



EAC 301

Hiking and Backpacking

NCAC University of Scouting

Course outline

- Hiking vs. backpacking. Why?
- Making a hike or backing trek happen
- Crew concept
- Gearing up
- Additional resources

Hiking? Backpacking? What's the difference?

- “All backpacking involves hiking, but not all hiking involves backpacking.”
- For our purposes, we will define:
 - Hiking = taking a long, usually strenuous, walk for fun or pleasure.
 - Backpacking = the recreational act of carrying all of your necessary belongings on your back, usually for multiple days, hiking during the day and camping at night.
- Both can be equally challenging (distance vs. terrain vs. time)

Why Go Hiking and Backpacking?

- A key part of the Scouting program (i.e. the "outing in Scouting")
 - Advancement (Tenderfoot, 2nd Class, Venturing Ranger Award, Backpacking/ Camping/Cooking/Hiking MBs, National Outdoor Awards (Hiking, Adventure), 50 Miler)
 - Challenge (physical/mental/emotional) → skill development, leadership development → personal growth!
- Supporting goals
 - Fun
 - Appreciation of the outdoors
 - Fitness ("I will keep myself physically strong...")
 - Teamwork
 - Develop the youth's ability to plan *successful* trips
- *** Older Scout retention ***

How to make it happen...

- Two key guides cover broadly the same material
 - Passport to High Adventure, geared to...wait for it...HA.
 - Enables *older Scouts and Venturers, with guidance from their adult leaders*, to plan and safely carry out unit high adventure treks using Leave No Trace techniques.
 - TAP is an online tool geared toward a broader continuum of adventure.
 - A tool to guide *unit leaders (Cubs, Scouts, Venturers & Sea Scouts)* through all stages of adventure planning.

Passport to High Adventure

- [https://filestore.scouting.org/filestore/pdf/Passport_to_HighAdventure_34245\(16\).pdf](https://filestore.scouting.org/filestore/pdf/Passport_to_HighAdventure_34245(16).pdf)
- Older, published 2011. Out of print (PDF available).
- Still quite relevant. Goes more in-depth on topics.
- Ten chapters
 1. Who Will Go?
 2. Trip Planning
 3. Travel, Budget and Insurance
 4. Promotion and Preparation
 5. Equipment
 6. Skills Practice
 7. Trail Procedures
 8. Trek Safety
 9. Leave No Trace
 10. Wrapping Up Your Adventure

The Adventure Plan

- <https://tap.scouting.org/>
- Newer. Since online, lends itself more readily to updates. Not quite as in-depth on topics but makes up for that with numerous links out to supporting policies & documents.
- Four phases, 52 steps
 - Adventure selection, steps 1-16
 - Preparation, steps 17-45
 - The Adventure, steps 46-48
 - After the Adventure, steps 49-52

Things to Highlight

- Not going to go through the steps in detail. Please review these two resources yourselves.
- However, I will cover some key points within to the end-to-end process to realize a hike or backpacking trek.

Who will go?

- Participant qualifications
 - Balance crew experience and skills with location and activity
 - Experience - age, rank
 - Skills - rank, MBs, certifications, experience.
 - ***Consider 1st Class a minimum for advanced treks***
 - Good health (physical, mental, emotional), no contrary medical conditions
- Crew organization
- Adult advisor
- Adult leadership
- YPT

Crew Concept

- Crew size
 - Can range from 4-12 people; 5-8 is ideal
 - May be dictated by the backcountry management area's rules (ex. AT = 10 max for overnight, 25 for day hike. Groups larger than that must be divided, register and camp separately).
 - Multiple crews? Organize by skill level.



Crew Concept (cont)

- Relies on an understanding of the Stages of Team Development (forming, storming, norming, performing)
- The Crew *Leader leads (a youth!)*
 - Organizes the crew (may have an assistant)
 - Develops the duty roster
 - Seeks consensus from crew, but makes decisions
 - Setting Up the Crew Leader for Success
 - !!! Train the Crew Leader !!!
 - Let him/her grow into the job
 - Important that both youth AND ADULTS recognize and acknowledge his/her role

Crew Advisor (aka adult "leader")

- Crew advisor *should*:
 - Arrange transportation, overnight stops & meals en route (older youth can make these with adult leader guidance)
 - Assist Scouts to earn their way through fund-raising efforts
 - Help ensure the safety and well-being of everyone in the crew
 - Address crew conflicts that may require discipline
 - Serve as counselor and coach; give appropriate guidance to crew leader and members.

