Always Running
Winterizing Your Run

I am often asked this question as a coach and a runner, “How do you run in the rain, or do you?” My answer is always a very stern “Yes, of course I run in the rain!” In my many years of running, I’ve experienced dozens of climates, during all seasons, as I have traveled to 49 of the 50 states, (I somehow missed North Dakota). With high school in New Jersey, college in Virginia, a few post-college years in southern California and 18 years here in the Pacific Northwest, I have had countless runs that have given me the experience to deal with a wide variety of weather conditions as a runner. I’ve been caught in a lightning storm in Florida and experienced hands so cold I couldn’t unlock my dorm room in Virginia. I hope to share the rest of my countless weather-related experiences with you in a book I have started writing: “Always Running, It’s a Lifestyle.”

Beyond my personal experience, the single most useful tool I’ve found in gaining an understanding of how to deal with weather conditions while running is Tim Noakes’s book, “The Lore of Running.” The chapter on body temperature regulation is extremely informative.

Here in the Pacific Northwest we have some unique obstacles that prevent the runner from getting out safely and being consistent with his or her training. The fall begins with rapidly decreasing daylight hours, increased precipitation, cloud cover and high wind conditions. Each runner responds to hot and cold environments differently due to his or her body type, conditioning, and age; each will be affected differently by the same environmental conditions. Therefore, there is no one combination of clothing that will be satisfactory for all.

This article will help you prepare to run safely and comfortably through the fall and winter months, focusing on three objectives:

(1) Learn how different weather conditions affect you as a runner,
(2) Learn how to regulate your body’s temperature during your runs through appropriate clothing systems.
(3) Learn and respect the hazards of running in dark, inclement weather.

Mastering these will lead to a more pleasant training experience, increased consistency, and (most importantly) a reduced risk of becoming injured.

As a beginning runner, it is important to be patient and to carefully prepare for fall and winter runs. As you become more experienced, it will require less preparation time. After 32 years of running I still make mistakes due to either not preparing enough or an unforeseen drastic change in weather that was not forecasted. They both end in the same result - a bad experience. This article will focus on how your clothing system can help regulate your body temperature as you run in temperatures ranging from 50 degrees down to -15. Your clothing system will vary in each temperature range because of other environmental factors and personal characteristics such as: health, workout intensity and duration, wind, precipitation, and a host of other variables. So, no, you can’t just lace up your shoes and head out the door for a run during the fall and winter months. You must spend a little more time and effort planning before you head out the door. These are the five factors I recommend a runner consider before heading out the door:

1. Weather
2. Workout
3. Route
4. Clothing system (YES it’s a “system”)
5. Safety

1. WEATHER

Understanding weather conditions is very important to planning your run. To ensure you have the most accurate information, check weather forecasts the night before *and* right before your run using the hour-by-hour feature available on most online weather sites. Additionally, you should be aware that weather patterns vary based on the microclimates around region (a "microclimate" is a local atmospheric zone where the climate differs from the surrounding area due to a variety of factors such as bodies of water. e.g. Green Lake neighborhood), so you need to tailor your workout and clothing system for the exact location of your run. On long runs, keep in mind you may encounter more than one microclimate. Once you have the most accurate information available, you make your final decisions on workout, route and clothing system. In the winter months, you should make your final clothing decisions 10 minutes before you head out the door.

Before heading out the door in the winter months:

- Check the temperature and overall weather conditions.
  - A thermometer that reads outdoor temperature is useful.
  - http://www.weather.com/weather/hourbyhour/graph/98115
- Know the direction the wind is blowing. (Tip: in the greater Seattle area, the wind comes from the south 90% of the time from September through April.)
- Be aware of when the weather is due to change.

Now you have the weather conditions, you can decide if you should do your workout as assigned or alter either the workout or the route based on those conditions.

2. WORKOUT

When faced with adverse fall and winter conditions such as constant drizzle, snow, freezing temperatures, icy roads and sidewalks or high winds, you may need to change your workout by modifying distance, pace or both.

