

Sprinting Tactics

This article is designed to help sprinters win races (and for non-sprinters to understand how to beat them!).

Club coach Ian Bowman has provided an excellent article in a previous newsletter on training for sprinting. However in any bunch sprint finish, tactics play at least as big a factor as sprinting strength.

There are thousands of riders who are more qualified to offer sprinting tactics than me. The problem is that good sprinters simply don't talk much about their own theories. And why would they! Anyway, here are my thoughts.....

The first thing a rider who wants to do well in bunch sprints needs to consider, is whether they want to win races or make friends! It seems that the two are incompatible!

Anyone who breaks away from a peleton and rides unassisted to the line is always considered a deserving winner. After all, such a feat comes with risks, pain and exhaustion. But if you win a bunch sprint against 10 other riders, people will say you were lucky, didn't work during the race or you just picked the right wheel to sit on. And to add insult to injury to those strong riders who get pipped on the line by a lazy wheel sucker; a sprinters' heart rate really doesn't increase until after they cross the finish line!

Ian's article explains the nexus between aerobic capacity (continuous type work, converting oxygen and glucose in the blood into energy) and anaerobic capacity (short bursts of energy converting stored chemicals in the muscles into energy). Those riders with higher proportions of fast twitch muscle fibres have a distinct anaerobic advantage over those with slow twitch fibres. However specific sprint training can improve anyone's sprinting ability to some degree.

Early and mid race tactics for sprinters:-

- * Try to keep the bunch together
- * Always sit on someone's wheel (out of the wind)
- * Try to keep the pace slow
- * Try to keep your heart rate as low as possible.

Keeping the bunch together is a very difficult job for one person if they also want to achieve the other 3 objectives. Some of the tactics are to sit somewhere from mid pack to down the back, keeping a very close eye on the leading 4 or 5 riders. If some of them start talking and looking at each other (and obviously forming a coalition to make a break) a sprinter should come up to the front and get in the group. As subtlety as possible, they should try to interrupt the riders so as to not let an organised break-away group to form.

Occasionally if a group does get away, sprinters will come to the front of the bunch and drive the pack at a steady pace up to the breakaway. Of course, it's always better to let someone else do this, but occasionally there's no option.

Sprinters sometimes might make a judgment call that the riders in a break-away are simply not going to get caught. In these circumstances, a sprinter might sprint away from the following pack and try to catch the break by themselves.

If they achieve this, a sprinter will have to make a choice between making friends and winning the race. They can work with the breakaway to ensure the following bunch doesn't catch them, or they can sit on the back of the break conserving energy for a sprint finish. A very popular tactic....not!

Final stage race tactics for sprinters:-

- * Try not to go into anaerobic state for 5 minutes before the finish
- * Try to understand the rotating rhythm of the leading group of riders
- * Pick the right wheel to sit on.

Everyone can sprint to some degree. But there is a limit to the amount of chemicals stored in the muscles used for sprinting. If possible, allow a good 5 minutes for the chemicals to be replenished by not accelerating for any reason (and creating lactic acid) until the actual sprint finish.

On flat criterium circuits such as Nundah and Murrarie, there is a distinct rotating rhythm of the first 5 to 10 riders in the final stage of a race. You need to try to gain an understanding of it as best as possible. The problem is that both the number of riders in the rhythm and the speed of the rotation is constantly changing.

Murrarie has a finishing straight of about 250 metres. You need to work out where to be in the rotating rhythm so that you are between 3rd and 5th wheel at the final turn. From this position, you'll be able to see who is serious about taking part in the sprint and you can 'pick a wheel'. This person may be in front of you or may sprint early and come from 2 or 3 positions behind. Obviously, if the wheel you pick is slowing compared to someone in front, abandon them for the better rider. Keep changing position so that you can jump away from the leading rider with 30 metres to go. Of course, luck still plays a big part. Other riders will be doing exactly what you are....and may well pass you just before the line!

Tactics for Nundah are a little different. Because the finishing straight is so long (500m) there's no real problem in coming around the last corner in 10th position. You just need to be prepared to use sprinting riders to leap-frog so that you just make the front at the finish line.

Lakeside is completely different. The Eastern Loop hill on the last lap presents a real challenge for sprinters. I've never seen the rotating rhythm of riders going up the climb on the last lap. Almost always there will be one or two 'aerobic' strength riders who will try to attack. Sprinters have to make a judgment call to jump with them, or hope the pack will catch them on the down-hill or early in the finishing straight.

What about racing on windy days? There are two options, either stay home, or treat the race as a training exercise! Strong winds tend to break up bunches (that's bad for sprinters). While peletons can sometimes stay together on short flat courses on windy days, longer road races that also feature hills rarely produce a finish where the sprinters have survived. It's no secret that sprinters are poor climbers!

But if you do have some sprinting ability and you find yourself near the front at the finish on a windy day, what do you do? I read once that Baden Cook said, "sprint early with a tail wind, sprint late with a head wind." I've always found that to be good advice.

Ian's sprinting article made good references to sprint riding techniques and picking the right gear. There are three technical comments I'd like to add. Firstly, wider handlebars are better for sprinting (more physical leverage for downward pressure on the pedals). Secondly, race on bikes with stiff frames; while the ride might be nicer on a steel or carbon bike, aluminum still seems to produce the 'stiffness' goods. Lastly, understand the significant difference lighter rims and tyres can make to acceleration (sprinting). Anything you can do to reduce the 'rotating mass' on a bike will improve its ability to accelerate. Heavy, deep dish, aero rims are fine for time trials and triathlons, but forget them for sprinting!

I hope these thoughts have helped some racers - but no-one in my grade!

The Wheel Sucker
(Kim Flessner)