Winter Bike Strategy

- **Lights**
  - The most important item for winter riding
  - Use even in the day for increased visibility, especially when it's cloudy
  - Blinking can sometimes equal blinding, especially in the dark; try slow flash or steady settings
  - White in front, red in rear
  - Use backups! 2-3 on rear, 1-2 on front
  - Rechargeables are good—battery drains at a steady rate, light stays consistent

- **Fenders**
  - Like a jacket for your bike: prevents spray from coming up from road, protects drivetrain and frame as well as rider
  - Road spray is far dirtier than rain/snow
  - Full-coverage or clip-on styles are available for different bikes

- **Tires**
  - Use the fattest tires that will fit in your frame
  - Adjust pressure for conditions
    - Snow and ice –> low as you can go
  - Some tread, or siping, can help grip in wet, gritty, slippery conditions
  - Studded tires provide the ultimate in winter traction

- **Extras**
  - Bar Mitts or pogies to cover your hands
  - Pedals—use ones with good grip for snow/ice, allow boots
  - Heated grips for ultra luxury
  - Chemical heat packs when necessary
  - Cut winter shoe inserts out of wool felt

- **Preparation and Maintenance**
  - Check tire pressure
  - Get your bike checked out ahead of time—bearings and cables lubed
  - Consider using Frame Saver spray to protect steel frames from rust
  - Rinse salt off when you can
  - Learn how to lube chain and check frequently

Winter Cycling Layering Strategy

LAYERING: Allows you to remove or add layers to adjust your temperature as you go, or as conditions change.
Also, each layer traps still air, which is crucial to keeping body heat in.

- It's best to start off a bit chilly—you will warm up as you pedal. Adjust your clothing according to how fast and far you will be going as well as to the weather.
  - *Faster and/or farther –>* use fewer layers
  - *Slower and/or shorter –>* use more layers
  - You can also slow down or speed up to adjust your temperature
  - Humidity is a big factor—it often feels colder just above freezing and damp, than below freezing and dry

- For outer layer—windproof is best, waterproof if necessary.
  - Blocking wind/water is better than bulk
  - Waterproof/breathable is a *spectrum*—nearly impossible to get both!

- Best choice for inner layers: wool!
  - Retains warmth even when wet
  - Breathes well
  - Naturally antimicrobial—does not stink, even with repeated wearings
  - If you only buy one cycling-specific clothing item, make it a wool long-sleeve baselayer

- For mid-layer: wool or fleece works well.
  - Can use basic wool sweaters, fleece shirts, even sweatshirts if necessary
  - Don't want too much bulk
  - Casual clothes are fine

- Keep body zones in mind (see next page).
  - Certain zones will chill faster—especially hands and feet
  - Everyone has places that are more sensitive to cold than for others: ears, knees, fingers, toes, etc.
  - Lots of temperature control through head layers, also front closure on jacket or mid-layer

