Snow Shoeing 101

Lesson Theme: Teach the basics of snowshoeing

Background

Snow shoeing is an ancient form of transportation used to permit humans to travel in the winter. Snow shoes has changed drastically through time but the concept is the same. Snow shoes keeps you on top the snow. Giving you the ability to travel to more remote locations in the winter.

Program Activities

In this part of the lesson plan, explain exactly what you will do during the program.

Introduction (5 minutes)

Objective: To inform the participants of what the class will be about

1. We will spend time inside learning the basics of the snow shoe, what you need to prepare for when snow shoeing and how to choose your snow shoe. Then we will go outside and put on our snow shoe go outside.

2. Introduction of staff

Preparation (10 minutes)

Objective: Be ready and equipped for an outdoor winter activity

- What do you do before you go snow shoeing?
  a. Clothing- Make sure you wear for the weather and layers so you can take off and put back on. Have warm boots and socks and gloves extremity’s get cold first. Layer pants, snow pants, shirts, sweatshirts coat. Lastly cover your face in cold temps and sunglasses if it is sunny.
  b. Check the weather make sure you know what will happen when you are out
  c. Safety
    i. Let someone know where you are going and when you plan to come back
ii. Buddy system
iii. Flashlight, water, snacks, whistle, first aid kit
iv. Hypothermia
   1. Heavy shivering, slurred speech, shallow breathing, lack of coordination, drowsy, confusion, fall asleep.
v. Frostbite
   1. Frostbite-
      a. Cold skin, prickling feeling, numbness.
      b. For example, a temperature of 0 degrees F and a wind speed of 15 mph will produce a wind chill temperature of -19 degrees F. Under these conditions, exposed skin can freeze in 30 minutes.
      c. Get moving, get warm
      d. Leave no Trace
         i. Trash your Trash
         ii. Stay off cross-country ski trails
         iii. Respect wildlife

Equipment (10 minutes)

Objective: What gear is needed to snow shoe

- Snow Shoe
  a. Size
  b. Parts of a snow shoe
  c. How to put it on
- Poles
  a. How to adjust
  b. What not to do

Using the snow shoe (15 minutes)

Objective: Snow Shoe

1. We will hand out a snow shoes to each person. You will go outside and put on your snow shoes. If you need help, ask one of us and we will help. Once on, walk around a little and get used to walking with a large shoe. Please stay off the parking lot as it wears out the crampons

- Hand out shoe
- Put on Shoe
- Practice walking around
Snow shoe techniques (20-30 minutes)

Objective: Learn some basic techniques when snow shoeing

- Falling and how to get up
- Turning around
- Breaking Trail

Wrap Up (5 minutes)

Objective: Return shoes and review. Please return shoes to staff in order. Make sure to take off before you come in.

- What did we learn?
  - What do we need to snow shoe?
  - Equipment
  - Techniques

Extension Activities:

Game or Craft

Objective: In case we have extra time or it is snowing.
Habitat rings-game
Rope making

Evaluation

Objective: Evaluate in an informal way any changed perspectives or knowledge with a question and answer or wrap up game.

