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Race Strategy Practice

This is an excerpt from the Basic Bike Racing Tactics Manual. It was written to help athletes plan out how they will ride during a particular event. In the case of this example, the course is the famous Snake Alley Criterium in Burlington, Iowa. However this idea works for any race. During the course of the book, the athletes have been instructed in all the basic moves that can occur during competition. The idea now is for the athletes to take a look at building a race strategy for the entire race.

Begin by looking at the race promoter's information and the course itself. It may be a championship race, a race with a large prize structure or it could be you just want to use it as training for bigger race. You may need to decide how many teammates you will need to help you with this. By looking at the strengths and weaknesses of each athlete, you can make your selection for the best possible results. It is important to keep track of how each athlete has been performing lately and how motivated they all may be for this race.

For the starting part of your plan, you may want to get a race promotion flyer and a good map of the actual race course. Using a map and your knowledge of the course, begin by determining all the terrain obstacles the riders will encounter. Include hills, descents, turns, straight-aways, buildings, forests, bridges, tunnels, bad pavement, changes in road width, open farm fields, construction, traffic patterns and the shoulder of the road throughout the course.

Next take a look at the location of the start and finish of the race. If the course itself is not technically challenging, the entire race strategy may have to be made on how to approach the finish. If the race is long enough to have a feed zone, be sure to consider how this will be used by your teammates during the race. Be sure to take predicted weather conditions and race time of day into account. If the forecast is usually predicting rain and strong winds, then plans should be made to use these additional factors to your advantage.

Above all remember the words of Greg LeMond, "Bike racing is like chess on wheels!" When making up a race strategy, be sure to come up with more than one idea for each scenario in the race. You can never count on things working according to plan, so just like in chess, you must move or respond to things as they happen.

For a strategy planning, begin by discussing with your athletes the importance of the race. Review the promoter's race flyer for details concerning how the race will be operated. Discuss what will be required in order to win the race. You may want to plan out your first move of the race with an attack. This may require the skills of your climbing specialist, if you are lucky enough to have one on your team. Therefore your plans should include having other riders go with the climber to help make the move successful. So you should come

up with at least two different approaches on how to begin the long process of whittling down the size of the field.

One strategy could be made on the assumption that your team will make the first move. For example having the riders in a loose formation that will help them to block up the road as soon as your hill climber attacks. A second tactic could be made from the idea that another team will strike first. Again by having your riders in a loose formation, they may decide to simply follow the attack of another team. Either way, your team will be able to stay in control of things as they happen, no matter who is making them happen.

By using this basic outline approach the coach can break up the entire course into strategic elements. Riders are often overwhelmed with the task of planning out a strategy, but if the race course is broken up into little pieces, the task suddenly becomes much easier. If you layout your basic plan in this fashion, it makes it easier for the riders to understand. It is important to always remember that no two riders will ever absorb or process information in the same way.

Once you begin to plan the overall scheme, your riders will be able to add their own ideas and suggestions. If you have a strategy to begin your attacks on a climb, you may get some good input from the riders. Perhaps one of them has been working a lot on their climbing and has greatly improved their ability to sprint uphill. If that rider's improvement is used correctly, it could help disrupt the competition at just the right time. By teaching the riders how to plan a race strategy in this way, they will become better communicators with you and each other.

When teaching this portion of the book, the riders will begin to see how each of the tactical moves they learned earlier are now pieces of the big plan. Tactics are indeed the moves that enable you to complete a race strategy.