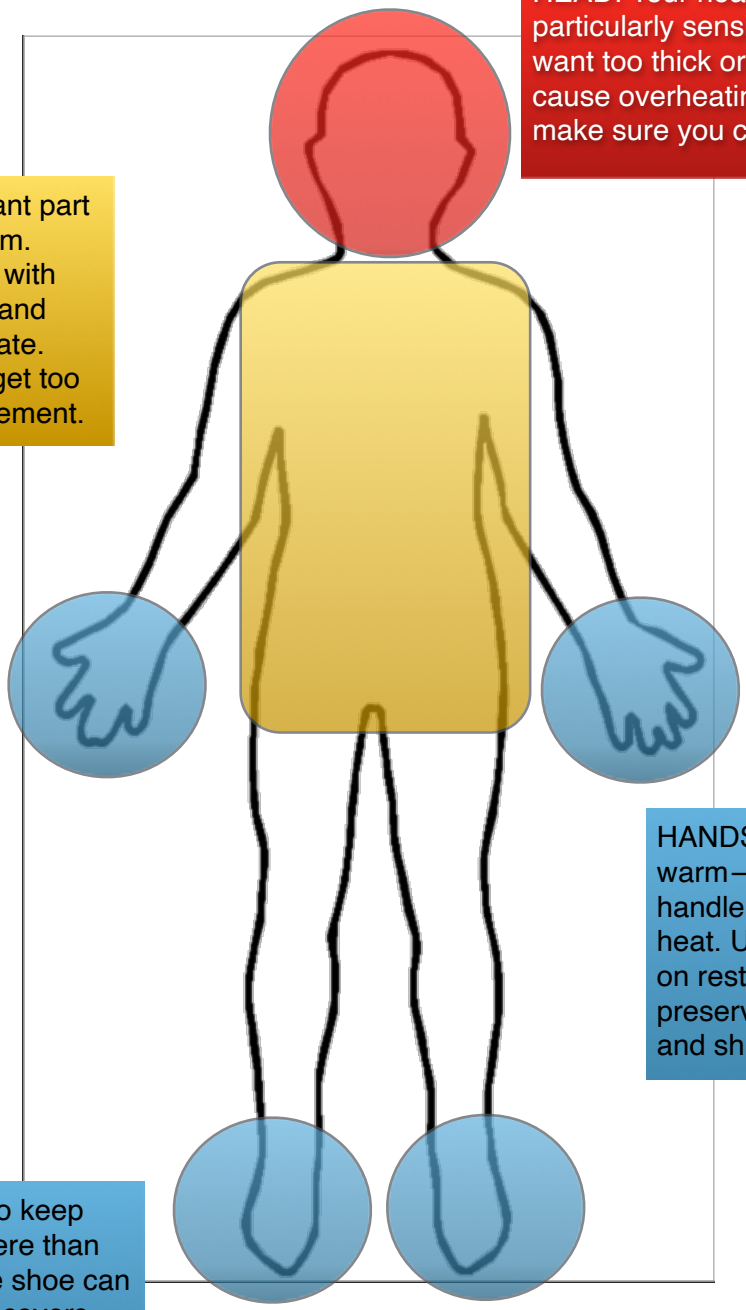
- Avoid tight, restricting clothing as it can make you colder
  - For example, two pairs of socks can actually restrict blood flow to your toes

WHERE TO SHOP:
- 3 Rivers Outdoors - used gear and clothing, good sales
- REI - used gear and clothing, good sales
- Secondhand resale shops like Avalon
- Thrift stores like Goodwill - for old sports jerseys, wool layers
- FB Marketplace, FB Buy-Nothing groups

Winter Clothing Layering Strategy

HEAD: Your head and face are particularly sensitive to cold. Don't want too thick or warm layers — will cause overheating. If you cover mouth, make sure you can breathe well.

CORE: The most important part of your body to keep warm. Need to balance warmth with venting to limit sweating and allow moisture to evaporate. Zipper use is key. Don't get too bulky, or will restrict movement.



HANDS: Can be difficult to keep warm—they're stationary, and metal handlebars and brake levers rob heat. Use warmer layers here than on rest of body, but make sure to preserve enough dexterity for braking and shifting.

FEET: Can also be difficult to keep warm. Use warmer layers here than on rest of body. A larger size shoe can allow thicker socks, or shoe covers can block wind. Keep tread in mind for snow and ice.

Winter Road Conditions

- **Rain**
  - Can feel colder than snow! More humid = more body heat lost
  - Rainy conditions can create bad visibility for car drivers
  - May have to change clothes at destination
  - Fenders are best defense against spray from tires

- **Snow**
  - We don't get a lot, often just a few inches
  - Quite variable conditions depending not just on snow depth but on temperature
    - wetter = heavier, colder = drier
    - different neighborhoods can get different amounts—higher elevation = more snow
  - Margins of streets, less-traveled streets can have more snow—choose routes accordingly
  - Wide tires with low pressure work best
    - Most of the time! But sometimes narrow tires cut down through snow layer
  - Test the surface!

- **Ice**
  - Very difficult to handle! Studded tires are the only foolproof way, and even then be careful
  - Watch out for black ice: thin almost invisible layer, looks wet
  - Snow can melt and re-freeze
  - Be aware of temperature drops during the day
  - Test the surface!

- **Salt**
  - Corrodes metal parts quickly
  - Try to remove as much as you can from your bike—even wiping with damp paper towels can help
  - Frequently re-lube chain

Most accurate weather forecasts and radar:

- National Weather Service: https://forecast.weather.gov/MapClick.php?CityName=Pittsburgh&state=PA&site=PBZ&textField1=40.4392&textField2=-79.9767&e=0#.X7guQC1h3UI