

# ultralight backpacking



course 319  
shane watts, instructor





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**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...



# agenda



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  $\leq 20$  lbs

**ultralight:** base weight  $\leq 10$  lbs

**super ultralight:** base weight  $\leq 5$  lbs

**stupid light:** not taking gear and supplies that are necessary given the conditions

# why ultralight?



more comfortable

focus on the journey

travel faster

travel farther

fewer injuries

age

skills + planning emphasis

no-tear 50 milers

# why not ultralight?



price

durability

safety

comfort

fringe



# ultralight principles



# 7 ultralight principles



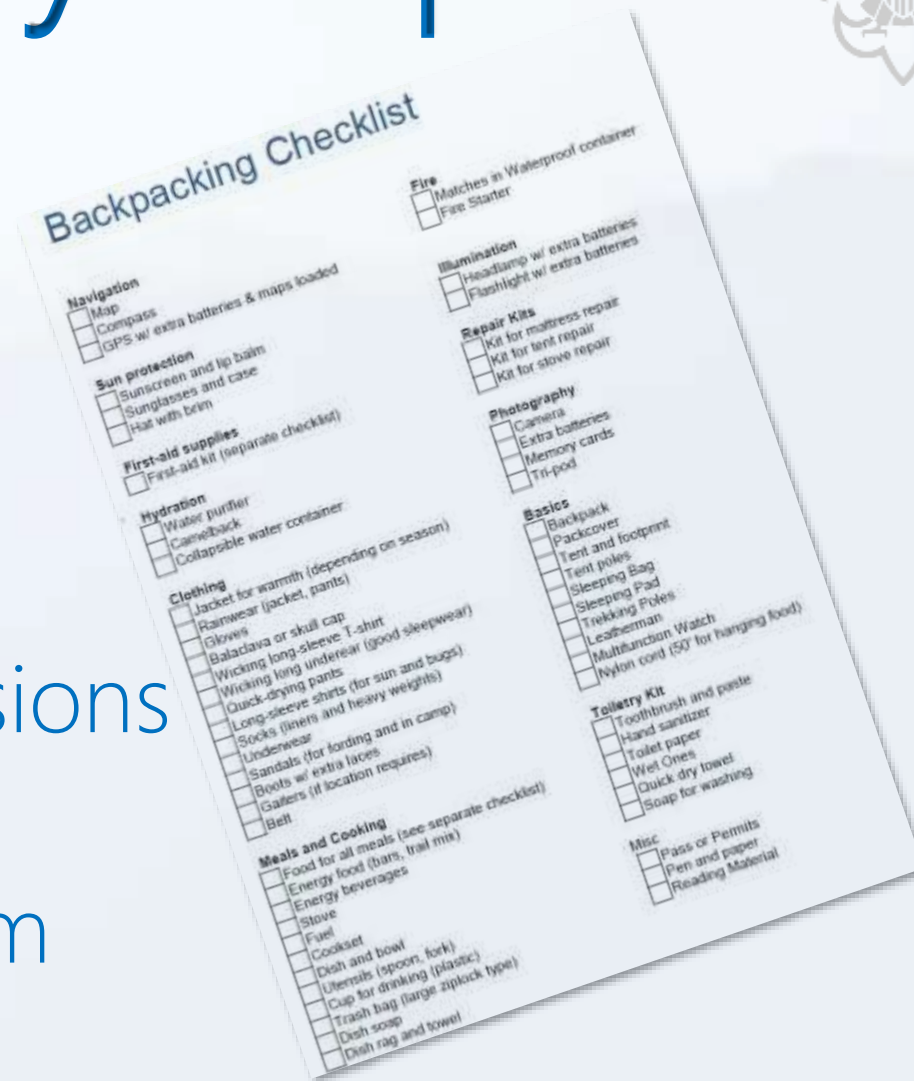
1. know what's in your pack—take inventory
2. knowledge and skills over gear
3. take only what you need
4. take lighter, smaller stuff
5. take multipurpose gear
6. limit contingencies
7. keep learning





# 1. know what's in your pack

- take inventory
  - ✓ count
  - ✓ weight
  - ✓ volume
  - ✓ condition
- make better purchasing decisions
- use checklists
- quick and easy storage system



## 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, terrain, water sources, 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, two or more uses
- don't take it too far