"Train Smart" is my first law of training and making decisions about your workout based on current conditions and other facts and *not* the emotion of really wanting to get in a workout is what I call "emotional resilience."

- Long runs, shorten then for bad weather that you can maintain your body temperature
- Speed workouts: tempo run, intervals, should be canceled for temperature below the 34 to 38 range, if you run take extra care maintain leg temperature.
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Your body is more susceptible to muscle strains, pulls and tears in cold and damp weather conditions. Having the emotional resilience to train smart throughout the fall and winter months will go a long way towards preventing injuries, thereby preventing training setbacks.

3. ROUTE

Your route should be chosen carefully and should feature terrain that will protect you from the elements rather than adding to the inherent hazards of the fall and winter weather.

Plan a route that allows you to:
Sunrise, and Sunset - timing your run as sunrises

If you start before sunrise, time your run so that you run the most unsecure section after the sun has risen.

If your route passes through a danger zone, run through that part of the route before the sunset.

Danger zone: less traffic of other runners, poor lighting, lifted side walks,
Shelter
Stay off the ridges
Stay off the water
Well Lit Street at night
Tree cover canopy, but not good choice in windy condition in parks, forest where trees can fall

- Start your run into the wind and return with the wind at your back. This will lessen the chilling effect of the wind on your body after you have perspired and make the return trip easier.
- Keep your feet dry by avoiding low-lying areas prone to standing or running water.
- Plan a route that keeps you close to home, work or your car by running small loops from 1 to 3 miles. Longer loops can get you into trouble when the weather changes unexpectedly so if you are doing a longer loop, plan for support.
- Run non-stop as much as possible by avoiding traffic lights, bridges and railroad crossing that open and close, etc. While you are running your body is generating heat, but the more you stop, the more body heat you lose.

4. CLOTHING

As a runner, if your clothing choices are incorrect, most of the time you will have a safe way to bail out from the workout or retreat to a protective environment. It is rare for a runner to find himself in a life-threating situation because he was not able to maintain an adequate body temperature. This is not the case in mountain climbing where one's clothing system is a life or death choice. I read several books during my mountain climbing years and all the authors say appropriate clothing choice is a determining factor of mountain survival in inclement weather on the mountain. I have learned many rules of survival from books like "Don't Die on the Mountain," and "Staying Found." If you are caught running in a heavy storm, you can always call a cab or friend when on a run that is within cellphone coverage area. In the mountains or areas lacking cell coverage, your clothing system becomes part of your life line, and may determine if you can even get back to the trail head or back to your home or place of work. Between my own climbing experience and knowledge taken from various references, I have developed a high level of caution when in the outdoors and engage in thoughtful decision making when preparing my clothing system for my run.

You may be ready to just bundle up and go run, but overdressing is just as detrimental to regulating your body temperature as underdressing. You may stand around waiting to start your run and feel chilled and have the desire to just bundle up more to stay warm. Don't! After just a half mile of running, your body will begin to produce enough heat that you will no longer feel chilled. The key here is your clothing system needs to vent body heat away from you in the beginning of your run. In the first mile, your ventilation system should help you stay dry—"no sweating"—to prevent moisture build-up early in the run. This is done by starting with an outer jacket or vest and other layers zipped down during that first mile. As the run progresses, the ventilation system will begin to close off and trap heat. By progressively zipping up your layers as you cover more and more miles, you will regulate your body heat. Keeping your body as dry as possible through ventilation will keep you warmer by allowing your clothing to act as a better insulator.

Choosing a Clothing System For Your Run

Some runners dress warmer while others tend to wear less. It's best to test out different combinations of clothing to see what works best for your body. What you wear while running is, of course, a matter of personal preference and the best way to find what works for you is to test different clothing combinations. The following guidelines are a great way to start.

