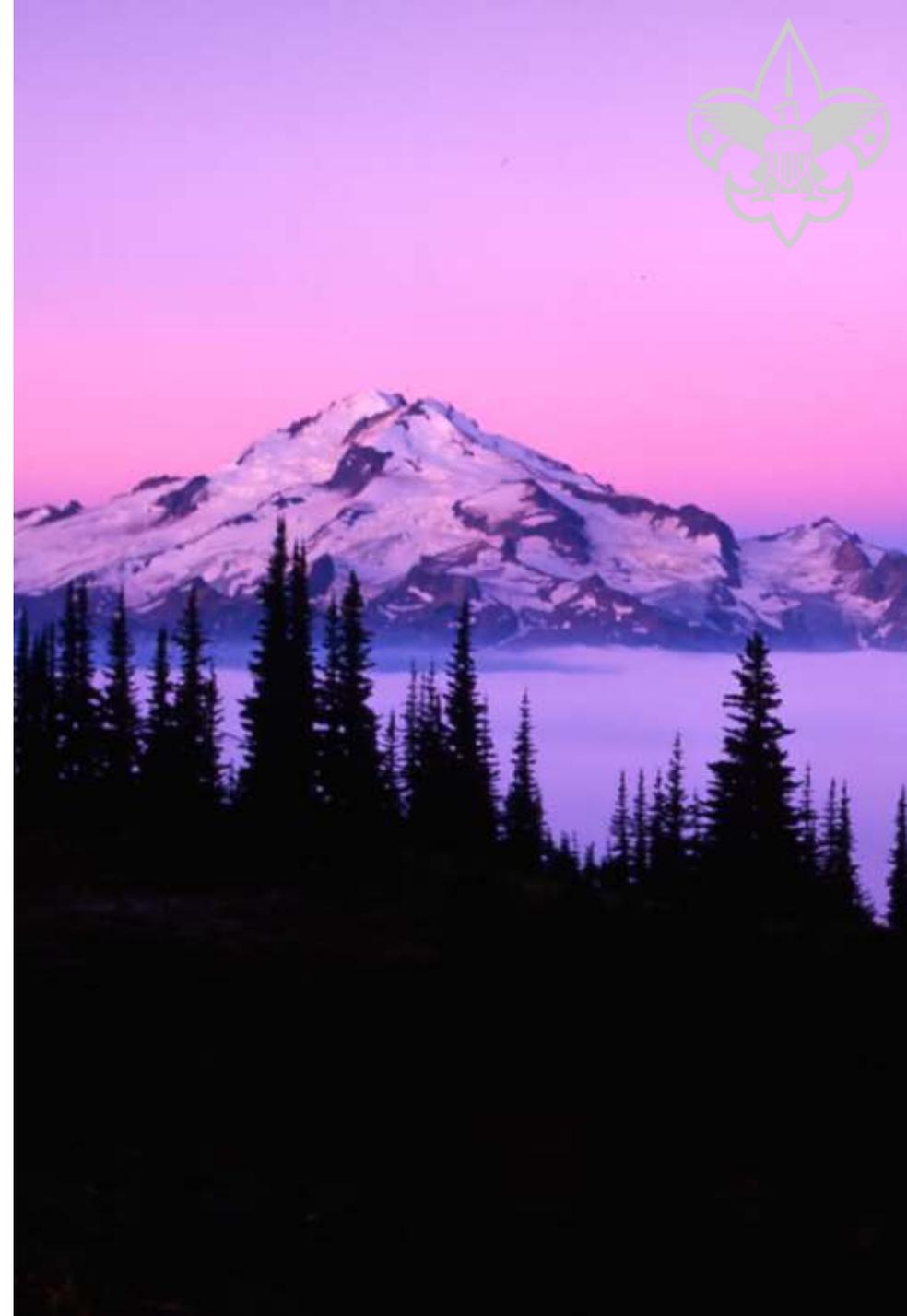


why ultralight?

- more comfortable
- focus on the journey
- travel faster
- travel farther
- fewer injuries
- age friendly (young and old)
- skills + planning emphasis

why *not* ultralight?

