Backpacking Honour

by Nestor Osman
The blessings of this activity

1. These were the spiritual **retreats** of Jesus. (Luke 5:16)

2. Direct access to the revelation of God in nature. (Psalm 19:1-6)

3. Creates a small Christian **community** (Amos 3:3) with strong bonds replicating the Early Church for few days. (Acts 4:32)

4. Produces **authenticity** beyond appearances (and smells).

5. Increase physical, mental and spiritual resilience.

6. Establishes a very strong common **purpose**.

7. + endorphins + weight loss + joy + fun + identity + adventure + team work + marketing + commitment.
Expeditions are inspired in the Christian Journey

- Enoch walked faithfully with God
- And I will walk among you and will be your God...
- On the Road to Emmaus.
- Then Peter got down out of the boat, walked on the water and came toward Jesus.
1. Discuss with your instructor the meaning of the motto: "Take nothing but pictures and leave nothing but footprints."
Do you really need to start a campfire?

**For cooking:** Plan ahead for a "no trace" camping and bring a camp stove. If you are on the trail, trail mix, energy bars, or fruit will replace a cooked meal.

**For low temperatures:** The main source of heat for your body is: your body. Little jumps, a short jog without sweating will warm up your body. Do this right before going to sleep.
Do you really need to start a campfire?

For safety: The most likely problems when dealing with wild animals are hassles, not attacks, and those hassles are likely to revolve around small animals and their attempts to get your food.
Do you really need to start a campfire?

A campfire will not make any difference for a bear that provably has been in more campgrounds than you 😊
#1 and #2 (toilet time)
Interpret the image 😊

Ground, Water, Wind
#1 and #2 (toilet time)
2. Know the essentials of proper clothing, shoes, and rain gear to use in backpacking.
Hiking shoes

**Trail Runner**
- **Pros**
  - Lightest
  - Flexible
- **Cons**
  - Less durable
  - Little protection

**Hiking Shoe**
- **Pros**
  - Lighter than boots
  - More ventilation or Waterproof
- **Cons**
  - Less protection

**Hiking Boot**
- **Pros**
  - Stability
  - Ankle support
  - Safety
  - Waterproof
  - Warmer
- **Cons**
  - Heavier
  - Poor ventilation
Hiking socks

The most common natural fiber used in socks. It’s breathable, comfortable, and strong.

More durable, resistant to body oils, spandex can be stretched over 500% without breaking.

The most-used synthetic fiber. It insulates, wicks moisture and dries quickly.

Produces more elasticity, nylon is stronger yet weighs less. It can help improve drying times.

Softer than cotton, feels like silk, very durable.

It regulates temperature well to keep your feet from getting sweaty and it provides cushioning.

These days most socks are made of merino wool, which is essentially itch-free. Most wool socks use blends of wool and synthetic materials for better durability and faster drying.
Sports underwear

These will avoid painful rash during the hike
Hiking pants

Usually are fresh and comfortable, and dry fast. Avoid shorts in order to protect your legs from insects, poison plants, sunburn, and scratches. Also long pants will keep the humidity in your legs, delaying dehydration.
Cotton T-shirt

More comfortable than synthetic fabrics. If in a narrow trail heavily forested or in a desert, long sleeve light shirt may be a good option for the same reasons that long pants.
Hat with a wide brim

Always remember, your head is the control center of your body and needs special protection.
Dress in Layers

The key factor is to dress in layers. This will allow you to control your temperature better. In cold weather, you do not want to sweat, because that will soak your clothing and chill you.
The first layer (underwear layer)

- Merino Wool
- Wool
- Fleece
The second layer (insulating layer)

- Polyester fleece
- Down insulated jackets
- Synthetic insulated jackets
Third layer (shell layer)

- Gore-Tex
- eVent
- Sympatex
- Omni-Dry
- NeoShell
- HyVent
3. Know the principles in selecting a good quality backpack. In an emergency, what might be used in place of a backpack?
**External Frame**

