

**Backpacking Basics Lecture 2:**  
Critical Skills and Gear for Camp

The Mountaineers  
March 26, 2020

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Keys to successful (back)packing:  
**Intention and discipline**

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FOOD AND FOOD STORAGE  
TOILETING  
SLEEP SYSTEM  
THE PACK

**TRAIL MAP**

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# FOOD STORAGE – KEY TO “LEAVE NO TRACE”

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## Storing Food at Camp



**Why worry about securing your food?**

1. Animals are all around us and very motivated to gather food!
2. They learn to get easy food around humans and can become very aggressive.
3. Habituated creatures almost always lose from the experience.
4. Good food storage and camp sanitation are an essential part of 'leave no trace' backcountry travel.

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## Food Storage Options



Ursack      Bear canister

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### Keep a Clean Camp!

- ❑ Prepare, eat, and store food away from your from sleeping area
- ❑ Leave smelly foods at home
- ❑ Never leave your camp with food unsecured
- ❑ Don't wash dishes in the lake/stream
- ❑ Scatter gray water away from camp
- ❑ Carry out all uneaten food & scraps.
- ❑ **PACK IT ALL OUT.**




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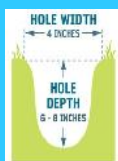
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### Toileting

\* Core of "leave no trace" ethics: leave the ground as clean or cleaner than you found it.




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### Toileting

- \* Peeing: soft absorbent ground
  - Women: Pee funnel, pee rag or bandanna. Pack TP out or bury 6" deep. (Or use a natural alternative – leaves, moss)
  - Men (and very agile women): Pee bottle at night
- \* Pooping: find a spot before you REALLY need it. Soft diggable ground – 200' from camp or water
  - Bring a lightweight camp trowel or tent stake to dig a hole. If you can't bury TP and waste 6" deep, carry it out (double Ziploc – line outer one with duct tape)
  - Some fragile areas require you carry out your waste. Blue bag
- \* Wash hands or use plenty of sanitizer afterwards.




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# SLEEP SYSTEM

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## The Basic Kit - SLEEP SYSTEM

**What do you need?**

- Shelter
- Sleeping bag
- Sleeping pad



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## SHELTER

**What do I want from my shelter?**

- \* Protection from severe wind and cold? → "4-season" tent
  - Durable fabric & poles, less venting, fly to the ground. But HEAVY and \$\$\$!
- \* Absolute minimum weight? → tarp tent or system
  - Poorer protection from rain and bugs (and more challenging set up)





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### The Basic Kit - 3-season tent

In the PNW, most backpackers want reliable protection from rain and bugs, plus easy & flexible setup → 3-season tents!

- Single vs. double wall: single is lighter but subject to condensation




- Tent size: capacity (1P vs. 2P vs. 3P) and interior dimensions
- Fabric and pole configuration

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### More Advanced: Trekking Pole Tent

- Tents require rigid poles for structure and support
- Many people already carry trekking poles
- Could we save weight by having the tent use trekking poles?
- Great example of dual-use gear
- A bit fussier to set up
- Single or dual pole models



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### CHOOSING YOUR TENT

- ❖ Interior space varies greatly between models for same capacity
- ❖ Floor dimensions, peak height and wall shape drive "livability"
  - Wider at the head allows more elbow room
  - Roof height to allow clothes changes without hitting the roof
  - "Eyebrow" poles and vertical walls add headroom
- ❖ Vestibule space - key for wet weather!
- ❖ End vs side entry – ease of access, vestibule size





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### TENT CAPACITY AND SHAPE

**Eureka Spitfire 1**  
\$139.95, 2lbs 12 oz

**Big Agnes Copper spur UL1**  
\$379, 2lbs 8oz

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### CHOOSING YOUR TENT

- \* **2-person vs. "solo" tents**
  - Copper Spur UL2 vs. UL1: adds 14" width, 2" height, extra vestibule for extra 10oz and \$70
  - When shared with a second person, the weight is just 1.5lbs per person (and extra side door becomes very important!)
  - Substantially greater size boost for the Spitfire 2P at only \$40 more – weight just 2 lbs per person when shared between 2 people
- \* **Worth carrying a 2P tent for just yourself?**
  - It's a 'comfort' choice. Is it worth the extra cost and weight?
  - Consider whether a different 1P model with larger interior dimensions can get you there for less, in money and weight!