- price
- durability
- safety
- comfort
- fad





7 ultralight principles

1. know what's in your pack
2. knowledge and skills over gear
3. take only what you need
4. take lighter, smaller stuff
5. take multipurpose gear
6. limit contingencies
7. keep learning



1. know what's in your pack

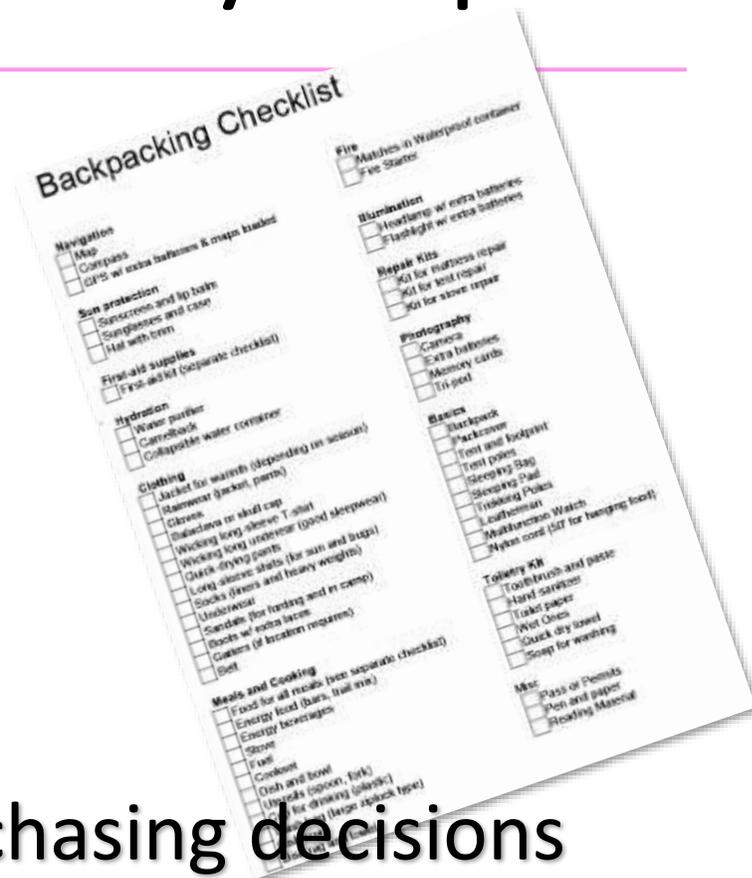
- take inventory

- count
- weight
- volume
- condition

- use checklists

- make better purchasing decisions

- quick and easy storage system



2. knowledge & skills over gear





2. knowledge & skills over gear

- knowledge + skills = less fear = less gear
 - “don’t pack your fears.”
- minimize dependencies
- learn your way to ultralight faster than buy your way to ultralight
- planning increases knowledge
 - conditions, distances, water sources, terrain, etc.



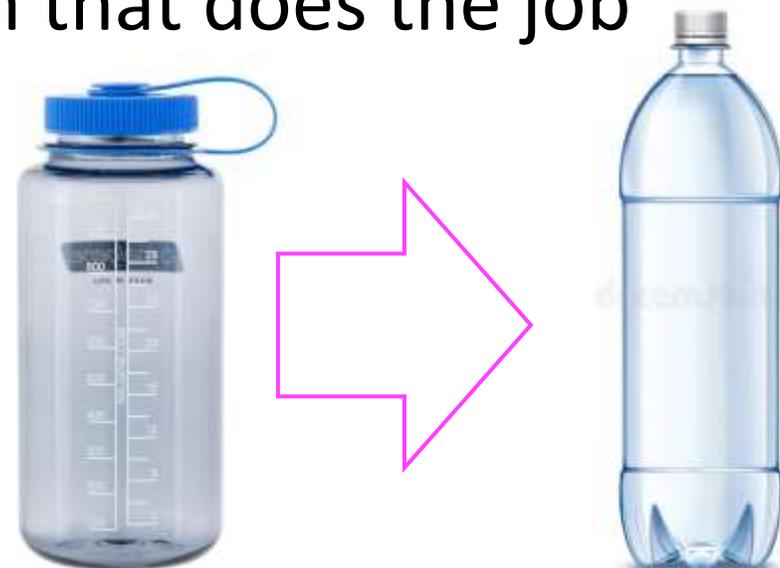
3. take only what you need

- know what you need
- varies from trip to trip
- mindful reduction
- reduce and repackage
- portion control