**Pros**
- More ventilation

**Cons**
- Less ergonomic

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**Internal Frame**

**Pros**
- More ergonomic
- Flex and move as the body does
- More comfortable

**Cons**
- Heavier

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**Without Frame**

**Pros**
- Ultralight

**Cons**
- Uncomfortable
- Less durable
Beyond the system (with internal or external frame), the bodies of the backpacks are more or less similar, however, the quality of the shoulder and hip straps will determine a big part of the comfort and performance of the backpack.
Between 50 to 70 liters size should be enough. Even for extreme backpacking expeditions. Less than 50 liters may be appropriate for a day hiking, and larger than 70 may be a big temptation to keep loading equipment that may not be necessary, just because "there is still space".
4. Know the **essential** items to be taken on a backpack trip.
Do you really need it?
Are you really going to use it?

What would be the worst scenario if you don’t take it with you?
<table>
<thead>
<tr>
<th>Item</th>
<th>Diagram</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sleeping pad</td>
<td><img src="image" alt="Sleeping pad" /></td>
</tr>
<tr>
<td>Food</td>
<td><img src="image" alt="Food" /></td>
</tr>
<tr>
<td>Clothes</td>
<td><img src="image" alt="Clothes" /></td>
</tr>
<tr>
<td>Toiletries</td>
<td><img src="image" alt="Toiletries" /></td>
</tr>
<tr>
<td>Cellphone/Bible/GPS/Camera</td>
<td><img src="image" alt="Cellphone" /></td>
</tr>
<tr>
<td>Solar charger</td>
<td><img src="image" alt="Solar charger" /></td>
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<tr>
<td>Sun glasses</td>
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<tr>
<td>Mosquito repellent</td>
<td><img src="image" alt="Mosquito repellent" /></td>
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<tr>
<td>Bear spray</td>
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<tr>
<td>Garbage bags and rope</td>
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</table>
5. What kind of sleeping bag and pad are best for your camping area? Know at least three kinds of each that are available.
**Mummy**
- Best warmth to weight ratio
- Can be restrictive
- Harder to get comfortable in
- Well suited to ultra marathons & expeditions

**Rectangle**
- Maximum comfort in terms of space
- Can be used as a blanket
- Ventilation on hot nights
- Suited to warm environment & summer nights

**Barrel**
- Compromise between other designs
- Retains more warmth than rectangle shape
- Roomier than Mummy design
- Suits camping & backpacking

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**Sleeping Bag Shapes**
Sleeping Bag Fill Materials

SYNTHETIC vs DOWN

- Down-like loft and insulation performance
- Not moisture sensitive
- Insulates while damp
- Fast drying
- High performance insulation
- Minimal weight
- Breathable
- Packable
Sleeping Bag Fill Materials
Sleeping Bag Temperature Rating

20°F (-7°C)

Comfort: 33°F (0°C)
Limit: 22°F (-5°C)
Extreme: -9°F (-23°C)

C°: 5.3°C
F°: 41.5°F

EN 13537 TESTED
Plasma 30

Comfort: Zone de confort
Zone de transition: Grenztemperatur
Extreme: Zone de risque
Komforttemperatur: Extreme
# Sleeping Bag Liner