Crew Advisor (cont)

- The Crew **advisor (an adult) advises**
 - With the crew leader, develops the training program for building backcountry skills and crew unity
 - Daily "one-on-one" with crew leader on the trail
 - Goal of only stepping in when there is a health or safety issue or "catastrophic" mistake is about to happen (one that does not offer a value-added learning opportunity and will negatively affect the crew or conduct of the trek) - that is to say, LETTING THE YOUTH LEARN AND LEAD.
 - Learning to appropriately keep your mouth shut and sit on your hands is the most difficult skill for adults. Patience is a necessary attribute.
 - Recognize there can be more than one right way.
 - Perfect vs. good enough.

Travel, Budget & Insurance

- Group travel
 - Cars/vans, trucks/trailers/campers, buses, planes, trains
- Overnight stops along the way
 - Council camps, parks, churches, military bases
- Permits
- Ambassadors of Goodwill
 - Uniform, buddy system, communication, appreciation
- Budget
- Insurance

Promotion & preparation

- Parents' Night or HA Parents' Rally
- Health exams and medical records
 - Height/weight guidelines
 - Immunizations
- Physical fitness (aka "getting in shape")
 - Build it into your crew's training (***) Consider practice hikes assessments of physical fitness for the big show (***)
- Mental & emotional fitness
 - Perseverance, confidence, assertiveness, willing to learn from success/failure, conscientiousness, handling change/adversity
 - Like physical fitness, build into crew training → Project COPE

Preparation (cont)

- Risk advisory
 - Understand and communicate explicit and implied risks
 - Modify activity if not appropriate (GSS & SA age-appropriate guidelines) or unwilling to assume the risk(s)
- Chronic illness recommendations
 - Medical professional evaluate vs. planned activity for compatibility; decide whether to modify activity to accommodate
- Trek Safely - SA training

Equipment

- Gearing up
- Individual equipment
- Packs
- Crew equipment
 - Cooking gear
- Outdoor essentials
- Food
- First aid kit
- Navigation

Gearing up

- Knowledge & Training are the best "equipment"
 - The "science of personal equipment" - ex. how we thermoregulate vs. performance properties of fabrics; environmental conditions vs. equipment material properties in those conditions
- Think M&M - Multi-use & Minimize
- Go for quality (especially backpack, sleeping bag & boots)
 - Know when "good enough" is good enough (ex. free WaWa spork vs. Snow Peak titanium spork, Smart Water bottle vs. Nalgene)
 - Expensive, new doesn't guarantee. Cheap, used can be as good or better (Ex. REI Re-supply, Good Wolf Gear in Herndon).
- Keep it simple

Individual equipment

- Personal clothing
 - OBJECTIVE: stay dry and comfortable
 - Loose fitting
 - Use layering system (wicking, warmth, wind)
 - Mix/match to conditions; pack for most extreme expected
- Rain gear = rain & wind layer; recommend suit vs. poncho
- Footwear
- Sleeping bag/pad
- Hydration - bottle vs. bladder
- Hiking poles

The Big Four of Equipment



- Backpacks
- Sleeping "System"
- Footwear
- Clothing and Raingear

Roughly equal
parts of your
monetary
budget

- Consider purchasing the backpack last. Sleeping bag/pad a big volume factor. Size backpack for volume and weight of the best gear/clothing you could afford to purchase.

Backpacks



Backpacks

- Internal vs. external frame
- Design features: panel vs. top loading, one vs. many compartments, hydration
- Sizing
 - Backpack: Carrying capacity (liters/cu. in., weight)
 - *** Crew 'owns' ~1/3 your pack for crew gear, food ***
 - You: Size (torso, waist)
- Adjustment
 - To adjust properly, backpack must first be sized properly for you. Most will fit a range.

Sleeping System

- Sleep System = Sleeping bag/quilt + bag liner + ground pad + ground cloth + clothing
- Bags & quilts
 - Shape - ex. Mummy, semi-rectangular (bag)
 - Insulation - synthetic vs. down, bias, baffling
 - Temp rating system vs. how you sleep
 - Features - draft tubes/collars, shell/lining material, zippers, cut, pad attach system
- Pads
 - Length, design (closed cell, self-inflating, air), R-value



Footwear - Your Propulsion System

- Boots, low hikers, trail runners
 - Hiking vs. backpacking
 - Waterproof? Some cons: Less ventilation, hotter, won't drain.
 - Select lightest shoe capable of handling trails, your load
 - Boots - most ankle support; leather vs. synthetic; 6-8" high, sturdy soles; heaviest loads
 - Low hikers - lighter, less ankle support, lighter loads
 - Trail runners - lightest, least ankle support, lightest loads
 - Socks & liners - wool, synthetic
 - Get shoes fitted wearing them & later in day (foot swells)

