The Big Four of Backpacking

NCAC Philmont Training Session I November 21, 2021 Mark Wray



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 (Frederick) 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



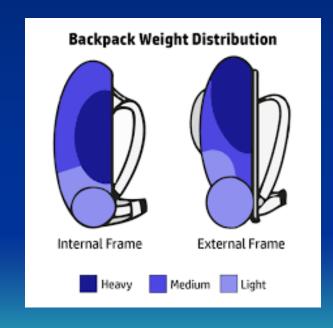
Backpack Sizing

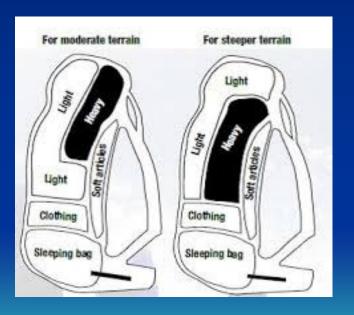
- Must fit YOUR body
- Large enough for personal AND crew gear (Crew "owns" about 1/3 of your pack volume)
- Recommend ~4500 cu in/70 liter capacity
- Try on several sizes and makes
- Fixed size or Adjustable Torso Length
- Weight of the pack itself !



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

Down

- ➤ 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 inclement weather, only inadequate clothing...