## Sleeping Bag Liner Fabrics

<table>
<thead>
<tr>
<th>Fabric</th>
<th>Benefits</th>
<th>Drawbacks</th>
<th>Summary</th>
</tr>
</thead>
<tbody>
<tr>
<td>Silk</td>
<td>Lightweight, Very soft on skin, Insulating, Breathable, Absorbent, Hypoallergenic</td>
<td>Expensive, Absorbent, Delicate, Water spots, Special care</td>
<td>If you’ve got the cash to spring for an expensive fabric, silk liners are great for backpacking to keep weight down and perform in various environments.</td>
</tr>
<tr>
<td>Polyester</td>
<td>Lightweight, Soft on skin, Insulating, Resistant to shrinking, stretching, mildew, sun, Less expensive</td>
<td>Doesn’t breathe, Not stain resistant, Cool on skin</td>
<td>A great middle of the road option but will feel the same on your skin as the inside of your sleeping bag.</td>
</tr>
<tr>
<td>Modal</td>
<td>Medium weight, Very soft on skin, Compact, Some insulation if dry, Breathable, Resistant to shrinking, fading</td>
<td>Very absorbent, Prone to stretching, pilling, Moderate price</td>
<td>Not great for high moisture environments, but super soft on skin and great for car camping /hotel/hostel uses.</td>
</tr>
<tr>
<td>Cotton</td>
<td>Medium weight, Very soft on skin, Compact, Some insulation if dry, Hypoallergenic, Breathable, Less expensive</td>
<td>Very absorbent, Prone to stretching and staining</td>
<td>Not great for high moisture environments, but super soft on skin and great for car camping /hotel/hostel uses.</td>
</tr>
<tr>
<td>Fleece</td>
<td>Insulating, Soft on skin, Moisture-wicking, Less expensive</td>
<td>Heavy, Very bulky, Linked to ocean micro-plastic pollution</td>
<td>Great for car camping or uses where space and weight is not limited.</td>
</tr>
<tr>
<td>Wool</td>
<td>Insulating, Tear resistant, Breathable</td>
<td>Heavy, Bulky, Itchy, Will breakdown with extended use</td>
<td>Great for car camping or uses where space and weight is not limited.</td>
</tr>
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Sleeping Pads

Basic Types of Sleeping Pads

Chambered “air” mattress: (L) open tubes, (R) baffled air chambers - lengthwise or across width.

“Self-inflating: (L) perforated foam or (R) solid foam, both with tough fabric cover

Closed cell: dense foam with waffle pattern surfaces

Air pad with either foam, goose, synthetic down insulation
**Air Pad**

**Pros**
- Very comfortable
- Lightweight
- Very compact

**Cons**
- Air pads tend to be more expensive the lighter and more compact they are.
- They can be punctured or ripped.

**Self-Inflating Pad**

**Pros**
- Comfortable
- Reasonably compact
- Excellent insulation,

**Cons**
- Heavier
- They can be punctured or ripped.

**Closed-Cell Foam Pad**

**Pros**
- Lightweight
- Inexpensive
- Durable
- Consistent insulation

**Cons**
- Less comfortable
- Bulky
6. Know how to pack a pack properly.
According to the use/weight

- Frequently used items
- Lighter items
- Heavier items
- Infrequently used items
According to the weight/terrain

For moderate terrain:
- Heavy
- Soft articles
- Clothing
- Sleeping bag

For steeper terrain:
- Light
- Heavy
- Soft articles
- Clothing
- Sleeping bag
According to the gravity center/terrain
How to properly adjust a backpack
Loosen all straps:
load the backpack with a realistic weight to test it. Loosen all straps. Then lift the backpack onto your shoulders.

Position the hip strap:
place the middle of the hip fins on the top of your hips and fasten. Positioned too high, the belt will cut into your stomach. Positioned too low, the fins will rub your groin as you walk.

Tighten shoulder straps: pull the shoulder straps to tighten. Not too tight, because the main load is carried on the hip belt.
Position correctly: the shoulder strap attachment on the backpack should ideally sit between the shoulder blades. In this case, the shoulder pads surround the shoulders neatly.

Adjust and fasten the chest strap: once the back length is correct, adjust the height-adjustable chest strap and fasten it such that it doesn’t affect your breathing.
Fasten hip belt stabilizer straps: depending on the terrain, tighten the hip belt stabilizer straps for more load transfer or loosen them for more freedom of movement. For larger-volume backpacks, adjust the position adjusting straps on the shoulder straps: When loosened, they enable better ventilation over light terrain. When tightened, they provide a more direct back contact and, thus, more stability over difficult terrain.
7. What types of food are best for backpacking? Visit a grocery store and list the foods found there that are suitable for backpacking. With your instructor, do the following:
a. Prepare a menu for a weekend backpack trip using foods obtained from a grocery store.
b. Learn the techniques of measuring, packaging, and labeling backpack foods for your trip.
c. Make a trail snack.
Dehydrated food
Lighter – Nutritious - Compact
8. Know the prevention, symptoms of, and the first aid for:
a. Sunburn
b. Blisters
c. Frostbite
d. Hypothermia
e. Heat stroke
f. Heat exhaustion
g. Snake bite First aid
h. Cramps
i. Dehydration
**FROSTBITE**
A victim is often unaware of frostbite because frozen tissue is numb.