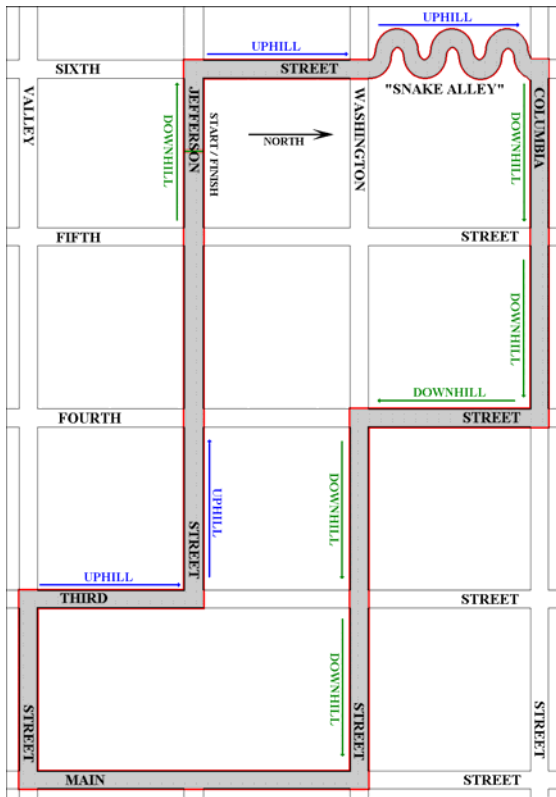
To provide another example of how this process works, we will walk through a planned practice session that was used for a real race. In this case it was designed to assist the riders in learning the course itself quicker. Individual tactics were added later after this initial introduction.



While it is not the most famous race in the world, the Snake Alley Criterium in Burlington, Iowa provides some of the most challenging racing in the country. At first glance it appears to be a simple mile long race within the limits a Midwestern town. However, the race includes six switchbacks on one of the steepest climbs in the United States, followed immediately by a steep five block long descent that turns in opposite directions twice.

The Snake Alley climb itself is made up of old, broken paving bricks that sit at an angle. The climb is an average of 12.5% gradient with sharp pitches across

the crown of the road. Although the climb is very tough, it is the descent immediately after it that often foils riders. Let's look at the challenge the same way the coach explained the strategy to the riders.

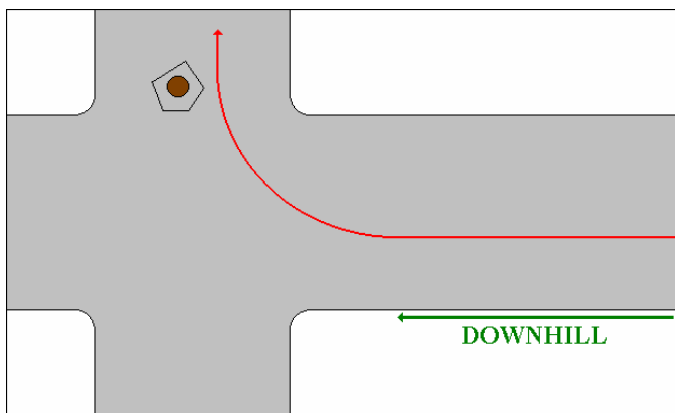


The initial part of this race strategy begins with the choice of gearing to use for the start of the race. In most races, the riders use the large chainring, probably with 53 teeth and a gear suitable for accelerating from the standing start. At the Snake Alley Criterium this selection is almost pointless.

Within about 150 meters from the starting line on Jefferson Street, the riders must make a 90 degree right hand turn onto Sixth Street and ascend a block long climb that leads to the bottom of the Snake. Riders who have raced this criterium before know that one of the key elements to victory is winning the drag race from the starting line to the first turn. A quick survey of bicycles in the race will find 39 teeth to be the favored size for the small chainring. Using this chainring in combination with perhaps a 13 tooth cog will provide 79.74 gear inches which is sufficient gearing for a fast start and sustained speed to the corner and the base of the climb. This is not unlike a gear combination used on velodromes as a warm-up gear.

Once around the corner, there is a large sewer lid near the center of the road. This is the landmark for the actual start of the climb. It is always a good idea to try and use landmarks that the rider will see easily. Objects on the road always make the best landmarks. The sewer lid on Sixth Street is easily seen from just before the turn. It is surrounded by a large, irregular shaped concrete patch. It will definitely be something the riders will try to avoid if it is raining.

