# The Big Four of Backpacking

### Mark Wray NCAC Philmont Training Session I November 20, 2022



# 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)
  - Casual Adventure (Arlington)
  - Online: Campmor, Hiker Direct
  - Philmont Tooth of Time Traders



# Backpacks

#### External Frame

#### ► Cheaper

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

Trade-offs

#### **Internal Frame**

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

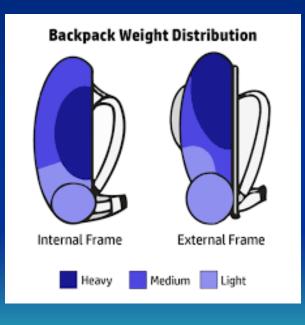


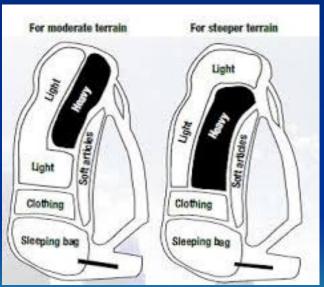
## **Backpack Sizing**

- 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)





Too low Too high http://www.deuter.com/en\_US/adjust-backpacks.php

#### **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'I 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

<sup>3</sup>/<sub>4</sub> length or full length

<u>Closed-cell foam</u>

► 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	Fabric & Leather
	Less expensive
Careful break in	Minimal break-in
► Heavier	► 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...

