

## 1 Hiking & Backpacking

## 2 Environmental Ethics

- *Ethics*: agreed upon restrictions on behavior for the overall good of a community
  - values; knowing “right & wrong”
- *Land Ethic*: behavior is right when it preserves the integrity, stability, & beauty of the outdoor environment
  - knowing the “impact”

## 3 Backcountry Behavior

- *Observing* others & *recognizing* our own backcountry behaviors.
  - Consider:
    - Trail use
    - Campsites
    - Use of fire
    - Sanitation

## 4 Consequences of environmental impact

- 1 • Minimizing impact on the environment
  - Preserves:
    - “natural” character
    - quality & purity of natural resources
  - Increases capacity to support rec. use.
- 2 • Ignoring one’s impact on the environment
  - Deteriorates:
    - “natural” character
    - quality & purity of natural resources
  - Decreases capacity for rec. use.

## 5 “Leave No Trace”

- USFS awareness campaign that fosters an *attitude*, or “land ethic,” with regard to seven principles:
  1. Planning & preparation
  2. Travel/camp on durable surfaces
  3. Disposing of waste properly
  4. Leave what you find
  5. Minimize campfire impacts
  6. Respect wildlife
  7. Consideration for other visitors

## 6 Excursion Behavior

- Good group behavior: "...the motivation & character to be concerned for others as one is for oneself" (Petzoldt, 1984)
  - Set expectations & group norms

## 7 Hiking & Trail Technique

- 1 • **Conserve Energy**
  - rhythmic breathing
  - pace
  - rest step, breaks
  - eating & drinking
- **Hiking**
  - follow trail
    - watch for markers
    - careful attention to map
    - trail courtesy
- 2
  - uphill
    - stand straight to allow for recovery of footing (use rest step)
    - small steps
  - downhill
    - bend knees/small steps
    - minimize friction (boots)
    - contouring
  - impact considerations
    - stay on trail (treadway)
    - trail litter
    - human waste

## 8 Trail Logistics

- 1 • **Responsible to others in group**
- **Group size concerns**
  - safety
  - environmental impact
  - psychological impact
  - managing agency policies
- 2 • **Group roles**
  - Leader
  - Scout
  - Smoother
  - Logger (record keeper)
  - Sweep

## 9 Packs

- Two basic types:
  - external
    - rigid & stable aluminum frame
    - distributes weight evenly
  - internal
    - concealed frame in wall of pack
    - flexible (can be conformed to back)

- more adjustable to torso length
- rests closer to back

## 10 Stoves

- Two basic types:
    - liquid fuel
      - white gas, kerosene, alcohol\*
      - pro: fuel is readily available
      - con: high maintenance
    - compressed gas
      - butane or propane
      - pros: easy on/off, low maintenance, easy temp. control
      - cons: hard to tell level of fuel, canister disposal
- \*alcohol or butane do not burn well over 7000'*

## 11 Guidelines for stove use

- Know how to use/assemble your stove.
- Make sure there is enough fuel
- Work from the side, not over the top, of your stove.
- Do not re-light a hot stove until it has cooled.
- Do not use your stove inside your tent.
- Emergency:
  - douse: water/sand; put an empty pot over stove (lack of oxygen)

## 12 Water

- Pack it in or find a water source.
- Why should water be treated?
  - Giardia (bacteria) & intestinal viruses
- Treatment
  - boiling (a full boil expends fuel)
  - filtration (easy but slow with some risk)
  - chemical treatment (easy but takes time, affects taste, with some risk)
    - iodine & chlorine tabs

## 13 Food

- What to consider
  - length of trip
  - preparation
  - weight
  - packing/re-packing
  - spoilage

## 14 Food protection & disposal

- Considerations for protection
  - ethics (feeding wildlife)
  - safety (rabid animals)
  - sanitation (animals licking your pots)
- Protection (hanging food/waste)
  - 200+ feet away
  - 12 feet high & 6 feet away from tree
- Disposal
  - drain waste water away from site
  - pack out food waste, or burn in hot fire

## 15 Cooking

- hygiene
- burning, or sticking
- spices
- efficiency (keep a pot on stove)
- pack fuel away from food
- cooking at altitude
  - dinners that cook in <20 min add 1 min/1000' of elevation – for >20 min add 2 min/1000'

## 16 Eating

- Breakfast: cereals, oatmeal, grits, etc.
- Lunch & Trail: granola, fruit (dried), heavy breads, tuna, food bars (energy), cheese, GORP, etc.
- Dinner: pasta, rice (brown), soups, beans, dehydrated meals, cheese, salami, etc.
- Misc. sugar, coffee/tea, powdered milk, drink mix, spices, oil, butter, etc.

## 17 Clothing

- Material Characteristics
  - Wool *Pros*: good insulator, retains warmth when wet, *Cons*: is bulky, can shrink.
  - Cotton *Pros*: comfortable, conducts heat away from body, *Cons*: absorbs water and sweat & loses insulative value.
  - Synthetics *Pros*: lightweight, absorb no water, help conserve heat, dry quickly, *Cons*: cost, can melt/burn from heat.
    - Polypropylene shirts, undergarments
    - Nylon/Gore-Tex shells

## 18 Fires

- Considerations
  - dead wood, safe location, impact, permitted?
- Functions
  - emergency, food prep, aesthetic value, heat (warmth & drying)

- **Site Considerations**
  - soil type, wind, distance from camp, established fire sites
- **Restoration**
  - burn wood to ash, douse until cool, spread

19  **Latrines**

- **Impact of improper disposal**
  - aesthetics
  - physical (contamination can cause illness)
  - environmental (animals affected)
- **Cat-holes (process)**
  - small hole 6+” deep, use it only once, do away from camp, water & trails, cover hole, & pack out TP (if necessary)
- **Urination (use same general area)**

20  **Packing the Backpack**

- **Consider weight distribution**
  - Flat terrain
    - Higher center of gravity
      - load light gear in bottom of pack; stack heavier gear on top.
  - Steep terrain
    - Lower center of gravity
      - load heavier items lower in pack & closer to body