If a rider started the race in the big chainring and has not shifted into the small chainring by this



Once

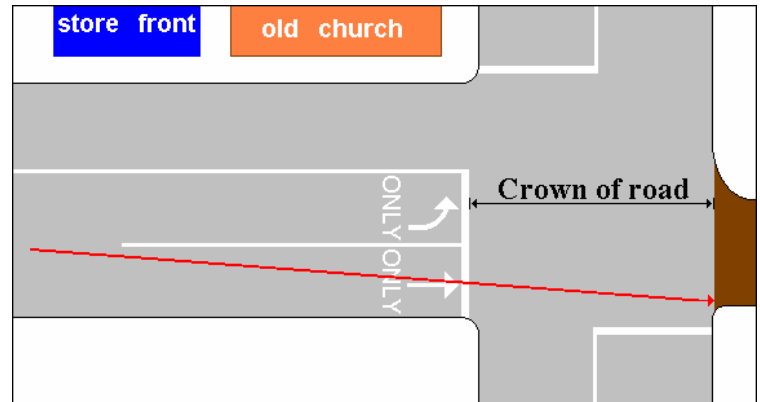


landmark, they will soon be in trouble. If the rider has started in the small chainring, then from that point on it simply becomes a matter of shifting through the cogs one at a time until the largest cog is engaged. Most riders opt for a 25 or 26 tooth cog as a bail out. This size gearing provides the rider with the bailout gearing they need for the Snake Alley climb.

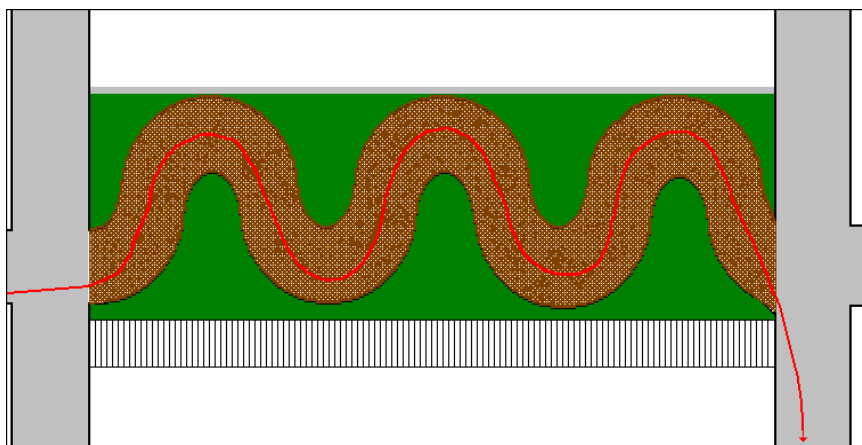
Making the first turn near the front in this race is extremely important on the first two laps. A rider who is at or near the back of the field at the first turn usually

finds themselves chasing hopelessly for the rest of the race. Riders making the turn and climbing the first hill bog down almost immediately. If you are a rider caught behind this bunch, you will be trapped there until at least the flat stretch on Main Street leading back to the start/finish line.

Climbing the hill on Sixth Street between Jefferson Street and Washington Street is actually the bottom leg of the Snake itself and the staging point for the bricked climb ahead. The rider has to make a transition through the gears as they approach Washington Street. This final gear combination has to be reached before the crest of the hill, which is actually the centerline of Washington Street at the foot of the Snake. Again, having a landmark to guide you is always a plus. It enables the rider to keep their mind on the task at hand and simply key off the visual reminders along the road. In the case of the lower climb at Snake Alley, the landmark during the 2002 version was a bright blue store front on the west side of Sixth Street about 75 feet from Washington Street. It was an easy to find reminder of where that climbing gear had to be engaged. After that there were the white turn arrows painted on the road surface just before Washington Street. This was the point where the rider needed to be in their optimal gear combination and getting the rhythm needed to climb the Snake.