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### THE VESTIBULE

- \* The vestibule is the place where you take off and put on muddy or wet gear so that you keep the gear inside your tent dry.
- \* You can keep some gear in your vestibule overnight, but anything with potential to be sweaty or with an odor could be chewed by animals. Hang on a tree or keep in your tent!
  - Pack, trekking pole handles, shoes

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### CHOOSING YOUR TENT

- ❖ **Tent Weight: Not always what it seems!**
  - Look at the **Packaged weight**: This is the weight of all the components: body, rainfly, poles, stakes, stuff sack, pole sack, instructions, etc.
- ❖ **Enough room?** Pitch the tent and lay down/move around inside with your pack and gear before you choose.
- ❖ **How much to spend?** Can choose a nice roomy lightweight tent for <\$200 – upgrade in the future when you know more
- ❖ *Consider sharing-borrowing-renting before you buy!!*

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### FOOTPRINT?

- ❖ Extends the life of your tent floor.
- ❖ Very light polycryo or piece of plastic can serve the purpose with less weight and expense than the footprint sold with the tent.
- ❖ Make sure the footprint does not extend beyond the floor of the tent or water will collect and flow under your tent!
- ❖ Or skip the footprint and be careful with where you pitch the tent.

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### MAINTAINING YOUR SHELTER

- ❖ **Stuff, don't roll!**
- ❖ **Maintenance**
  - Mildew could break down the fabric. Let your shelter dry out during a sunny break; dry it out completely when you get home.
  - Store your tent in a cool dry place away from the sun.
- ❖ **Re-seal seams, waterproof floor and fly periodically**
- ❖ **Check your floor and rainfly for pinholes; check poles for dings and creases in the metal**
- ❖ **Never operate a stove in your tent. Even in the vestibule is risky!**

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## The Basic Kit - SLEEPING BAG



**Temperature ratings**

- \* **EN comfort rating** = lowest temperature at which the bag will keep a 'cold sleeper' comfortable.
- \* **EN lower limit rating** = lowest temperature at which the bag will keep a 'warm sleeper' comfortable.
  - Assumes that you are wearing long underwear and sleeping on a pad.
  - Women's bags are typically sold by the comfort rating, men's bags by the lower limit rating.
- The warmer the bag's rating, usually the more expensive, heavy and bulky it will be for the same shape, fill type and fill count

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## FILL OPTIONS



- \* **Down: warmest for the weight and bulk.**
  - "Fill counts": degree of insulation for the weight (look for 600-950 fill).
  - Can be very light and pack small (but don't over-compress).
  - Lasts longer than synthetic (if stored uncompressed).
  - Performs poorly if wet ("Dri-down", "Hydrodown", "HyperDry", "Q-Shield" add water repellency.)
- ❖ **Synthetic fill: bulkier and heavier for the same warmth, but retains some insulating value when wet. Insulation value degrades rapidly with use.**

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## SLEEPING BAG OPTIONS



**Shape**

- "Mummy bags" wrap around your head, fit tighter around body → better warmth and less weight
- "Spoon" shape provides more room at shoulder and knees

**Length, shoulder, and hip room**

- Look at measurements before you buy – can vary widely
- "Women's" bags provide more room at the hips
- You want enough room to wear extra clothing when you need it, but too roomy means extra weight and more air to heat

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## QUILTS

- \* No hood, open under your body (cinch straps and cinch-able footbox)
- \* Relies on your sleeping pad to provide warmth underneath
- \* Can be very economical, light and compact for the warmth
- \* Offers more room to move around inside
- \* Choose a warmer quilt (lower temperature rating) than you would for a sleeping bag



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## MAKING YOUR SLEEPING BAG DECISION

- \* **Go as light and compressible as you can afford, given your overall sleep system and the nighttime temps you want to be prepared for.**
  - > Summer: 30° down bag or quilt (lightest & most compressible)
  - > Spring/fall or high elevations: 10-20° bag or quilt with silk sleep sack
  - > Winter camping: 0° or lower
- \* **Choose to minimize weight and bulk. Keep it in a dry bag or garbage bag to keep it dry.**
- \* **Beginner? Concentrate on summer trips and get a light, compressible 30-40 degree down bag for \$200 or less. Wear more clothes or get a silk sleep sack to boost the warmth.**