Hands
Some runners can get away with not wearing gloves until it's *really* chilly out, will others wear them as soon the temperature drops below 50 degrees. Having at least three pairs of running gloves that can be used in different combinations will protect your hands from the cold and allow you to enjoy winter running.

- What to buy:
  - Lightweight finger gloves
  - Medium-weight finger gloves
  - Outer shell mittens
  - Hand warmers

- What to wear at what temperature:
  - 50 to 40 degrees: Lightweight finger gloves
  - 45 to 35 degrees: Medium-weight finger gloves
  - 35 to 25 degrees: Outer shell mittens
  - 30 to 20 degrees: layer lightweight finger gloves with outer shell mitten on top

- 30 degrees and colder: Add hand warmers 1/3 way through your run if you are running longer than 30 minutes.
- Windy days up to 40 degrees: layer outer shell mittens with appropriate weight finger gloves for better protection

Head
Although it's constantly rumored that you lose 80% of your body's heat through your head, you really only lose 10 to 15 %. Even so, your head is obviously a very important part of your body and you need it to function properly so cover it up! Those of you with a head of hair have an extra built-in layer of insulation…bonus!

- What to buy:
  - Vaseline or lotion (protects and insulates your face from the wind)
  - Baseball cap
  - Ear warmer band
  - Synthetic beanie, with ponytail hole for the long haired runner
  - Fleece beanie
  - Hooded jacket

- What to wear at what temperature
  - 50 to 40 degrees: Baseball cap (with ear warmer band if you have sensitive ears)
  - 40 to 34 degrees: Baseball cap with ear warmer band or fleece or synthetic beanie
    - Beanie tip: when you start out, have it sitting on top of your head, not over your ears, allowing ventilation. As you progress in your run, pull it down over the tops of your ears and then further down as needed to trap more body heat.
  - 33 to 20 degrees: Fleece beanie cap
    - Beanie tip: in these temperatures you're going to start your run with your beanie cap covering the tips of your ears.
    - If you are running more than five or six miles, bring a second beanie to change into when the first one becomes wet (put the second cap in your vest pocket in a Ziploc bag so it doesn't get wet).
  - 20 degrees or lower: Fleece beanie cap as above PLUS a hooded jacket if you plan to do a long run (a jacket with a hood zipped into the collar works well).

Torso
Use layers that have zippers so you can vent off body heat. The ladies have an advantage here as a jog bra adds an extra layer to trap in heat.

- What to buy:
  - Breathable jog bra (women only – avoid cotton as it traps wetness close to the body)
  - Short-sleeved technical shirt (light & medium-weights)
  - Long-sleeved technical shirt (light, medium & heavy-weights)
  - Nylon breathable vests
  - Nylon breathable jacket, remove sleeves, with attached hood or detachable hood
  - Arm warmers
  - Hand warmers

- What to wear at what temperature:

- 40 degrees and above: Lightweight long-sleeved shirt layered with a medium-weight short-sleeved shirt on top typically works the best. Arm warmers could also be used with one or two short-sleeved shirts.
- Between 30 and 40 degrees: Add a third layer—a vest or jacket—and remember to vent the first mile and then gradually close off the jacket or vest.
- 33 to 20 degrees: Consider putting hand warmers in the pockets of your jacket or vest. You can activate these a few miles into your run to help keep your core warm and later move them to your hands.

Legs

Legs are a body part you can leave exposed if coated with Vaseline or lotion to help protect and insulate against the wind and cold. The advantage of wearing less clothing on your legs is that in the event of precipitation, wet running pants and tights get heavy and your bare legs will not. The downside to Vaseline on your legs, however, is that it traps road grit and grime that has kicked up from your shoes and onto your legs.

