

## **Agenda**

- Review of Winter Outings
- Slide Show Winter Hiking at Starved Rock State Park
- Presentation: How to Dress for Winter Outings
- Show and Tell: Equipment Demonstrations

### **Outings Offered During the Winter**

- Hiking
- Cross-Country Skiing

### What Skills are Necessary?

- Most outings are open for all skill levels
- Easy for beginners to get started
- Non-competitive

## Where to I find gear?

- REI sales. rentals & classes
- LL Bean sales & rentals
- Viking Ski Shops sales & rentals
- Some locations offer rentals
  - Golf courses
  - Cook County Forest Preserve District
  - State Parks
  - State Forests

### **Planned Outings**

Winter Hiking at Starved Rock State Park

- Mid-January
- Featuring migrating bald eagles and frozen waterfalls

Cross-Country Skiing at Sagawau Nordic Sagawau Environmental Learning Center in Lemont, IL

Cross-Country Skiing at Moraine Hills State Park, McHenry, IL

**Cross-Country Skiing at Lapham Peak, South Kettle Moraine State Forest, WI** 

- Some of the best cross country skiing near Chicago
- Rentals available on location
- Offer many routes from beginner to advanced

Slide Show:
Winter at Starved Rock State Park

## **Dressing in Layers: The Basics**

Layering is the best method to stay warm & maximize your comfort in the outdoors

## The Three Layers

- Base layer
- Insulating layer
- Shell layer
- Each layer serves a function
- Allows you to make quick adjustments by adding or shedding layers based on your activity level and changes in the weather

## **Base Layer: Moisture Management**

- Designed to fit snugly against your skin, not loose
- Helps regulate your body temperature by moving perspiration away from your skin
- Keeping dry helps you maintain a cool body temperature in the summer and avoid hypothermia in the winter
- Designed to fit snugly against your skin, not loose
- Transports or "wicks perspiration away from your skin, dispersing it on the outer surface where it can evaporate.
- You stay drier even when you sweat
- Quick drying
- Available in various weights (thickness) so you can choose the best one that matches your activity and the temperature range

## Fabrics used for base layers

#### **Merino Wool**

Popularized by brands such as SmartWool, Ibex, Patagonia, or Icebreaker

### **Synthetic Fabrics**

 Polyesters such as polypropylene, Polartec Power Dry or Patagonia Capilene

## **Middle Layer: Insulation**

Purpose: Retain heat by trapping air close to your body

#### Natural fibers:

- Merino Wool
  - Offers reliable warmth
  - Good wind resistance
  - Keep on insulating even when wet
  - Not itchy like rag wool
  - Soft like cotton

#### **Goose Down**

- Best for very cold and dry conditions
- Offers an unbeatable warmth-to-weight ratio
- Highly compressible.
- Main drawback is that it must be kept dry to maintain its insulating ability. A new innovation—water-resistant down—promises to change this

### Synthetic fibers

- Polartec fleece, Thinsulate, or other proprietary fibers
- Light weight, breathable and insulate even when wet
- Dry faster but do not insulate as well as wool when wet
- Main drawbacks: wind permeability and bulk (less compressible than other fabrics)

#### Available in three weights:

- Light-weight for aerobic activity (cross-country skiing) or mild climates (Polartec 100)
- Mid-weight for moderate activity (hiking) or climates (Polartec 200)
- Expedition-weight for low activity (handing around camp) or cold climates (mountaineering) (Polartec 300, Wind blocking fleece which uses a hidden membrane that does not affect breathability)

**Shell Layer: Weather Protection** 

Purpose: Outer layer to protect you from wind, rain or snow

- Most shell layers allow at least some perspiration to escape
- Most are treated with a durable water repellent (DWR) finish to make water bead up and roll off the fabric
- An outer shell is an important piece in bad weather, because if wind and water are allowed to penetrate to your inner layers, you begin to feel cold
- Without proper ventilation, perspiration cannot evaporate but instead condenses on the inside of your shell

**Fit is an important consideration:** Your shell layer should be roomy enough to fit easily over other layers and not restrict your movement.

#### **Hard Shell**

- Waterproof & breathable shells
- Best for wet, cool conditions and alpine activities
- Use laminated membranes, such as Gore-Tex, for top performance
- · Other fabric coatings are available for a more economical alternative
- Rainwear: Emphasizes low weight and packability
- Mountain wear: More abrasion-resistant and has additional features

#### **Soft Shells:**

- More emphasis on breathability
- Most feature stretch fabric or fabric panels for added comfort during aerobic activities
- Many offer both shell and insulating properties, so they in effect combine 2 layers into 1
- Will not prevent heavy moisture from penetrating, like a "hard shell" layer during a downpour or heavy snow
- Can be expensive depending on manufacturer and options offered

### Hats & Gloves

- A significant amount of body heat can be lost from your head and hands if not covered
- Wear a fleece or wool cap with some type of wind blocking property
- If it gets really cold, add a scarf, neck gaiter or balaclava as needed
- For your hands, use the same base layer, insulating layer and shell layer combination as you do for your body
- As it gets warmer or colder, simply remove or add the layers as necessary for comfort

## **Socks and Foot Protection**

- For the feet, a base layer (liner socks) and an insulating layer (wool or synthetic socks) are often used
- Your your hiking boots or ski boots act as the shell layer
- Many boots are waterproof or have built-in insulation for additional warmth
- While thick socks can certainly be used to create more warmth, be aware of how much space is available in your boots
- Another smart option is to wear snow gaiters to prevent snow from sneaking down into the tops of your boots

## **Sun Protection**

- You need to protect yourself from both direct sunlight and reflective sunlight off the snow—even during a cloudy day
- Wearing layers with complete skin coverage prevents sunburn as well as provides warmth and moisture wicking
- Remember to wear sunglasses
- Regularly apply sunscreen to exposed skin
- Use a lip balm with sun protection

## A Few Good Rules to Follow

- An outfit of lightweight base layers and light pants is usually sufficient in mild conditions
- Avoid bulk when layering
- Keep layers snug-fitting but not tight
- Bring backup layers and put them in your pack
- Be ready to add on or replace layers
  - If you feel cold, just add another layer
  - If your primary layers get wet from precipitation or sweat, you'll appreciate having dry layers in your pack to change into
- Experiment with various layers until you learn how your body manages heat and perspiration while you are taking part in an activity or standing still
- Never use clothing made with cotton
  - It dries very slowly compare to other fabrics
  - It will leave you chilled and put you at risk for hypothermia