

Keep corners in mind when dialing in tire pressure. Low pressure helps your tires grip the ground and keeps you from sliding. Tire pressure is too low when the tire folds under you at racing speeds, you usually want just a little more than that. Also, testing how fast you can get through tricky sections of the course is important during your pre-ride so that you know the speed limit of every corner.

Always think about the next course feature after the corner and adjust your line accordingly. If the next feature is a corner in the opposite direction, then fully going tape-to-tape is going to cause you to have a poor entrance angle for the next corner. In this case you want to adjust your line to maintain speed and maximize your turning radius while putting you in a good position to initiate the next turn, and again maximize your turning radius. The ability to anticipate the next feature is a key attribute in being able to carry the maximum speed through each feature and smoothly transition from one course section to the next.



HIGH-SPEED CORNERING (COUNTER-STEER)

A common road cycling technique is readily applied to high-speed turns in cyclocross: counter-steering. When entering a high-speed corner, your body lean dictates more of your turning motion than your tire steering into the turn. To properly negotiate a high-speed turn, a subtle maneuver is applied to initiate your body lean. As you approach the corner, apply slight pressure to the side of the handlebar that you are turning. For a fast right-hand corner, apply pressure to the right side of the handlebar, causing your wheel to turn slightly to the left. This has the effect of initiating your body and bike to lean to the right. The same principle applies for a left-hand turn. Once in the lean, it is a natural tendency for your body to balance the forces of each hand on the bars to keep you on track through the corner. As long as your eyes are looking toward where you want to go, your bike will follow. If you become fixated on an obstacle off your ideal path and stare at it, you will inevitably go right toward it. However if you trust your technique, you will ride the turn at a high rate of speed and carry momentum out of the corner.

Off-Camber

The off-camber turn is one in which the grade of the turn pulls you to the outside rather than to the inside. In most instances this means turning on a hill or downward slope. It's the opposite of a banked turn.

To successfully ride an off-camber section:

- Make sure you enter the off-camber turn at a speed you can maintain throughout. Too slow and you will lose traction, too fast and you will lose control of the bike. You should have figured out the right speed during your pre-ride.
- If you are following another rider into a tricky off-camber section, allow the rider some space. If the rider makes a mistake and slows down or abruptly stops you won't be delayed and you will have a better chance of passing safely.
- Do not brake through the turn. Doing so will disengage your tires from the ground and your chances of sliding are greater. It is also difficult to turn and brake at the same time.
- All factors being equal pick a high line on the off-camber to ride. This is not only the shortest route around the turn but it also gives you the most room with which to work. If you start high but can't stay there, you have room to move lower while keeping speed and traction. Starting too low doesn't give you that wiggle room and increases the chances that you will ride into the tape or have to pedal uphill. In short, it saves energy.
- Determine the best line during your warm up lap. Ride different lines on the off-camber and see what works best. Watch others ride and see where the popular line is and where the effective line is.

Know the most effective line but also have an alternative line ready to go if race conditions dictate a change to your "A" plan.

- Sometimes the fastest way to ride an off-camber section is not to ride it at all. Remember the goal is who can get to the finish line first, not who can stay on their bike the longest. If the traction is questionable, practice dismounting and running your bike around the off-camber section. Keep in mind that if it is a steep off-camber where the high-side is on your right, running the bike can be a little tricky. You risk throwing off your balance and sliding down the hill. You have to either shoulder the bike or carry it a bit higher so that the wheels clear the ground. Dismounting and running tricky technical sections may be something you have to do on the first lap if you're not one of the first riders through the turn.

When entering the turn keep your body loose. Arms should be supple and ready to absorb the turn, your weight should be lightly on the saddle, predominantly on the downhill leg and slightly forward. The ability to keep weight on the front wheel, while pedaling for traction on the rear wheel, is generally the best method for off-camber corners.

By concentrating your weight to the outside, more of the tire tread will be forced to make contact with the ground. If your weight is on the inside, or hill side, less of the tread and more of the sidewall will contact the ground. This will increase the possibility that you are going to slide down the hill.

FINDING THE LINE

Keep in mind that the line that is burned in during the early races is not always the best line. If the Cat 4s or 5s and juniors go first, their speed will be lower and technique not as refined. They'll burn in a line that a lot of Cat 3s will follow because it's there, but a lot of time it's not a good line for their speed. By the time the elite race comes along, many of the racers completely ignore the burned in line. As with all techniques in 'cross, never just follow what everyone else does—evaluate for yourself and consider alternatives.



Tripod

Tripoding is an option that lays somewhere between running and riding. This method involves unclipping your uphill leg from the pedal and using it as an outrigger to keep the bike from slipping down the hill. This technique projects your center of gravity to the inside of the turn so you don't have to lean your body as much, and therefore your bike as much, resulting in a better tread contact patch.