This is also the place where many riders mess up their own chances. Making the fast turn around that first corner and then the hard charge up the hill causes many riders to pause their efforts as they cross Washington Street at the foot of the Snake. This mistake completely ruins the rhythm they should be keeping and causes them to bog down heavily just at the moment when they need momentum. The other fatal mistake made here is shifting gears at the last second crossing Washington Street. This not only slows the rider tremendously, but they generally don't have that gear engaged by the time they hit the bricks. This in turn causes all the riders behind them to bunch up behind them. Another reason why getting to the front early is very critical.



Getting a rhythm on a climb takes a lot of practice. Just as a rider will want to develop a rhythm for time trialing, so they will want to develop one for climbing. The rhythm is usually a function of the gradient involved. When riding this course, a good rhythm is critical in order to not lose control on the hill. If the rider has ridden the climb before and found that they can maintain a seated average cadence of 65 rpm, they should stay within

this range during the race. The key to success is not changing this cadence even when they are forced to stand up on the pedals. The riders who get up this particular climb the best, seem to remain seated for all or most of the climb. Their biggest help comes from not changing the rhythm even when they stand up.

Climbing the Snake requires one other set-up. The best place to make the climb is right up the center of the brick pavement. The surface there is sometimes a little worse than the sides of the road, but it gives the rider two escape routes in the event of a crash, slipped pedal or dropped chain in front of them. To get this centerline position the rider must force their way to the center as they crest the first climb and cross Washington Street. Experienced bike racers expect to make physical contact with the rest of the riders during a race. It is a known fact that there is only so much room for bicycles on the road and the first person in a group gets the best spot. At the foot of the Snake Alley climb the best spot is dead center. A rider should do whatever they can to get this spot without risking the safety of the other riders. Getting to that spot should begin in front of that same blue storefront we talked about earlier.



So now the rider has crossed Washington Street and is carefully making their way up the brick road. If the weather was wet earlier, or if it is lightly raining, road debris becomes the next obstacle to overcome. It sticks to tires and makes bike handling on the brick pavement even more difficult.

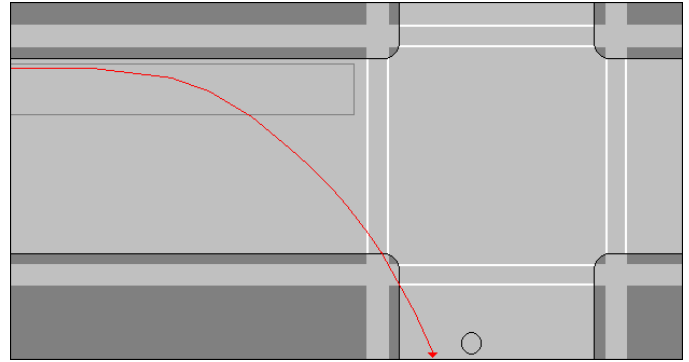


Other riders become obstacles as they struggle up the 'snake'. Being behind or next to struggling riders can be as much of a hazard as the road itself. There is always someone who drops a chain or stalls from being in the wrong gear. All part of trying to reach the top of the climb. Hitting the top of the climb becomes a moment of relief, but only a moment. If a rider is fortunate enough to be in a good position at the top of the climb, they cannot afford the luxury of taking it easy for even a moment. This is a good place to grab a drink from a water bottle and prepare to attack the descent.

Preparing to descend begins with getting over to the left side of the road on Columbia Street. The course drops steeply over a two block stretch and then turns right. To be in the correct place for the downhill turns, the rider needs to be on the left side of the street. In 2002 there was a long concrete patch that ended in front of the library. It was the perfect lane for lining up for the right turn onto Fourth Street. It not only was a smooth surface to ride on, but an easy landmark for a rider to spot. As a race like this goes on, the rider becomes exhausted and finds it more difficult to focus on the job at hand. By having simple, visual reminders to key off, the rider can keep their attention on the race as it develops around them.

