ASHEVILLE MELLOWDROME

Mellowdrome Rider Manual

Chapter

1

Introduction

General Information

Asheville, NC has what is best described as a training velodrome. Fondly dubbed the Mellowdrome, the 500m, asphalt oval is a freshly paved, gently banked (4 to 8 degrees), retired motor speedway that is now part of the Asheville City Parks and Recreation Department. The track is asymmetrical in shape with each corner having a different radius and degree of bank, however the track is striped and marked as a velodrome. Access to the infield is controlled by a pedestrian bridge that crosses over the track. All races are run under track racing rules and etiquette. A summer race series is conducted every other Tuesday night, featuring two fixed gear omnium fields along with a card of points races for road bikes. A typical schedule would follow this order:

- Youth Race
- Fixed Gear Scratch Race A & B Fields
- B Points Race (road bike)
- Fixed Gear A & B event #2 TBA
- A Points Race (road bike)
- Fixed Gear A & B Points Race

Racing begins at 6:00PM and runs about three and a half hours. In addition to the race series, a Saturday morning training session is conducted at the facility with focus on familiarization with track rules and etiquette. During the winter, there is a weeknight-training program under the lights.

As track culture continues to grow in this area, the biggest challenge will be that the park is a multi-use facility. On the infield there are a roller hockey rink, a basketball court, a playground, and sand and grass volleyball areas. Additionally, the periphery of the park houses softball fields, bocce ball courts, and an area for ultimate Frisbee.

This is becoming the city's busiest park. Unless the facility is reserved under a USCF race permit the track is open to all. Extreme care must be taken when using the track during general use times: Roller bladers may share the wide apron with walkers, baby strollers, and children on bikes, while up-track riders of all abilities mix in traffic. Each corner is different and has its own personality. There is no motor use of any kind on the track, including motor pacing.

2005 will be the park's fourth year of operation, and while cycling represents only one use of the track, Parks and Recreation has strongly supported the race series as well as the use of the oval for training sessions. We believe this facility represents grassroots support at its best.

Mellowdrome Update 2005

In September 2004 following serious flooding by Hurricanes Fran and Ivan the Mellowdrome at Carrier Park in Asheville, NC was heavily damaged. The back stretch and turn three area of the Mellowdrome was destroyed, the lighting system was condemned, and the concession stand and other parts of Carrier Park sustained heavy damage. Asheville Parks and Recreation has remained committed to the success of the Carrier Park in general and specifically to maintaining the Mellowdrome as a multi-use track and bicycle racing venue. As of Spring 2005, repairs have been completed and the track is fully operational.

A Brief History of U. S. Track Racing

The history of U.S. track racing dates its beginning to1891, at Madison Square Garden, New York City, when 24-hour marathon velodrome racing crossed the Atlantic Ocean from Europe. This type of endurance event suffered a set back in 1889 when the State of New York passed a law prohibiting riders from racing for 24-hours straight. With this turn of events, the first modern day Madison was held in 1899. The Madison was a contest for two-man teams; riders rode 12 hours each over a 24-hour period.

At the turn of the 20th century stationary, quarter-mile tracks, constructed from sand and gravel, were everywhere. Some areas of the country hosted more than a dozen of these outdoor tracks. During the 1920s and 1930s, six-day track racing grew into a popular form of entertainment. The indoor tracks used for these events were steep, 55 degrees, and were 150 to160 meters long. The Alkek Velodrome by comparison is 33 degrees. The bikes used then are very much like those used today.

With the onset of World War II, track racing declined. A group of Midwestern speed skaters is credited with the 1970s revival of track racing. The speed skaters were looking for a form of cross training during the off-season and chose track cycling to help stay fit.

Today, there are about twenty velodromes operating in the United States. Although track races have been run on car tracks the Asheville Mellowdrome represents the first time a motor speedway has been converted to bicycle use. The Mellowdrome is considered to be a non-standard velodrome. Although lacking the steep banking typical of a velodrome, the facility is suitable for development of track skills and as a venue for local and regional competitions. Riders can learn the trade of track cycling then go on to participate at any track throughout the country in a safe and skillful manner.

