

TRAINING IN A COLD AND SNOWY CLIMATE

During late November to early March, parts of the Northern Hemisphere are very cold and certain areas are also snowy. The wind chill at high speeds makes road riding unpleasant, and the narrow tyres of a racing bike make riding on the slippery road surfaces dangerous.

In these conditions the cyclist need not be forced to train exclusively indoors: there are outdoor sports to be enjoyed such as cross-country skiing, ice-skating, cyclo-cross, and cross-country mountain biking.

Please be aware that jogging and interval running-sprinting will not produce cycling beneficial results because the muscles worked are very different to those used in cycling.

Cross-country skiing and cross-country biking take you to the tranquillities of the countryside where you are free from the stress and pollution of cars whizzing by. Furthermore, in comparison to most other sports, an efficient cross-country skier employs the largest number of muscle groups and therefore, at least in theory, cross-country skiing provides the most complete type of fitness training to be found in one sport.

Cross-country skiing is also the ideal complement to cycling. The cross-country skiing *skating technique* is recommended above the traditional kick and slide technique; the skating motion is similar to cycling 'round pedalling', and you really work your leg muscles. Cross-country skiing also works the upper body muscles used in cycling, especially those used when cycling standing up-hill 'honking'.

In cross-country biking, the slower speeds to those encountered in road riding results in a much lower wind chill factor and therefore cross-country biking can be enjoyed for a long enough duration to be effective. Hilly terrain that includes a few long climbs is the ideal type of mountain bike course.

Leading coaches suggest a weekly program where cross-country skiing and indoor turbo training are combined. An effective weekly routine would be where two to three days are spent on the skis: one day on a workout at or near your Lactate Threshold (LT), another devoted to Endurance work, and a third to a Tempo workout. Speed work (important to the conditioning of the central nervous system) is, for reasons of practicability, best accomplished on the turbo trainer; you may also feel that the workout at or near your LT is more effectively done on the turbo trainer as there are many distractions outdoors that may interfere with your interval-type workout.

To get the most benefit out of time spent exercising, it is important for you to be able to measure or judge your level of exertion. The document, 'TRAINING LEVELS DEFINED', contains descriptions of levels of exertion as developed by Andrew R. Coggan, PH.D. These have been correlated to Ratings of Perceived Exertion (RPE) and percentage of LT. With practise you will be able to determine your level of exertion without the need to refer to a heart-rate monitor. This will allow you to apply your concentration to control your cross-country journey – a very necessary benefit bearing in mind the general unpredictability of the path.

The following is derived from 'TRAINING LEVELS DEFINED':

- For training to be effective your level of effort exertion must be at or above RPE 2.
- Effective endurance training is accomplished at a level of effort equivalent to RPE 2 to 3.
- Effective Lactate Threshold training is accomplished at a level of effort equivalent to RPE 4 to 5.

Refer to 'TURBO TRAINING WORKOUTS' for indoor routines that may be followed to complete the weekly program as well as to use in place of the outdoor routines described in this document.

WEEKLY PROGRAM

Important General Guidelines:

- Arrange your weekly exercise regime such that higher intensities of exercise are completed before lower intensities and endurance exercises; i.e., train for sprints before intervals and for intervals before endurance.
- Ensure that you have thoroughly warmed-up before commencing your exercise routine. You are more vulnerable to injury when your ligaments and muscles are cold. Keep your body extremities warm (I have sprained an icy cold hand during a workout honking up a climb - and did not feel it until I had thawed out!)
- Listen to your body:
 - If you have had a good workout on Sunday, treat Monday as a rest and recovery day.
 - Use your indoor trainer to 'thaw out' when you come in from the cold. A light 'Active Recovery' spin for half an hour will also speed up your recovery after a hard workout.

Routines:

1. Strength / Power

Total Time ~ 70 minutes

This will be your short distance intense workout day with brief intervals in which you apply exertion at or near your LT.

You will have fully recovered from previous training. The previous day would probably have been a rest and recovery day.

If there is snow, after a ten-minute warm-up, cross-country ski at a brisk pace for about fifty minutes at RPE 3, with about ten fifteen to thirty second intense intervals at RPE 5+ evenly spaced in the fifty-minute period. Allow yourself to recover from the previous sprint before doing the next one.

If it's very cold with no snow on the ground, and you cannot cross-country ski, and it's too icy to go cross-country biking, try ice-skating. After a ten-minute warm-up, skate for about fifty minutes with ten evenly spaced sprints on the ice.

If there is no snow on the ground but it's too cold to go road riding, try cross-country biking. Find a two-mile course of trails with a half-mile hill and some stretches that will allow you to do short sprint intervals.

2. Stamina, Strength Orientated

Total Time ~ 90 minutes

This will be your middle-distance, middle-intensity workout and follows the day after you have done routine 1.

If there is snow, cross-country ski for ninety minutes – do ten to fifteen minute sections where your RPE is steady at 3 to 4, i.e., where your perceived effort is moderate to somewhat heavy. Allow two minutes of very light work in between the ten to fifteen minute sections.

On a mountain bike, ride a circuit where you can follow this alternating pattern; do fairly long climbs to drive your heart rate up.

3. Stamina, Speed Orientated

Total Time ~ 120 minutes

This will be your endurance day where you do long-distance training with changes in rhythm. It follows the day after you have done routine 2. If you do not feel up to it, or do routine 'Speed Stamina' as detailed on 'TURBO TRAINING WORKOUTS'.

Cross-country ski for five minutes at RPE 2 then follow with five minutes at a slightly brisker pace at RPE 3 to 4. Ease off for one minute then repeat the routine for a total of two hours.

4. Active Recovery

Total Time ~ 60 minutes

This is your regeneration day and follows the day after you have done routine 3. Enjoy yourself by having fun in the snow, sledding or casually skating. Ideally complement the outdoor fun with 30 minutes of light, high cadence pedaling on your turbo trainer.

5. Stamina, Speed Orientated

Total Time ~ 90 to 120 minutes

Repeat routine 3 but ease off on the intensity.

6. Fartlek

Total Time ~ 90 to 120 minutes

Combine a little bit of all the elements you worked on during the week in this tempo workout, i.e., stamina, strength, speed and power.

Your level of effort must be RPE 3 to 4 and the duration of a cross-country ski should be approximately ninety minutes - this may be longer as your fitness improves. Push it on the uphill sections to raise your level of effort to RPE 4 and include some sprint intervals on the flats.

If you ride mountain bike, ride at a similar intensity for about two-and-a-half hours on a route that will take you up hills and through technical tracks.

7. Active Recovery

Total Time ~ 60 minutes

Repeat routine 4.

