The Big Four of Backpacking

Mark Wray
NCAC Philmont Training Session I
November 17, 2019



The Big Four of Backpacking

- Overview
- Backpacks
- Sleeping Bags (Ground Pads)
- Boots (Socks, Trekking Poles)
- Raingear & Backcountry Clothing



Overview

- Knowledge & Training are the best "equipment"
- Quality/Reliable brand
- Keep it simple
- Go to a Quality Supplier:
 - Major Stores: REI, Cabela's, L.L.Bean
 - Local outfitters! Trail House (Frererick) et al
- Online: (Major above) Campmor, Hiker Direct
- SALES!



Backpacks

External Frame

- Cheaper
- Spaced from back
 - Cooler
 - Tolerates lumps
 - More flexibility in packing
- "Some" gear outside
- More pockets



Internal Frame

- Close to back
 - Hotter
 - Careful packing required
- ▶ Off-trail/ascent
 - ► Lower CG
- ► Most gear inside
- Compartments with divider/shelf



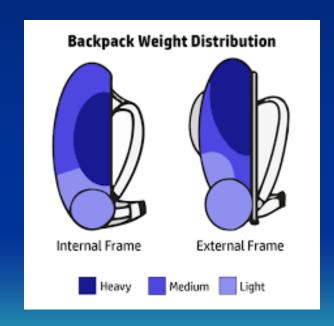
Backpack Sizing

- Must fit YOUR body
- Large enough for personal AND crew gear (Crew "owns" about 1/3 of your pack volume)
- Recommend ~4500 cu in/70 liter capacity
- Try on several sizes and makes
- Fixed size or Adjustable Torso Length
- Weight of the pack itself !



Backpack Loading

- Panel (front) or top loading
- One large or several divided compartments





Backpack Adjustments

- **1 Hip belt**Rides on hips, full contact
- 2 Shoulder straps
 Width to fit shoulders
- 3 Stabilizer straps
 Chest
 Side (hip) Load Adjusters
 Load Lifters (top)



Torso Length

Too short: Shoulders only

Too long: Hips only

C7 vertebrae to iliac crest





Sleeping Bags

Mummy

- –Less room, less to heat
- -Hooded
- -Lighter

Rectangular

- -Roomier, more to heat
- -No hood
- -Heavier
- Temperature ratings: EN 13537 (European)
 - Not consistent throughout industry...
- 20° F bag = good year round
- "Loft" Baffles Tubes
- Liner can add up to 10° F add'l warmth
- Or sleep in long johns
- Double bag in waterproof sacks



Sleeping Bags - Insulation

<u>Down</u>

- ➤ Warmest
- ▶ Lightest
- ► More expensive
- ► Most compressible
- New "dry-down" doesn't lose insulative ability when wet

Synthetic

- ➤ Warm enough
- ➤ Moderate weight
- ► Cheaper
- ► Less compressible
- Retains insulative property when wet



Ground Pads

3/4 length or full length

Closed-cell foam

- ► Cheap
- ▶ Lightest
- ▶ Indestructible
- ► Packs quickly

Self-inflating

- More expensive
- ▶ Heavier
- ► Less bulky
- More comfortable

<u>Inflatable</u>

- ► Most expensive
- Lighter
- ► Minimal bulk
- ▶ Noisy
- ► Puncture?
- ► Most comfortable



Boots

Lightest boot capable of handling trails and loads you'll have

Leather

- ► More expensive
- Careful break in
- Heavier

Fabric & Leather

- ► Less expensive
- ► Minimal break-in
- **►** Lighter
- One pound of boot equals 5 pounds in your pack
- High or Mid or Low Cut
- ► It's the fit not the size...



Fitting Boots

- Snug at instep, ball of foot, heel
- ► Room for toes; no contact with front on incline
- ▶ Walk around store:
 - Do they feel right?
 - Do they slip?
- ▶ Proper lacing

Socks

- ► Wear 2 pair: thin synthetic liner, midweight wool
- "Hiking socks" reinforced at stress areas

Trekking Poles

- Essential for most adults
- Requires some practice to get used to
- Assists with uphill and downhill
- Use as tarp poles (multiuse concept)



Rain Gear

Objective: stay dry and warm (comfortable)

Two piece rain suit (no ponchos)

BREATHABLE

Not worth it to go cheap

Nylon w/Gortex – Nylon – Vinyl

Packs small

Pants with side zips and/or boot zips



Backcountry Clothing

- NO COTTON!
- Wicking material (nylon/polyester/wool)
- Use Layers
 - heat & moisture control (avoid sweating!)
 - easily adjustable
 - Example: t-shirt, fleece, rain jacket
- Hat (sun, rain, cold)



Trail Wisdom

- High tech gives convenient options, but... What you have in your head is more important than What you have in your pack
- ► Fit, fit and... fit
- ► No such thing as bad weather, only inadequate gear...