Helpful How-to Video

https://www.youtube.com/watch?v=-bcNb7s-J7A
# Snow-Shoeing 5-E Lesson Plan

<table>
<thead>
<tr>
<th>Class Name: Snow Shoeing 101</th>
<th>Grade: Elementary</th>
<th>Time: 50 minutes</th>
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</thead>
<tbody>
<tr>
<td><strong>Learning Goal/Target:</strong> Students will understand basics of snow shoeing. What a snow shoe is, prepare for snow shoeing, How to snow shoe.</td>
<td><strong>Standards:</strong></td>
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<thead>
<tr>
<th><strong>Evaluation:</strong></th>
<th>How will participants demonstrate their learning? How will you assess their learning? (This step can happen at the end or throughout the lesson, but it is important to think about first)</th>
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<tbody>
<tr>
<td></td>
<td>Students understand what preparations are needed to go snow shoeing and learning how to get a snow shoe on correctly and to understand the basics of walking with snowshoes on.</td>
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<tr>
<th><strong>Engagement:</strong></th>
<th>How will participants engage in the concept/lesson? What will spark their interest?</th>
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<tbody>
<tr>
<td></td>
<td>Have snow shoes out and make sure you fit the part of a snow shoe presenter. Have correct clothing and gear.</td>
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<td></td>
<td>Ask the students if it is hard to walk through deep snow. What if you could walk on snow like walking on a sidewalk</td>
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<td>Think of all the places you could go with snow shoes that you normally could not.</td>
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<thead>
<tr>
<th><strong>Exploration:</strong></th>
<th>What will participants explore relating to the concept? What probing questions can you ask?</th>
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<tbody>
<tr>
<td></td>
<td>What are the parts of a snow shoe?</td>
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<td>How to put on a snow shoe</td>
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<td></td>
<td>What should you wear when snow shoeing?</td>
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<td></td>
<td>Snow shoes take time to get used to. Try not to step on your shoe.</td>
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<td></td>
<td>How to trail snow shoeing.</td>
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<td></td>
<td>Staying on top of the snow.</td>
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<td>Outdoor ethics</td>
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<tr>
<th><strong>Explanation:</strong></th>
<th>How will participants explain their thinking? What concepts do you anticipate you will need to explain?</th>
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<tbody>
<tr>
<td></td>
<td>How do you need to change the way you walk when snow shoeing?</td>
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<td>How do you stay above the crust?</td>
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<tr>
<th><strong>Elaboration:</strong></th>
<th>How will participants apply their knowledge and skills to a new situation? What questions can you ask to reinforce the concepts?</th>
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<td>When would snow shoes be important and when would they not be.</td>
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<td></td>
<td>What is the best part of snow shoeing?</td>
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Snowshoeing

Choosing Your Snowshoes
There are nearly as many designs and shapes of snowshoes as there are climatic regions of North America, and choosing one can be as confusing as finding your way through a whiteout blizzard. Here are some general factors to keep in mind as you make your choice:

- A large, wide snowshoe is the best choice for soft, deep snow because its greater surface area supports your weight on the snow surface more readily.
- A narrow snowshoe works best for traversing side hills.
- A snowshoe with an upturned toe makes it easier to walk down a hill. Unlike a flat-toed model, the tips won’t slip under the snow to cause a “face-plant.”
- A snowshoe with a long tail “tracks” well, meaning that the tails help lift the toes out of the snow when you take a step. This aids in preventing you from catching a tip in deep, soft snow.
- A short snowshoe provides better maneuverability in negotiating tight timber or other obstacle-strewn terrain.

Most snowshoes combine these characteristics to varying degrees, but snowshoe expert Gene Prater divides them into four basic categories: the Yukon, the beaver tail, the bear paw, and the Western.

Of the four types, the Western has perhaps enjoyed the most popularity since its introduction in the 1950s, as the first shoe to replace the traditional steam and bent white-ash frame and raw cowhide webbing with an aluminum frame and a nylon “deck.”

Developed from mountain travel, the Western’s design offers a compromise. It’s fairly small and narrow, making it especially good for climbing in mountain terrain and on firmer snowpacks. The shape requires little modification in your normal walking stride, and it includes the metal cleat underfoot that clings securely to steep slopes.

The disadvantages of the Western crop up in very soft, deep snow, such as you might encounter in the North Woods; its small surface area may not maintain your weight above the surface. Likewise, its upturned toe can make it difficult to kick steps into the hard crusts that cover eastern mountains. Here, many veteran snowshoers prefer to stick with their tried-and-true bear paws and Yukons.


Other Equipment and Supplies

Poles- An easy, affordable, tool that will help your snowshoes work for you. Poles not only help lead stability in any kind of condition, but they can also be used to help propel you forward. Expandable poles are ideal for probing at avalanche situations.

Day Pack- Usually the last thing remembered, this item is useful to carry all safety and personal items for your snowshoeing journey.

Waist Pack- For the brief snowshoe hike, essential items can be easily carried in a simple waist pack.

Snow Shovel- A great safety tool for avalanche situations, it is always helpful when setting up a lunch spot or camp site.

Ice Axe- For the serious adventurer or mountain man, the ice axe is a necessity when crossing steep and icy terrain.

First Aid Kit

Water- Ample water. Plan on one quart of water per person per hour.

Extra food or Energy Bars- These can go a long way in a emergency.

Compass and Trail Map

Dry Socks