## CYCLO-CROSS TRAINING

By Kenneth Lundgren

Cyclo-cross races are arguably the hardest events in this sport... Okay, so you don't have the 5-hours of punishment of a hilly road race, but then again you get ZERO rest. You take the steady-state aspect of time-trialing and mix in the accelerations of criterium racing and you get, well, hell. Cyclo-cross is hell... Riders say to me all the time that the cross race is harder than a time trial because there is no steady rhythm. And unlike a crit, there is no recovering, no true drafting. As my friend Gavi told me, "If you can see straight halfway through the race, you're not doing it right..."

Even though cyclo-cross races are typically 35-60 minutes, it doesn't mean you should skimp out on your base training. In fact, your preparation for cross may be even "harder" than your prep for the spring road campaign. We all know that the aerobic engine is the cornerstone for success in this sport, but so few riders undertrain this part of their engine...

For the road racer, endurance is the typical effort involved in their "base" training. In cross, Tempo is your best friend. After completing a Fitness Test, the athlete should be able to pinpoint his Lactate HR or Functional Threshold and then base his/her training zones off this number. For Elite Endurance athletes, six training zones are utilized: Recovery, Endurance, Tempo, UltraTempo, SubThreshold, LT, Vo2 Max, and Anaerobic Threshold.

If you're planning to peak for some cross races, I would highly recommend approaching these as you would a road or MTB event. You will need a FULL build-up. If you fail to properly build or train haphazardly, your fitness may get very high but you will crash and burn before the season is over. Cross is hard enough where it will easily expose any chink in your armor – you will be spit out the back. And once on that downward spiral, there is nowhere to go but DOWN.

For the cross riders who truly want to focus on peaking for the winter cross races, they are already shutting it down in June or July, then starting a full build back towards peak fitness. For the athletes with whom I work, we go run through Transition, Preparation, then Foundation training, progressing through each block... Build training is typically two months in length, followed by Peak training and a full taper...

During the early months of training, trail running or easy recovery runs on the road are an important fixture in the athlete's training. The rider has already been training from NOV-JUN for road (typically) so he/she may be more prone to overtraining... By getting him/her running easy, it gives them micro-breaks from the bike while still working the aerobic engine. Even though running is a small part of cross, if you can't run or if running is a weakness, you will seriously decrease your racing performance...

A full periodized weight program is utilized. For cross, since it's much more physical, the entire body needs to be addressed. Not only the legs and core, but the chest, arms, back, shoulders – these parts of your body need to be strengthened. In a muddy cross race, you need to haul through those mud ravines. When getting off your muddy bike to run up a hill, you need the extra strength to haul that 35-pound machine. Trust me: you will need to become a more physically powerful athlete from the waist up. If you are weak up top, during the rigors of a cross race you will quickly fall apart.

Tempo is a mainstay for the cross rider. Tempo tempo tempo. This is arguably the best way to strengthen the aerobic engine for this discipline. Most riders avoid this zone and go too easy or too hard... Don't make this mistake. Tempo intervals can be 15-30m in duration. If you're using HR as a barometer,

you'll see your average speeds improve. If you're staying on top of your FT, you'll see the power during this period of training steadily improve.

For the novice cross racer, running kills them during races. For the athletes with whom I work, I try to keep them running once or twice a week, usually at the end of a hard workout. The running, as with the bike workouts, continue to increase in intensity. You want to become a complete cyclo-cross racer, so don't skimp with the running. In some races you will find yourself hauling through sand, through mud, and if you don't prepare yourself for them, you can go from podium contender to pack feed...

Hunter Allen wrote that you need to be able to get on the gas for short bursts all race long. For the elite riders, this means an hour of anaerobic threshold pops. And there's only one way to get good at this: WORK. But training like this is very, very dangerous – you can get strong quickly, but you can also burn out and fall apart. So preparation is key. After ample time tempoing and completing force workouts, really hit the LT stuff hard and steady. LT intervals can range from seven to eleven minutes in length, and you are pegging your effort right on your threshold.

Success in cross means recovering quickly but keeping your foot on the gas. Some courses are technical and you can never go full-metal for more than 20s, but HR or power-wise you are always going SubThreshold or LT pace. You are always slowing down, accelerating, slowing down, accelerating. Two great workouts that really prepare you for the hell that is cross are SubSupers and Cruise intervals. They are very demanding, and as mentioned you need to be 100% prepared to tackle such training, so make you prepare in a very logical manner...

Slowing down, ripping out of turns, max efforts up short 15-second climbs, opening it up full gas in the straightaway. Repeated hard efforts with minimal recovery is what you need to be prepared to do, and once you enter late-Build and Peak training, you will be ready to rock this workload. Now, when it's time to go, you need to GO with everything. If you prepared properly, you will really be able to push to your limit and hopefully start achieving fitness you haven't experienced before...

One tip for cross training is to RIDE YOUR CROSS BIKE. Ride it on trails, get used to handling the bike. You can waste a lot of energy getting accustomed to the bike while racing, so get used to it in training. Get used to cornering hard, accelerating on uneven terrain, braking, climbing, sprinting – ride that cross bike. Become as efficient as possible on this unique machine. The position on the cross bike, as mentioned in an earlier Elite Endurance article, is different than your road position, and you have to let the body get acclimated to this position. If not, you will never discover your potential while racing.

Train the terrain you will tackle in races. Practice barriers, hill run-ups, mud sections. Practice roaring in and out of tight, twisty turns. Ride in the mud, ride on soft terrain. Practice barriers, hill run-ups, mud sections, tight twisty turns. In the mud or on soft. If the weather is crappy, don't hit the trainer. Get on the cross bike and go outside. Prepare yourself for these hellish conditions. If your body has never seen rain or 35-degree weather while racing, you're going to be in for quite a shock. Tempo, Recovery, harder rides – you can do all of these outside, no matter what the weather.

I offer a vast array of workouts to the Elite Endurance athletes, and the ones that seem best suited for cross are Peak Loops, Corner Accelerations, Grinds, Stutters, and Spin-Ups. These workouts help riders ride at threshold for extended periods, rip out of turns, climb in bigger gears, recover quickly from max efforts, and improve pedaling efficiency and leg speed.

I should also note the resistance for riders to rest. Succinctly, resting is critical. At the end of season, we're more tired from the rigors of a long cycling season. Also, because of the time of year, we have less

energy when the sun is out less. Also, the human body just doesn't recover as well in the colder weather. These are physiological facts. Remember that it's better to be undertrained than overtrained. As the great Joe Friel wrote, "When it doubt LEAVE IT OUT."

When you race cross, you feel as if you are in the red zone the entire time. Don't shortchange your preparation. If you want to be the king of cross, you need to build towards these events with the same dedication and attention as you would an epic road race. Train smart, always keep your goals in mind, and you WILL excel during the hellish cyclo-cross season...