Crew equipment

- Shelter - tarps & tents (shared)
- Cooking gear
 - Stoves & fuel
 - Pots
 - Utensils (ex. large spoon, hot-pot tongs)
 - Individual bowls/utensils (use all same - nest, takes up less space in packs)
- Water treatment
- Divide up equally (including adults)

Food

- Nutritional value
- Caloric needs
- Dietary restrictions
- How much?
 - Trip length, ability to resupply.
 - Plan menus/quantities. You don't want to carry/prepare more than you'll need. Leftovers = wet trash, attracts wildlife
- Forms
 - Dehydrated, freeze-dried, dry, convenience, retort (ex. MRE), fresh

First aid kit

- Adult leader(s)/older youth(s) should have first aid/CPR training
 - WFA required for National HABs
 - If you are going >1 hour from definitive medical care on a unit hike or backpack, strongly recommend WFA
- Crew kit
 - Basic contents; tailor for each outing
 - If you don't know how to use it, it shouldn't be in there.
- Individual kits
 - Take care of self (minor cuts, scrapes, blisters, foot care)
 - Personal meds

Navigation

- Maps & compasses
 - Consider as crew gear. Scout essentials aside, not necessary for each person to carry a compass. Crew decide.
 - Recommend two - one for youth, one for adults
- GPS
 - Can be unreliable - loss of signal, batteries die
 - Recommend only using if "lost" on the map to locate crew or ICO of emergency
 - Know how to use before you need to rely upon it
 - Can provide post-trip stats & record for posterity
- TCP - Time control plan
 - Done before the hike, helps estimate travel time given terrain and distance. Promotes terrain awareness. Knowing this time is important for crew planning and the trip plan left behind.

Skills practice (aka Shakedown)

- TRAINING for the big event!!!
 - Hikes as training for backpacking
- Builds crew spirit/cohesion
- Loading a pack
- Backpacking technique
- Hiking tips
 - ALWAYS KEEP THE CREW TOGETHER
 - No faster than slowest member; spacing, pace, rest stops.
 - Foot problems? Stop and address early.
- Helps you identify needed or unnecessary equipment



Trail procedures

- Assigning duties: navigator, smoother-upper, hiker, leader, sweep
- Duty roster tasks: Stove, water, cooking, cleanup, navigation
- Positive crew dynamics
 - Discuss goals/expectations beforehand, designated crew leader, members select own tent mates, tolerance/sensitivity, chores cooperation, enough food, no horseplay, counseling sandwich
- Staying healthy
 - Conserving body energy, foot care, personal hygiene, clothes washing, drinking water treatment, dishwashing, waste disposal

Trek safely

- Expect the unexpected ("Nobody expects the Spanish Inquisition! Our chief weapon is surprise...")
- Dangerous weather - high winds, lightning, heavy rain/flooding, extreme temps/humidity
- What to do when lost - Stay, Think, Observe, Plan
- Avoiding accidents - No horseplay
- Safety around plants/animals - snakes, bears, mini-bears
- When to stop and turn back: Dangerous WX, difficult terrain/conditions, fatigue, darkness, insufficient time, inadequate food/water, low morale (no Bataan death marches!)

Wrapping up your adventure

- Keep a journal
 - Great way to remember your trek
 - Allows you to record things while fresh in your mind
 - Good way to relax at end of the day and get ready for a good night's rest - dump your mind onto the page
- When you get home
 - Unpack everything; clean & stow gear; write thank yous
- Evaluating your trek: What went well? What could be improved? What will we do differently next time? Skills to improve/acquire? Gear needed/not used? Where to next?

Additional Resources

- Fieldbook
- Backpacking & Hiking MB booklets
- NCAC HAC
- HAC guidebooks (Vol. I National/council HA, Vol. II NCAC region prep hikes)
- Training
 - Backcountry Outdoor Leader Skills (BCOLS), University of Scouting, other courses/sources

OK, So Where Can We Go?

- Some local options
 - Hike-O-Ree Trails!
 - Appalachian Trail
 - Ironmaster YH
 - The Roller Coaster
 - Shenandoah NP
 - George Washington & Jefferson NF
 - Massanutten Mountain VA
 - Signal Knob
 - Wolf Gap VA/WVA
 - Dolly Sods WVA