4. take lighter, smaller stuff

- focus on core function
- lightest item that does the job
- smallest item that does the job





5. take multi-purpose stuff

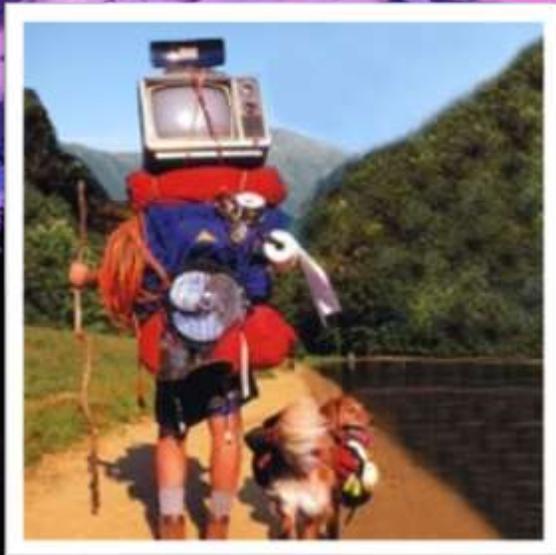
- one item, multiple uses
- don't take this too far





6. limit contingencies

- weigh probabilities
- pack for the probable, plan for the possible
- requires better planning
- you and your companions are the biggest variable





7. keep learning

- experiment and adapt
- ask questions:
 - what didn't I use?
 - what worked, what didn't?
- full pack day hikes
- back yard test runs
- read and watch videos



packing light is a skill, one that often develops with time, experience, and lots of mistakes. experience will teach you how to identify the unnecessary weight—and the gear you simply cannot (and should not) do without.



ultralight gear



the big ~~three~~ four



shelter



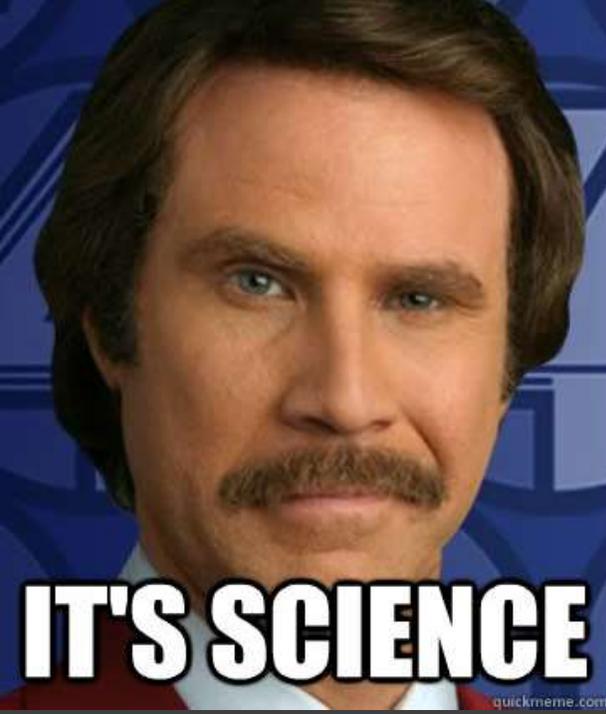
sleep system



backpack



footwear



why not boots?

- weight (actual & biomechanical)
- comfort
- no more blisters
- water management
- support vs. agility
- cost
- maintenance
- multi-purpose



the big ~~three~~ four



item	traditional weight	UL weight	weight savings
shelter (2 person)	4-8 lbs	2-3 lbs	2-5 lbs
sleep system	4-8 lbs	2-3 lbs	2-5 lbs
backpack	3-8 lbs	1-2 lbs	2-6 lbs
footwear	3-4 lbs (15-20 lbs)	1 lbs (5 lbs)	2-3 lbs (10-15 lbs)
TOTAL	14-28 lbs (15-20 lbs)	6-8 lbs (5 lbs)	8-20 lbs (10-15 lbs)



what's in my
backpack?