# 6. limit contingencies



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



*what if...*

*just in case!*



# 7. keep learning



- experiment and adapt
- Ask questions
  - ✓ what didn't I use?
  - ✓ what worked, what didn't?
- full pack day hikes
- backyard 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 and biomechanical)

comfort

no more blisters

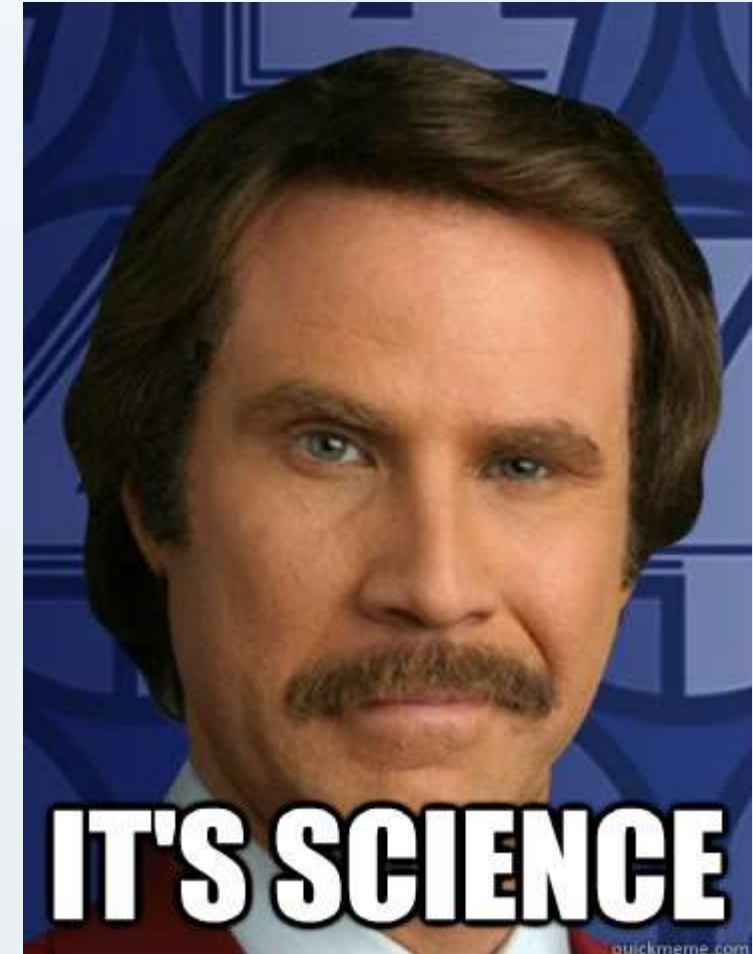
water management

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	1.5-3 lbs	2.5-5 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)	5.5-8 lbs (5 lbs)	8.5-20 lbs (10-15 lbs)



what's in  
my backpack?



# my base packing checklist



Clothing
<input type="checkbox"/> 1 Rain shell
<input type="checkbox"/> Lightweight rain 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 Long sleeve 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 Small folding 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"/> 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 filter -OR- tablets*
<input type="checkbox"/> Bear bag*
<input type="checkbox"/> Cord (50 ft)*
<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
- ✧ don’t cook (loose 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



*gossamer gear*  
**the two**



hennessy  
hyperlight



tarptent  
notch



Zpacks  
duplex 2



pick	shelter	sleeps	material	weight	price
best buy	<a href="#">tarptent</a> - notch	1	silnylon	1 lb 11 oz	\$314
high-end choice	<a href="#">zpacks</a> – duplex 2	2	DCF	1 lb 5 oz	\$599
honorable mention	<a href="#">gossamer gear</a> – the two	2	silnylon	1 lb 13 oz	\$389
honorable mention	<a href="#">tarptent</a> – stratospire 2	2	silnylon	2 lb 14 oz	\$349
best hammock	<a href="#">hennessy hammock</a> - hyperlite	1	nylon/silnylon	1 lb 12 oz	\$280

*gossamer gear*  
**Gorilla 40**



*zpacks*  
**arc blast**



*osprey*  
**exos 48**



*hyperlight mountain gear*  
**2400 southwest**



<b>pick</b>	<b>pack</b>	<b>volume</b>	<b>weight</b>	<b>price</b>
best overall	<a href="#">gossamer gear</a> – gorilla 40	40L	1 lb 14 oz	\$215
high-end choice	<a href="#">zpacks</a> - arc blast	55L	1 lb 5 oz	\$325+
best buy	<a href="#">osprey</a> - exos 48	48L	2 lbs 8 oz	\$190
honorable mention	<a href="#">hyperlight mountain gear</a> – 2400 southwest	50L	1 lbs 14 oz	\$310
honorable mention	<a href="#">ula</a> - circuit	68L	2 lbs 9 oz	\$235