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## BASIC KIT - SLEEPING PAD OPTIONS



### Foam or Closed-Cell

- Pros: light, inexpensive, no inflation, durable
- Cons: not as warm or comfortable, can be bulky

### Inflatable

- Pros: warmer, more comfy (thicker), packs small
- Cons: spendier, need inflation, can puncture



### Self-Inflating

- Inflatable filled with open-cell foam
- Middle ground between other two options

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**SLEEPING PAD OPTIONS**

**Sizes / shapes**

- Full Length or shorter
- Tapered or rectangular
- Thickness - can be up to 4" – great for side sleepers!
- Thicker inflatables require more air, consider a pump sack

**Lengthwise, crosswise or other arrangement of baffles**

- Raised baffles on the outside to keep you from rolling off

**Some fabrics can be noisy! Check this before you go out with a group!**

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**THE PACK**

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**FRAMELESS PACKS**      **FRAMED PACKS**



**SELECTION PROCESS**

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## OTHER CONSIDERATIONS

- Volume
- Fit
- Fabric (nylon, Dyneema, X-Pac)
- Design (hip-belt pockets, ventilation, etc.)

*Hint: Be clear about what you REALLY need. More features and ruggedness typically mean more weight.*

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## BASIC KIT GUIDELINES FOR PACKS

### Overall capacity

- 50-60L for three-season backpacking trips.
- Possibly more for winter, climbing gear, or if you're carrying gear for multiple people.
- Will it fit a bear canister? Required in Olympics and other locations

### Fit and ride

- Based on your torso length.
- Waist belt should buckle across your navel and rest just above your pelvic bones with 80% of the weight carried on the hip belt.
- Try it out fully loaded on a long hike or a 2-3 backpack trip before making a final decision!

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## Keeping your gear dry!

- Pack cover
- Poncho
- Pack liner / trash compactor bag / nylofume
- Dry sacks



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# PACKING YOUR PACK



- > Gear you use the most often should be the easiest to get to (and vice versa)
- > Hip belt or shoulder strap pouches great for sunscreen, snacks, etc.
- > Use a "ditty bag" (stuff sack) to organize smaller gear
- > Wet gear on the outside in front pouch

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# BREAKOUT GROUP EXERCISE

## Backpacks (15 minutes)

- > What backpacks do your mentors use?
- > What do they love about them?
- > What are the downsides?
- > How do they pack them?

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# GEARING UP WITHOUT BREAKING THE BANK....

- > Borrow, share, rent gear for your first few trips
- > Check out discount and 'gently used' gear sites
- > Consider lower cost brands until you're sure how much you'll be backpacking
- > Weigh the gear you already have before buying new gear
- > Focus on the greatest weight saving opportunities and improvements in versatility

***Some ultralight gear can only be purchased from online retailers. Check their return policy – be sure before you buy!***

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### GETTING IN SHAPE FOR BACKPACKING

- The best way to get in shape for backpacking is to put on a loaded pack and start hiking.
- Start small, dream big: *slowly* build up to the trips you want to do
- Cardio for endurance
- Strength training to prevent injury/joint pain

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### WHAT'S NEXT IN THE COURSE?

- \* **Demo Day**  
9AM-3PM on Saturday April 25<sup>th</sup> at the Mountaineers Seattle Program Center  
Dress for cool weather, rain or shine – you'll spend time outside  
Bring a lunch
- \* **Practice Camp**  
9AM-2PM May 9<sup>th</sup> at the Mountaineers Seattle Program Center and out in Magnusen park  
Meet in the basement  
Bring a fully-loaded pack (or whatever you've got so far)  
Hike across the park, collect/treat water, pitch tents, cook a meal

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### GRADUATION REQUIREMENTS

- \* **Demonstrate basic competence on three backpacking trips**
  - One of the trips must be 2 nights or more
  - Two of the trips must be with the Mountaineers
- \* **Complete one stewardship activity (Mountaineers, WTA, etc.)**
- \* **No time limit!**

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**NOW...GET SIGNED UP FOR SOME TRIPS!!**

Start with an early-season beginner trip in May or June  
Mentor-group trip? Club-wide?  
Mentors: explain difficulty ratings, leader's notes  
Learn by doing: just jump in!  
Stewardship: Mountaineers or wta.org  
Cancellation and 'no-show' etiquette

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**QUESTIONS?**

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