The unclipped leg should be out in front of you and not straight down. If it is out in front and you have to catch yourself by touching down, there is less of a chance you will bounce.

This technique should be used conservatively and is best for super-slippery turns that may be quicker to run. Tripoding can get you around a turn quickly and could be a viable option but it comes with a couple caveats.

- It is harder to keep your body loose, absorbing the shock of the terrain, while you have a foot unclipped from the pedal.
- Conditions in which you are going to unclip and tripod may be muddy and possibly frozen. Clipping back in to the pedal in these conditions is never easy. You may end up saving time by tripoding and losing it all back when you can't clip back into the pedal.

- Sometimes running is faster and less risky. Don't be afraid to run.
- “Fred Flintstone” hybrid technique, in which you stay on your bike but kick the ground to move forward, is an option for long, off-camber traverses.

Like mud and sand, off-camber turns are another course feature in which you have to have confidence and even a little faith that your tires are going to do their job. If you feel your tires start to slip, don't immediately try to brake, turn or otherwise make a save. Instead, stay calm, don't tense up, and let the tires do their job. In most instances after a slight drift many tires will re-grip and get you back on track. If your tires consistently slip on off-camber turns without hooking back up, you may want to look into using tires with more aggressive side knobs on the tread.

CORNERING DRILL

Practicing on different corners over and over with different tire pressures is something that a lot of people don't do. Set up different types of corners to practice on and purposely try to determine what tire pressures work for you on that type of corner. Start off at 32 psi, drop by 5 psi and ride the corner again. Drop by another 5 psi and do it again. Maybe add 2 psi to your tires to go up again. Do it until you find the ideal tire pressure for that type of corner. That way on race day, you have a frame of reference to go off of when choosing your tire pressure.



PEANUT DRILL

The peanut drill works solo or for a group. On an open patch of grass, either flat or on a slight hillside, place 8 cones—or water bottles—in a large peanut shape. Begin the drill by focusing on anticipating the next feature, in this case entry into a corner in the other direction. Work on maximizing your turning radius and maintaining speed throughout the corners. The first goal is to complete the peanut (in as wide of a configuration as you wish) without touching the brakes in one direction. Remember to look through each turn, in this case, it is best to look at least one cone ahead. Complete multiple laps, then repeat the drill in the opposite direction. The outside corners are opportunities for higher speed turns, whereas the interior corners generally require a slower, tighter turn. The next goal is to focus on applying some pressure to the pedals (accelerating) as you exit the turns, while still maintaining the goal of not braking through the course. Eventually you will start going so fast that you will have to start scrubbing speed before you initiate the next turn.

If you find yourself braking through the apex of the turn, slow it down and progress again. You always want to brake before the turn, not during the turn. If possible, add another rider and start on opposite sides of the peanut and race each other. At first, end the race when one rider catches up to the wheel of the other; when you are comfortable

you can later end the race when one rider passes the other. In this scenario you'll have to work on setting up the pass and executing it safely, similar to the strategic cornering drill earlier. You can also do this drill with a small group of riders, which will teach you how to ride through a group, pass, and maintain your technique while others are taking the optimal line away. A final modification to this drill is to shrink the peanut such that the cornering is much tighter, requiring much more body English to navigate the tight turns. While this may not seem at first to have as many direct race applications, understanding how you can manipulate your bike with your body weight is a key attribute in handling off-camber turns, mud, sand, snow, ice and loose gravel.

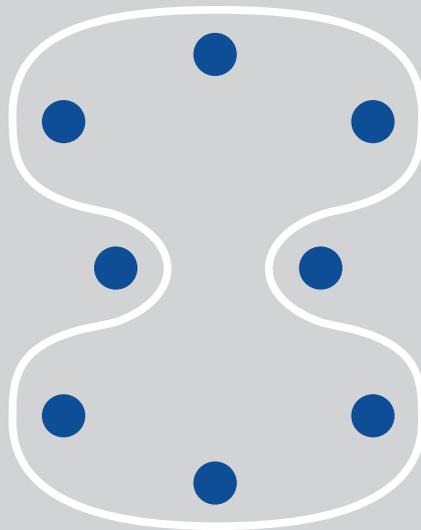


FIGURE EIGHT DRILL

Find a hillside and place a cone (or bottle) ten feet down the hill. Practice riding down the hill, around the cone and back up the hill. Change the angle of your entry and exit. Add extra cones to restrict the angle of entry and exit. Also, turn around and go the other direction so that you are leaning to the other side. You may find it's easier for you to turn one direction more than the other. Spend more practice time riding your weaker direction. Another drill is to set up two cones on the hillside about thirty feet away from each other. Then ride a figure eight pattern around the two cones. Switch directions on this drill about halfway through your drill time.