**Signs & Symptoms**
- Redness or pain in any skin area may be the first sign of frostbite.
- Other signs include:
  - a white or grayish-yellow skin area
  - skin that feels unusually firm or waxy
  - numbness

**HYPOTHERMIA**
Hypothermia often occurs at very cold temperatures, but can occur at cool temperatures (above 40°F) if a person is wet (from rain, sweat or cold water) and becomes chilled.

**Signs & Symptoms**
- Shivering
- Exhaustion
- Confusion
- Fumbling hands
- Memory loss
- Slurred speech
- Drowsiness

**Infants:**
- Bright red, cold skin
- Very low energy

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**HEAT EXHAUSTION**
- Dizziness & Fainting
- Excessive Sweating
- Rapid, Weak Pulse
- Nausea or Vomiting
- Cool, Pale Clammy Skin
- Muscle Cramps

**HEAT STROKE**
- Throbbing Headache
- No Sweating
- Rapid, Strong Pulse
- Nausea or Vomiting
- Red, Hot Dry Skin
- May Lose Consciousness
10 Signs You Might Be Dehydrated

- Irritability or Confusion
- Headache
- Low Energy or Fatigue
- Dry Mouth or Bad Breath
- Lightheaded or Dizziness
- Constipation
- Infrequent Urination or Dark Urine
- Dry Skin
- Muscle Cramps
9. Have a first aid kit in your pack and know how to use it.
Compact, lightweight first aid kits are available at many retailers and outdoor outfitters. But don't just go out, buy one, and toss it in your pack without another thought. It is important for you to open it up and examine every item.

Consider the medical forms of the participants in order to include in the first aid kits a solution for potential issues.
- Gloves (Nitrile)
- CPR mask and airway management
- 1” athletic tape
- Gauze / dressings (4-6)
- Adhesive bandages (8)
- Roller gauze or vet wrap (2)
- Waterproof/ breathable (occlusive) wound dressings (2-3)
- Tweezers
- Small magnifier
- Wound cleaning
- Trauma shears (1)
- Blister care

Musculoskeletal injuries:
- Compression wrap(s) – 3”
- Aluminum foam splint (1)
- Triangular bandages (2)

Over the counter medications:
- Pain management
- Gastrointestinal meds
- Antihistamines
- Topical antibiotic cream
10. According to your weight, what is the maximum number of pounds you should be allowed to carry?
A loaded backpacking pack should not weigh more than about 20 percent of your body weight. (If you weigh 150 pounds (68kg), your pack should not exceed 30 pounds (13kg) for backpacking.)

A loaded day hiking pack should not weigh more than about 10 percent of your body weight. (If you weigh 150 pounds (68kg), your pack should not exceed 15 pounds (6,8kg) for hiking.)

With experience, your loaded backpack may weigh less than 10% of your body weight, even for a 2 or 3 days backpacking trip.
11. Know three ways to find direction without a compass. Demonstrate at least two Northern hemisphere instructions
12. Show the proper way to put on and take off a backpack alone and with a partner.
HOW TO PUT ON YOUR PACK

KNEE ASSIST
Use your knee to hold the weight of the pack while you slide your arms into the shoulder straps.

THIGH SLIDE
Use the haul loop to slide the pack up your leg, which will support the weight more easily than a knee. When it’s in position, slip into the shoulder straps and swing pack into place.
TWO PERSON
Ask a friend to lift your pack up until you're able to set it on your own shoulders.
13. Participate in a weekend backpack trip of at least five miles (8 km) to a site not accessible by a vehicle and cook your own meals.