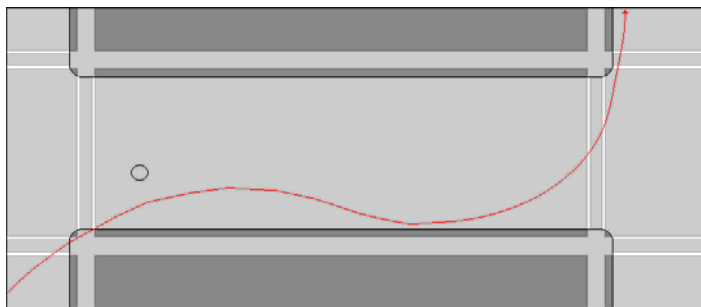
Near the end of the long concrete patch, the rider begins an arcing turn to the right that actually goes almost over the sidewalk.

The smoothest path is just like it shows in the diagram above. The rider aims for the spot between the lines of the cross walk on Columbia Street and comes off the sidewalk between the lines of the cross walk on Fourth Street. The target just beyond the cross walk is a sewer lid on Fourth Street.



By staying to the right of this sewer lid, the rider stays on the right side of the road and that sets up the next turn.

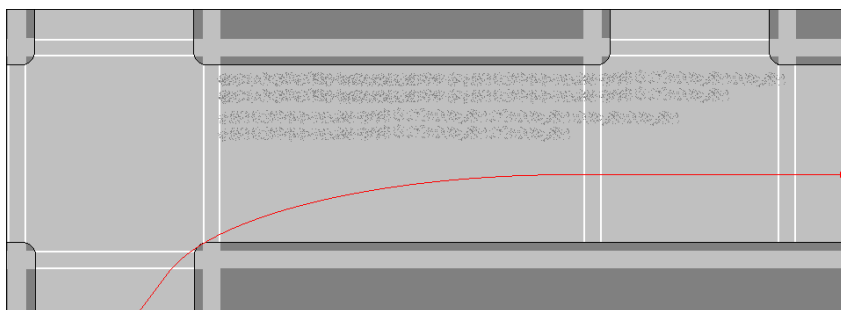
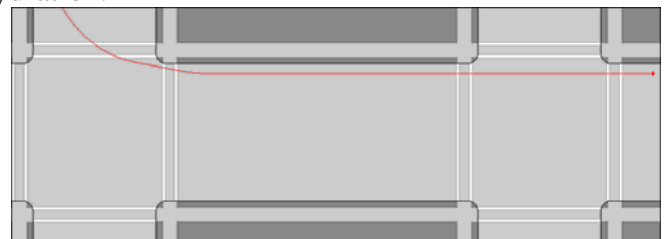
If the rider performs this action properly, they should not need to apply their brakes in order to control the path of their bicycle during these turns.



Once the left turn has been made onto Washington Street, the rider has a two block stretch in which they can get another drink and prepare to make the last downhill turn. Getting a drink may not seem like a big deal in the average race, but in this race it can be difficult. The speed on much of the course can be too

high to drink and trying to drink on Snake Alley is impossible. Drinking may seem like something that can be postponed, but temperatures at this race have been known to reach 95 degrees and there is often little to no breeze between the buildings of downtown Burlington, Iowa. There are plenty of riders who fail to finish this race because they could not maintain the needed energy or hydration.

The right hand turn itself is not downhill, but it is at the bottom of a long downhill and therefore has to be taken carefully.



The rider will always need to watch for other riders while going through the turns, but especially this one. The pavement on the northbound lane on Main Street is rutted badly and if the rider gets forced onto it, it is difficult to get back onto smooth pavement for at least 100 meters. By that time, riders coming from behind may have passed by.

Like the right turn onto Fourth Street, the rider should aim for the sidewalk at a point between the cross walk lines. Taking this line will allow the rider to make the turn and stay to the right of the centerline of Main Street. Once this turn has been negotiated the remaining part of the course is really no different than any other criterium course.

Now this may seem like an oversimplified analysis of a particularly complicated bicycle race, but it gives a good idea of what a coach or rider should look at when designing tactics and a race strategy for a competition. The more complicated the course, the more things to consider. The specific details and features of a course should always be looked at carefully so as to give the riders as much advantage as possible.

Study the courses. Study the competition. Be inventive. Good Luck!