*rei*  
**magma 10**



*katabatic gear*  
**Flex 22**



*western mountaineering*  
**ultralight 20**



*zpacks*  
**solo down 20**



*enlightened equipment*  
**revelation 20**



<b>pick</b>	<b>sleeping bag/quilt</b>	<b>EN rating</b>	<b>weight</b>	<b>price</b>
best overall	<a href="#">katabatic gear</a> – flex 22	22°	1 lb 8 oz	\$350
high-end choice	<a href="#">western mountaineering</a> – ultralight 20	20°	1 lb 13 oz	\$500
best buy	<a href="#">enlightened equipment</a> – enigma 20	20°	1 lb 3 oz	\$280
honorable mention	<a href="#">zpacks</a> – solo down 20	20°	1 lb 4 oz	\$359
honorable mention	<a href="#">rei</a> – magma 10	10°	1 lb 14 oz	\$310





*therm-a-rest*  
**neoair xlite**



*sea to summit*  
**ultralight insulated**



*therm-a-rest*  
**Z lite sol**



<b>pick</b>	<b>pad</b>	<b>r-value</b>	<b>weight</b>	<b>price</b>
best overall	<a href="#">sea to summit</a> - ultralight insulated mat	3.3	16 oz	\$100
high-end choice	<a href="#">therm-a-rest</a> - neoair xlite sleeping pad	3.2	12 oz	\$170
best buy	<a href="#">therm-a-rest</a> - z lite sol mattress	2.6	8.8 oz	\$40
honorable mention	<a href="#">outdoorsmanlab</a> - ultralight sleeping pad	1.3	16 oz	\$42



*altra*  
lone peak



*brooks*  
cascadia 12



*altra*  
Lone peak mid mesh

pick	shoes	weight	price
best overall	<a href="#">altra</a> – lone peak	11 oz	\$120
another great option	<a href="#">brooks</a> – Cascadia 12	12.1 oz	\$130
best boot holdout option	<a href="#">altra</a> – lone peak mid mesh	12.5 oz	\$130
comparative option	<a href="#">asolo</a> - TPS 520 GV evo	66 oz	\$315



hyperlite mountain gear  
the shell



patagonia  
storm racer



zpacks  
vertice



outdoor research  
helium II



pick		jacket	barrier	weight	price
best overall	<a href="#">zpacks</a>	- vertice	3 layer ventum-wpb	6.2 oz	\$300
high-end choice	<a href="#">hyperlite mountain gear</a>	- the shell	2 layer event + dcf	5.8 oz	\$450
honorable mention	<a href="#">patagonia</a>	- storm racer	3 layer h2no	6.2 oz	\$250
honorable mention	<a href="#">outdoor research</a>	- helium II	2.5 layer pertex shield+	6.2 oz	\$160
best buy	<a href="#">rei</a>	- co-op rain jacket	2.5 layer laminate	9.7 oz	\$70



stove recommendations



snow peak  
litemax



msr  
pocket rocket 2



brs 3000t  
ultralight



pick		stove	type	weight	price
best overall		<a href="#">msr</a> – pocket rocket 2	canister	2.6 oz	\$45
high-end choice		<a href="#">snow peak</a> - litemax	canister	1.9 oz	\$55
best buy		<a href="#">brs</a> - 3000t ultralight	canister	0.9 oz	\$16
comparative option		<a href="#">jetboil</a> - minimo	canister system	14 oz	\$135

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



*katadyn*  
**micropur tablets**



*katadyn*  
**hiker**



*hydroblu*  
**versa flow**



	<b>pick</b>	<b>stove</b>	<b>weight</b>	<b>price</b>
best overall		katadyn – micropur tablets	.5 oz	\$40
best group filter		Katadyn - hiker	11 oz	\$55
best buy		hydroblu – versa flow	2 oz	\$19



# my favorite ultralight retailers\*

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

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





# resources

✧ [cleverhiker.com](http://cleverhiker.com)



✧ [outdoorgearlab.com](http://outdoorgearlab.com)



✧ [backpackinglight.com](http://backpackinglight.com)



✧ [adventurealen.com](http://adventurealen.com)



✧ [backpackingnorth.com](http://backpackingnorth.com)



✧ [darwinonthetrail.com](http://darwinonthetrail.com)





thank you!