my base packing checklist



Clothing
<input type="checkbox"/> 1 Rain shell
<input type="checkbox"/> Lightweight gloves/mittens
<input type="checkbox"/> 1 Mid-layer insulation
<input type="checkbox"/> 1 Long sleeve trekking shirt
<input type="checkbox"/> 1 Shorts -OR- pants
<input type="checkbox"/> 2 Underwear (wearing one)
<input type="checkbox"/> 2-3 Pairs socks (wearing one)
<input type="checkbox"/> 1 Trail running/hiking shoes
<input type="checkbox"/> 1 Running gaiters
<input type="checkbox"/> 1 Sleeping top
<input type="checkbox"/> 1 Sleeping bottom
<input type="checkbox"/> 1 Sleeping beanie/cap
<input type="checkbox"/> 1 Hat with a brim
<input type="checkbox"/> 1 Bandana
Sleep System
<input type="checkbox"/> 1 Sleeping bag
<input type="checkbox"/> 1 Sleeping pad

Personal Gear
<input type="checkbox"/> 1 Backpack
<input type="checkbox"/> 2 Dry bags -OR- 1 pack liner
<input type="checkbox"/> 2 Water containers
<input type="checkbox"/> 1 Hygiene kit (in Ziploc bag)
<input type="checkbox"/> 1 Knife
<input type="checkbox"/> 1 Headlamp
<input type="checkbox"/> 1 Compass
<input type="checkbox"/> 1 Map
<input type="checkbox"/> 1 Whistle
<input type="checkbox"/> 1 First aid kit (in Ziploc bag)
<input type="checkbox"/> 1 Head net
<input type="checkbox"/> 1 Sun screen
<input type="checkbox"/> 2 Fire starters
<input type="checkbox"/> 1 Spoon
<input type="checkbox"/> 2-5 gallon Ziploc freezer bags
<input type="checkbox"/> 2 Trekking poles

Sharable Gear
<input type="checkbox"/> Tent
<input type="checkbox"/> Stove
<input type="checkbox"/> Pot/mug
<input type="checkbox"/> Fuel
<input type="checkbox"/> Water purification solution
<input type="checkbox"/> Bear bag kit (or Ursack)
<input type="checkbox"/> Food

Red = On your body, not in your pack



tips & tricks

tips & tricks



top tips

- ✧ buy a scale—weigh everything
- ✧ ask “what didn’t I use?” at the end of each trip
- ✧ experiment and learn on short trips

food & water

- ✧ carry less water (know your water sources)
- ✧ replace Nalgene’s with 1 liter plastic bottles
- ✧ drink-up at water sources
- ✧ carry less water in food
- ✧ only cook dinner (less fuel)
- ✧ don’t cook (lose the stove and fuel)
- ✧ choose calorie-dense foods
- ✧ replace water filter with tablets
- ✧ snacks in labeled ziplocs
- ✧ remove packaging



clothing & gear

- ✧ single set of pants/shirt
- ✧ replace pots with a mug
- ✧ short sleeping pad
- ✧ small, custom first aid kit
- ✧ use clothes bag for a pillow
- ✧ castile soap for toothpaste, washing everything



other ultralight hacks

- ✧ limit amounts—do you need the whole thing?
- ✧ leave deodorant at home
- ✧ pack fresh (not extra) batteries
- ✧ leave unnecessary bags
- ✧ layer proactively to sweat less
- ✧ share the load
- ✧ dry/shake out wet gear



ultralight gear recommendations

shelter recommendations

tarptent
stratospire li



tarptent
notch



Zpacks
duplex 2



pick

shelter

sleeps

material

weight

price

best buy	tarptent - notch	1	silnylon	1 lb 11 oz	\$314
high-end choice	zpacks – duplex 2	2	DCF	1 lb 5 oz	\$599
best freestanding	big agnes – tiger wall UL2	2	silnylon, nylon	2 lb 3 oz	\$399
honorable mention	tarptent – StratoSpire Li	2	DCF	1 lb 10 oz	\$689
best hammock	hennessy hammock - hyperlite	1	silnylon, nylon	1 lb 12 oz*	\$260

tent vs. hammock



big agnes
tiger wall UL2

pros

- space--can sit, kneel, move around in it
- privacy
- sleeps more than one

cons

- flat ground required
- setup in the mud
- large footprint

hennessy
hyperlight



pros

- setup anywhere (there are trees)
- lack of privacy, space
- comfort

cons

- trees required
- sleeps one person
- comfort

given an ultralight, three-season setup, hammocks generally weigh a bit more than a tent and cost about the same.