- What to buy:
  - Vaseline or lotion (protects and insulates exposed skin from the wind and cold)
  - Shorts
  - Running pants or full tights
  - Half tights
  - ¾ tights
  - Protective underwear
  - Compression sleeves for lower legs
  - Outer shell pants

- What to wear at what temperature:
  - 44 to 38 degrees: Shorts only or shorts and half-tights PLUS the use of Vaseline or lotion. In this temperature range there is a possibility of precipitation. Men may want to choose a half-tight that has a protective covering.
  - 37 to 20 degrees and dry—no precipitation whatsoever: Running pants or tights and protective underwear (men's wind briefs or boxer/compression short).
  - 20 degrees to 8 degrees: Running pants layered with tights and protective underwear.
  - 8 degrees and below: Once you've hit the single digits you'll most likely want to add an outer shell pant to all of the above, but more importantly, you should ask yourself, "Do I really want to go out there?"

Choosing Footwear for Your Run

Socks

Wear normal running socks whenever practical as your shoes will fit most properly with these, especially if you wear orthotics. Here are some guidelines for when normal running socks are not appropriate for the weather:

- Wool socks: wear on colder days and/or a day when you'll be submerging your shoes in snow.
- Gaiters: wear with wool socks if you're going to run longer than three miles in four or more inches of snow. Gaiters tend to be used most often for adventure snow runs.

Shoes

In temperatures below 30 degrees, running shoes tend to lose their cushion—they become hard and less flexible. Be aware that this could drastically affect your running gait. When the shoe becomes inflexible, it forces your foot to work harder to flex the shoe, possibly straining your plantar, Achilles or calf because the shoe is not giving as it usually does in normal conditions.

Additionally, have an increased awareness of your footing during wet and cold weather conditions. No matter what your footwear, balance and awareness are your most important tools for avoiding trouble (for example, avoid stepping on manhole covers in wet and cold weather conditions, especially while cornering or turning.)

Here are some guidelines to choosing the right shoes for your run during the winter months:

- Upper shoe: Wear the shoes with the least amount of mesh—most trail shoes will be a good choice.
    - Shoe tip: two or three days before a long wet or muddy run, spray your shoes with water repellent. Although this will limit the shoes' breathability, it will keep your feet dry and trap the heat, preventing the muscles and tendons in your feet from becoming cold and inflexible which could cause them to become strained.
- Traction: Choose your shoe with the best traction pattern.
- Traction devices on your shoes can be helpful, especially when running in the snow, but these devices will not take the place of increased awareness of your footing.

Before and After the Run

- If you are not running from home, bring items for all types of weather, even if you don't think you'll need them (gloves, skull cap, etc.). It may be a good idea to pack everything the night before.
- Pack a change of clothes for after the run and change out of your running gear and into dry clothes as soon as you can after the run. Ladies, this includes your jog bra!
- Dry out your shoes Coach Tony's Old School way:
    - Remove the inserts and or orthotics and stuff with newspaper.
    - Weight them down and set a fan to blow on them.
    - Don't lay your shoes on a heater vent and do not put them in the dryer. Any heat source can deform the shoe affecting its function.

5. SAFETY

Sunset as early as 4:40 pm and the resulting long, dark evenings together with cold, wet weather conditions and snow on the ground create some added safety concerns for running in the fall and winter months in Seattle. Here are some tips and guidelines to keep you training safely and injury-free through the winter:

- Road ID Bracelet
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- Run with a hand held LED flashlight.
- Wear a reflective safety belt.
- Watch for poor footing caused by uneven sidewalks lifted by tree roots and slippery surfaces from ice, wet leaves and moss. Slipping while running often causes groin and hamstring strains, pulls or tears and falling can obviously cause trauma injuries.
- Run with a partner—human or canine (canine running partners need a flashing light for their collar and reflective gear).
- Always let someone know your route—text them when you start and finish.

- Set the back light on your Garmin watch to stay on. This not only adds another light on your body, but also ensures the light will be on when you want to check your pace, distance or heart rate.
- Run with a cell phone and have money (or maybe a Starbuck's card) with you in case you have to stop.
- Emotional Resilience—perhaps the most important safety tip of all. USE GOOD JUDGMENT. If the conditions are icy, for example, is the run worth it?