**Snowshoeing: A Leader and Student Guide:**

**- In addition to 10 essentials...**
- bring extra gloves, we'll be practicing falling and getting up in the snow
- we suggest a thermos w/ warm drink (tea, broth) – and a plan to keep your water from freezing

- hand warmers are an excellent addition to your winter backpack kit
- bring a hat and extra insulation; the field trip will be colder than most trips because we will be standing more
- no Ice Axe or Crampons needed
- snow shovel encouraged if you already have one
- bring some kind of ground insulation (e.g. foam or inflatable) to sit on for lunch (assuming we'll be in the snow)
- note that electronics tend to fail more frequently in cold wet environments
- we suggest bringing an extra dry warm change of clothes for the trip home, to leave in the car: also bring a bag for you wet gear for the trip home

Go to NWAC website and read the avy and weather forecast the night before, or starting a couple of days before the trip.

Adjust your gaiter straps and their fit with the boots you plan to wear before the trip.

In the parking lot or meeting place, after we gather, we will talk about the following:

- Reminding drivers about not setting the parking brake and turning the windshield wipers up in very cold weather.
- Cover the agenda for the day
- Emphasize safety is the #1 priority
- Group will stay together (for some field trips we may also have walkie-talkies for the sub-group leaders to stay in touch)
- Please tell someone else if you take a party/bathroom break separation so we don't come looking (and be prepared to leave no trace and pack it out with doggie or other bags if necessary)
- We will remind folks of signs and symptoms of winter-related problems (hypothermia, frostbite)...and what to do about them
- Remind people to wear a hat / insulation (if needed)
- Remind people snowblindness is real and serious (so use the shades)
- Folks should stay hydrated / snack frequently
- We will generally break for lunch around noon (30 minutes, or less if people are done eating and getting cold)
- Plan is to keep on the move and stop frequently to help keep warm; but adjust layers frequently if needed
- Describe putting on snowshoes, especially positioning the boot relative to the snowsho

**Once snowshoes are on:**

- Practice turning and walking in the shoes on level ground (and we will review with group the various claws, cleat and side rails participants may have with their particular shoes) – learning to look ahead, not down at your shoes
- Discuss/practice making a "road", person in front falling to the back -- sizing steps when first breaking trail with the group in mind; no overly long strides
- Discuss basic safe travel (point out examples where practicable):
  - Keep distance from person in front's poles / be considerate of person behind
  - Limbs coming back after the person in front goes through brush or tree limbs – push brush or limbs down, not out or forward, and communicate with person behind you
  - Buried rocks, structures, fallen trees/logs
  - Tree wells
  - Water under snow
  - Flat places that may be lakes or ponds

  - Gullies
  - Snowmobilers (or novice skiers)
  - Ice/Snow falling from tree limbs above – “tree bombs”

**Your leaders will teach you:**

Falling and getting up: (how to, demonstrate, and observe students practicing)
  - Using poles for floatation; making an “X” with poles
  - Differences between falling forward versus on back
  - Differences when hills are involved, especially when head downhill

 Extracting oneself from a deep posthole

**Hill Work**: (how to, demonstrate, and observe students practicing)
  - Remind people if they are stopped on a hill to not let their pack or misc. things slide down the hill)
  - Staying in balance / "nose over toes" when descending
  - Longer versus shorter poles
  - Straight up / down a hill – using the “rest step” when going uphll
  - Traversing a slope
  - Switchbacks & turning on a hill
  - Plunge stepping (push heel in, stay in control)
  - Side stepping up and down
  - Backing down is an option

**Additional Safe Travel Considerations**: (point them out if/as we see them, if we don't see them, comment after lunch)

  - Cornices
  - Cracks or holes in the snow
  - Weather-related: whiteout, blizzard
  - Avalanche terrain-related potential of various places as we go; can we spot any signs of higher avalanche danger?
    - Avoid gullies
    - Stay on ridges or hilltops
    - Forested areas are less prone to slide
    - Keep in mind that the area below an unsafe slope is also unsafe (terrain trap)
    - 30-40 degree slope is the optimal avalanche slope

Lunch activities:
  - Lunch ~ noon
  - Navigation:

    - Don't blindly follow other tracks; your tracks may not be followable on return (wind, snow, melt, obscured by other snowshoers/snowmobilers)
    - Ask students which way is north
    - What are some terrain or other features they can use to navigate?
    - Identify where we are on the map
    - Identify which way/direction the cars are
  - Ask students to guess how deep the snow is where we're eating lunch; leader to pull out the probe to see actual snow depth
  - Leader to dig a simple snow pit and students can use to identify that there are many hidden layers of snow of differing consistencies, if there is no obvious exposed layering.

**Emergencies:**
  - Identify places/options for emergency shelter. What makes some places better than others? Leaders may have students form groups of 3-4 and ask you to spend 15 minutes, using the contents of your collective backpacks, to do what you can to prepare to spend the night with one injured member)
   - Out of the wind
   - Make sure rescuers can find you
  - Additional options if you have a tarp/shovel
  - Discuss what to do if someone falls in water