

PART 1 – TRAINING IN THE WINTER

Riding outside comfortably is more important this winter than any in my 11 years working in and around the ECCC. This season is going to start really, really fast and technical with the Philly Phlyer, then head right to the Nittany Classic for a climb that requires a substantial amount of climbing endurance. And, the rest of the season is the most physically demanding in years.

Winter is one of the most challenging times of the year for the endurance athlete – in particular for the cyclist or multi-sport athlete who needs to train on a bike. Not only are we faced with the temptations of the holiday season along with the cruelty of wind-chill and short days that minimize available outdoor hours on the bike, but we are also faced with the reality of the next racing season being just around the corner. For these reasons, we have to avoid hibernating and get on the bike.

Depending on when your first race goals of the season fall on the calendar, the early season training period (December, January and February, roughly) should be geared toward the development, or deepening, of the cyclists' aerobic engine. There is a reason why some coaches call this the foundation or base period of training; it is the sturdy base upon which all of your fitness will rely and rest. Think about it this way: If you were to build a house, once you had the proper materials and a blueprint to work from, you wouldn't set out building the top floor first. You literally couldn't. You need to build floor by floor *from the ground up*. Training is the same as building a house. Your blueprint is your training plan and race schedule. Winter aerobic development is your groundbreaking and bottom floor.

For most of us, laying this foundation takes an incredible amount of self-control and discipline. In the winter, we are faced with a catch-22: When we have the opportunity to go outside, or if the weather is unseasonably warm, we want to push ourselves and go hard. This is especially the case if we're stir-crazy from indoor riding. When we have to be indoors on the trainer or rollers, we need to break up the ride and throw in some variety to alleviate the ennui and cabin fever lest our brain turn to mush. BUT, it is crucial that we avoid falling into the trap of doing too much too soon and becoming everybody's favorite "January Champion". In August, no one cares who won the state-line sprint or was first to the top of a climb on a ride in January or February. Remember, our training goal is *progression* toward our peak, not regression from it.

Speaking of indoor training, a few brief thoughts (just like my indoor sessions, brief); an hour on the trainer is sufficient *and* only ride inside if you have no other choice. Riding on the road is almost always better than slogging away on the trainer or rollers. Of course, it's 20 degrees out, stay inside. If you can do an hour of riding outside and an hour inside, split it up and get your time in that way. And if you have never ridden rollers, I highly recommend getting a pair of high quality rollers and learning how to ride them. Not only do they provide a great workout and serve to dramatically improve your pedal stroke and bike handling skills, but they will also crack some of the indoor doldrums.

People with asthma, allergies, subclinical conditions related to both and others will have to be careful about the temperature and humidity when they ride. You will have to experiment to find your temperature/humidity minimum. If you get home and dry cough for more than about 10 minute or have tons of mucus, the weather wasn't right for you. Knowing this level is important because a dry cough for 30 minutes after a workout could actually damage your aerobic engine more than your ride improved it. Thus, sitting on your couch in your bibs would actually be more beneficial.

If you use watts to measure your training levels, they work pretty well in cold conditions. But your heart rate monitor data is a lot less reliable below 50 degrees. If you don't have watts, try to feel your levels and don't stress over the details. The level you ride at is less important than the amount of time you spend riding.



PART II – WHAT TO WEAR WHEN THE MERCURY DROPS!

Now riding in the winter is not all about training in the right training zones. There is more involved, like appropriate clothing and equipment. You can ride down to some very cold temperatures if you are suitably attired. If you are new to cycling, take heed of the following statement: *When you ride, not only are you battling the pure air temperature and the existing wind chill, but the wind chill that you create as well.*

Exposing yourself to the cold does not increase your adaptation. The variation in cold tolerance among people was decided before we were born: ethnicity and circulatory system features are likely the biggest determinants.

Know what frost bite is and what it isn't: <http://www.mayoclinic.org/diseases-conditions/frostbite/basics/definition/con-20034608>

Proper layering is key to an enjoyable winter ride. At the same time, it is equally as important to not over-dress. Check the weather forecast; take note of the wind chill, and dress for how you think you will feel 10 minutes into the ride. You might feel a bit cool before your body warms up, but once you do, you're golden.

Clothing that you can layer and fits loosely is the best. Over your ride you will want to delayer and re-layer pretty often. So clothing that's easy to get into and out of will help. You will also want to tailor the amount and type of clothing you wear based on your particular needs. However, what you wear for racing in the cold is going to be different than what you wear to train in the cold. Don't wear what you use to race in to train in, most of us will wear less layers when we race

Use the colder months to work on your pedal stroke. If you only push down on your pedals you will lower your circulation sooner. Pedaling a soft circle spreads out the load on your feet and means they will get colder more slowly.

A word on wicking. My impression is that the effect works if you don't sweat much. If you're sweating a lot as you climb in the sun, the ride down the other side of that hill is going to be frigid no matter what you're wearing.

Here are some key items for winter layering that will keep you warm AND dry (not necessarily all to be worn at the same time. Common sense rules apply):

- Long or short sleeve base layer *with* wicking properties to keep you dry.
- Long Sleeve Jersey
- Thermal Jacket or Vest
- Wind Jacket or Vest
- Thermal Shorts w/Leg Warmers (many companies make thicker shorts for winter)
- Tights or leg warmers. A rule of thumb is to keep those knees covered when temps are below 60 degrees and cover the entire leg below I train in leg warmers in weather *below* 65 degrees. Once it dips below 65, my legs are covered.
- Warming balm or oil to cover the joints.
- Rain Jacket (for those of you who won't be deterred by the elements)
- Booties or shoe covers (for another layer of warmth, try putting a plastic bag or old Tyvek race number between your sock and shoe. Also, chemically heated shoe inserts may work for you

- Winter socks
- Gloves (different conditions call for different gloves, have several thicknesses on hand and cheap latex/surgical/medical gloves work great as a base layer under gloves to keep out wind/water)
- Head band, hat, balaclava or neck gaiter (you may need to take some of the padding out of your helmet to get the right fit)
- Insulated water bottles. You need to hydrate in the winter, too (if you don't have insulated bottles, there are a few tricks that I use to keep my liquid from freezing)
- Sunglasses - key to keep your eyes from watering.

Of course, this is just a partial list of items that will make winter more bearable. For many of us, there are some homemade tricks to keep warm that work as well.