backpack recommendations

gossamer gear
Gorilla 40



zpacks
arc blast



osprey
exos 48



hyperlight mountain gear
2400 junction



	pick	pack	volume	weight	price
best overall	gossamer gear – gorilla 40		40L	1 lb 14 oz	\$215
high-end choice	zpacks - arc blast		55L	1 lb 5 oz	\$325+
best buy	osprey - exos 48		48L	2 lbs 8 oz	\$190
honorable mention	hyperlight mountain gear – 2400 southwest		40L	1 lb 13 oz	\$310
honorable mention	katabatic - onni liteskin		50L	1 lb 13 oz	\$325+

jacket recommendations

enlightened equipment
visp



zpacks
vertice



montbell
versalite



outdoor research
helium II



jacket	waterproof	breathability	layers	weight	price
zpacks - vertice	20,000 mm	56,000 g/m ² /24hr	3	6.2 oz	\$260
enlightened equipment - visp	20,000 mm	75,000 g/m ² /24hr	3	5 oz	\$200
montbell - versalite	30,000 mm	43,000 g/m ² /24hr	2	6.2 oz	\$200
outdoor research – helium II	15,000 mm	20,000 g/m ² /24hr	2.5	6.4 oz	\$160
frogg toggs - ultra-lite2	yep	nope	1	5.5 oz	\$19



bag/quilt recommendations

rei
magma 10



katabatic gear
Flex 22



western mountaineering
ultralight 20



zpacks
solo down 20



enlightened equipment
enigma 20



pick	sleeping bag/quilt	EN rating	weight	price
best high-end quilt	katabatic gear – flex 22	22°	1 lb 8 oz	\$350
Best high-end bag	western mountaineering – ultralight 20	20°	1 lb 13 oz	\$500
best overall	enlightened equipment – enigma 20	20°	1 lb 3 oz	\$290
honorable mention	zpacks – solo down 20	20°	1 lb 4 oz	\$359
honorable mention	rei – magma 10	10°	1 lb 14 oz	\$310



pad recommendations

therm-a-rest
neoair xlite



nemo
tensor insulated



big agnes
insulated axl air



therm-a-rest
neoair uberlite



	pick	pad	r-value	weight	price
best overall	nemo	– tensor insulated	15°-20°	14 oz	\$160
gold standard	therm-a-rest	- neoair xlite	3.2	12 oz	\$150
risky option	therm-a-rest	- neoair uberlite	2	8.8 oz	\$160
honorable mention	big agnes	– insulated axl air	20°-25°	12 oz	\$135



shoe recommendations

altra
lone peak



inov-8
TerraUltra g 260



saucony
peregrine iso



pick	shoes	weight	price
thru-hiker favorite	altra – lone peak	12 oz	\$120
innovative option	inov-8 - terraultra g 260	11.1 oz	\$150
much loved option	saucony – peregrine iso	11.5 oz	\$120
comparative option	asolo - TPS 520 GV evo	66 oz	\$315

stove recommendations

snow peak
litemax



msr
pocket rocket deluxe



brs 3000t
ultralight



	pick	stove	type	weight	price
best overall		msr – pocket rocket deluxe	canister	2.9 oz	\$75
high-end choice		snow peak - litemax	canister	1.9 oz	\$55
best buy		brs - 3000t ultralight	canister	0.9 oz	\$16
comparative option		jetboil - minimo	canister system	14 oz	\$135

note: alcohol stoves are not allowed on scout trips and so are not featured or recommended here.



