



## **Coach's Corner, Buffalo Stampede**

### **Part 5: Uphill & Downhill Running**

The Buffalo Stampede marathon has 3000m of climbing and 2000m of descent. The ultra option has over 4500 metres of up and down. Yes runners, that wasn't a typo! These are tough, hard races but this is exactly as it's meant to be, embracing the ethos of Sky Running means that there is very minimal easy running ever. I can't think of any other race where managing the uphill and downhills of the race will dictate your finishing time as much as these two.

The nature of the uphill sections (gradient, technicality and length) means that this is one race where the majority of runners will be walking the climbs much more than running them. Most of the Mystic Mountain climb and the top half of the Big Walk on Mt Buffalo are all quite runnable sections. The first half of Mt Buffalo, the Clear Spot climbs (in both directions, although the return leg section is a bit more runnable) and the Bakers Gully Climb on the return leg are brutal beasts that will take attempt to take the life out of your legs and the will power out of your spirit! However, some key technique principles, well planned training and conditioning and smart race execution will make the uphill sections less of an influence on your finishing time.

Then there are the downhills. The quad smashing, slippery, technical slopes of hell. Yes, time can be made up or lost on the uphills, but in my opinion, the downhills in this race have the potential to be the biggest influences on the race result, particularly in the ultra distance event. Being a strong descender, I know that my downhill running has been the difference in some of my races between a podium position and not. But it is always a double edged sword. The downhills also have the ability to derail your race completely, particularly if your body is not conditioned adequately to weather the constant battering that will occur.

#### **Tackling the Uphills**

There are some really long climbs in the Buffalo Stampede, and the nature of the climbs require good strategy and sound technique. All but the very top runners will implement a run-walk strategy on all the climbs, particularly the Clear Spot climb and return leg of Bakers Gully in the ultra. As such, the principal of specificity dictates that walking training should be included in the lead up to the event. Even investing in a good pair of walking poles to assist

you wouldn't be a bad idea at all, I know I will be!

### **Running uphill**

When running uphill, regardless of the speed, runners must aim to keep as upright as possible. You may remember from Part 3 of Coach's Corner where I stressed the importance of 'running tall' and leaning from your ankles. The same principles apply. The main reason for keeping the torso as upright as possible when running uphill is so our biggest and most powerful muscle group, our glutes, and upper quads are activated. If a runner leans forward from their hips into an uphill they will only use their calves and lower quads with any decent power. Keeping yourself upright also keeps the chest area open and will enable maximum air intake; something we always need a lot of while climbing!

Our stride length should adjust to the gradient of the climb, the steeper the grade, the smaller the stride length. Meanwhile our cadence (leg turnover) should always try and stay constant. I like the analogy of going down gears on a Mountain Bike while tackling a hill. Remember, the less of the hill we bite off on each stride, the less exhaustive it will be. If the grade becomes too steep and our running eventually looks too 'up and down' than switch to walking.

Keep the arms at approximately 90 degrees. For someone cruising up a hill in a long climb, the arms should keep as relaxed as possible. Feel the muscles hang as you swing the arms and use a slightly exaggerated follow through action to assist momentum.

Running uphill is one of the best ways to elevate your heart rate and staying below that anaerobic threshold is only something that you can control. Tackle each hill on its own merit. Going over a small pinch with a recovery on the ensuing downhill? It's fine to run 'through' that hill using some anaerobic influence. Starting off the Big Walk up Mt Buffalo? Start very conservatively and build into the climb!

### **Walking uphill**

Walking uphill is a skill perhaps not practiced by many trail runners in Australia, but a look at runners overseas particularly in Europe shows that they incorporate a lot of uphill powerwalking into their training. From my own experiences this can be the difference between achieving a good result and a great result. The key message underlying walking uphill is that you should go into the walk stage with the plan to get to the top of the time as quickly as possible. It should not be viewed as time for easing off or taking a break but as a purposeful powerwalk with the same if not greater effort as if you were attempting to run it.

As you would with running, key technique principals apply while walking, such as remaining

tall, high cadence, and good body posture and arm swing. We often see photos of trail runners putting their hands on their knees and slouching from the waist while climbing hills. I do not believe this is the most efficient way of climbing all hills, and should only be used for excessively steep climbs where remaining tall is impossible. By staying tall and driving from your glutes you are utilising not only your biggest muscle group but also your entire quadriceps muscles and your calves. Use an exaggerated arm swing to assist momentum.

Lastly, have a good mental mindset while walking. Always look for opportunities to run the less severe sections of the climb and implement a run/walk strategy that works for you and try to keep to it.

### **Tackling the Downhills**

Running downhill can make you or break you. You can either take advantage of the descents or let them dictate terms. I prefer the former! Take the influence that the big long descents have over the race with a carefully planned downhill training plan and by conditioning your legs adequately by implementing a strength training routine as discussed in Part 4 of Coach's Corner.

A couple of key technique points apply. Avoid heel striking down the hill as is our instinctive approach. Our survival instincts kick in and sometimes this is unavoidable. Some of the downhill sections particularly in the ultra like on the Clear Spot descent on the way back, there will be no way to avoid it. But on the more 'runnable' descents, push out from the chest and let yourself take a 'controlled fall' approach down the hill as quickly as possible, taking very quick yet light steps. By letting yourself go with the grade your stride will lengthen and your leg speed will increase due to the free energy, gravity that we are utilising.

Just as in uphill running, the feet should lift immediately below the hips. This will ensure you don't over stride and heel strike down the hill which will have a jarring affect on the body and acts as brakes. For any type of running, including downhill, it is best to land on the forefoot. If you begin to gain too much speed and momentum, and you are feeling out of control, try to slow down gradually by bending your knees, sinking in your glutes and your feet will automatically take shorter steps and ground contact will occur with the whole foot and this will eventually slow you down. Always avoid trying to stop suddenly by leaning back and this is often when we lose or balance or our footing.

When running downhill with speed, our arms also play a crucial role. They will instinctively want to fly out to the side to assist our balance and give us some control. I like to be proactive about this and always engage my arms by throwing them out and 'flying' down the hill. It may look a little silly but it definitely helps my balance and confidence on big downhill sections. Even circling your arms, as if you were doing a dodgy backstroke in the pool, can give you balance but also help give you some control over the speed of the descent!

Running downhill always involves an element of risk taking. There is no other way to gain the

confidence to take the risks by going out and playing on the downhills in training. Also, don't underplay the importance of a good grippy pair of trail shoes. These are often the key ingredient that allows us to take the risks in the first place!

Good luck with your uphill and downhill training. There are many different types of hill sessions; and change them up from uphill/downhill sessions and length and gradient of the hills. Oh and don't forget about the walking too!

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