filter recommendations

katadyn
micropur tablets



katadyn
befree 3L



hydroblu
versa flow

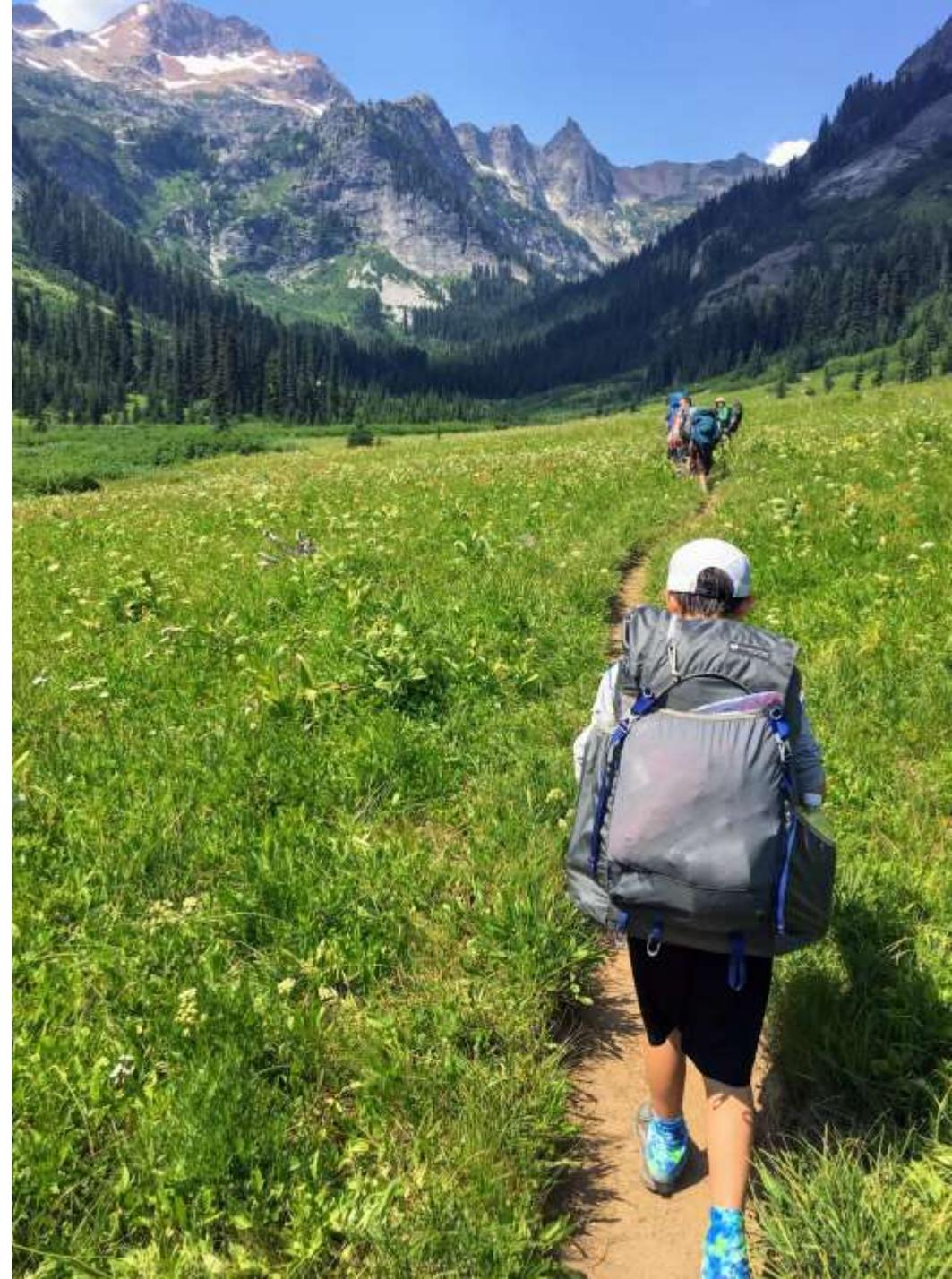


	pick	filter	weight	price
best non-filter		katadyn – micropur tablets	.5 oz	\$40
best group filter		Katadyn – befree 3L	3.5 oz	\$55
best buy		hydroblu – versa flow	2 oz	\$19

my favorite ultralight retailers*

- ✧ [gossamer gear](#)
- ✧ [zpacks](#)
- ✧ [hyperlite mountain gear](#)
- ✧ [ula equipment](#)
- ✧ [tarptent](#)
- ✧ [enlightened equipment](#)
- ✧ [katabatic gear](#)
- ✧ [mountain laurel designs](#)

** this is by no means an exhaustive list.*





resources

✧ cleverhiker.com



✧ outdoorgearlab.com



✧ backpackinglight.com



✧ adventurealen.com



✧ backpackingnorth.com



✧ darwinonthetrail.com





thank you!



ultralight backpacking

course 620
shane watts