Chapter

2

Track Terminology

The Track Bike

Two unique features of a track bicycle are the lack of brakes and only one gear. There is simply one non freewheeling sprocket securely fixed to the rear wheel driven by one chain ring. With this system, if the bike is moving, so are the pedals. Therefore, there is no coasting.

The construction of the track frame is similar to that of a road frame. The difference is in the geometry. Generally, the size of the track bike is the same as the road bike or slightly smaller, the bottom bracket is higher and the chain stays tend to be short. These characteristics make the track bike more rigid and responsive than the road bike.

Changing Gears

To change a gear on a track bike, the rider must change either the chain ring or the rear sprocket. Sometimes you might need to change both. Care must be used in the selection of chain rings and sprockets. The rider may have problems with the chain length if there is more than a four-tooth difference between your largest and smallest chain ring.

Safety Check

Each time you ride you bike you should conduct a safety check. There are three main areas to check:

- Tires for pressure and condition.

- Check the tightness of the bolts on the bikes. The general areas to check are the handlebars, cranks, wheels, headset and seat.

- Proper chain tension for fixed gearing is important. If the chain is too loose, it will rattle and may fall off the chain ring. There should be approximately a half-inch of play in the chain. To check the chain tension, hold the rear wheel off the ground and spin the cranks slowly. There shouldn't be any popping, and it should run smoothly. If this is not the case, you must adjust the rear wheel to correct the tension.

- Make sure your helmet is properly adjusted.

Track Talk

Apron The flat area around the infield below the banking or racing part of the track.

Attack A sudden acceleration to elude another rider or group of riders.

Banking This is the steep area of the track. The Mellowdrome's banking is from 4 to 8 degrees. Velodromes are typically banked from 25 up to as much as 50 degrees.

Blocking A tactic used by one rider or a team to slow down the pace of the other competitors.

Boxed A situation when competitors surround an opposing rider.

Break or ***Breakaway*** A rider or group of riders who leaves the main group behind.

Bridge To jump from one group of riders and join another group that is further ahead.

Category The division of the United States Cycling Federation classes into smaller groups based on ability and experience; beginning at level 5 through elite level 1.

Chasers Racers who are trying to catch a breakaway group.

Drafting Riding in a pocket of moving air, or slipstream, created by the rider in front. This enables the second rider to maintain speed with less effort.

Field The main group of riders. Also known as the pack, bunch, or peloton.

Fixed Gear The direct drive chain and cog set up in which the rider may not coast or shift gears.

Flyer A surprise attack, usually done alone.

Gap The distance between individuals or groups.

Hammering Riding all out.

Hook To move one's back wheel against the front wheel of a following bike.

Jump A quick acceleration usually developing into a sprint.

Lead-out An intentional sacrificing tactic whereby one rider sprints to give a head start to the rider on his wheel. That rider comes around the leader at an even faster speed.

Pace Line A string of riders who alternate riding at the front and sitting in.

Peloton This is the largest group of riders on the track. Also called the pack or field.

Parallel Track Markings

Blue Band or Out-of -Bounds

The wide blue band at the bottom of the track represents "out of bounds". During races riders may not ride below the blue band. (The Mellowdrome has yet to have the blue band painted).

Pole Line or Measurement Line

The inner edge of this yellow line, (black at most facilities) which runs around the entire track, is the point from which the track is measured.

Sprinter's Line

The sprinter's line, painted yellow (red at most facilities) runs parallel to the white measurement line. This area marks off the zone referred to as the sprinter's lane. In mass start events, if the lead rider is below the yellow sprinter's line, the other riders must pass above the rider who is in the sprinter's lane. During the last 200 meters of a sprint lap, the rider in the lead in the sprinter's lane must not exit the lane.

Stayer's Line or Relief Line

Midway up the track and the highest parallel line on the track is a blue line named the stayer's line. The stayer's line or relief line serves as a guide to riding zones during training or general riding sessions at the track. Cyclists riding at slow speeds stay above this blue relief line, while faster riders move to the lower half of the track.

Perpendicular Track Markings

Finish Line

Just before the first turn is a black line in the middle of a white strip. This distinct strip serves as the finish line.

200 Meter Line

Indicating 200 meters to the finish line, this white line is located in the apex of turn three.

Pursuit Finish Lines

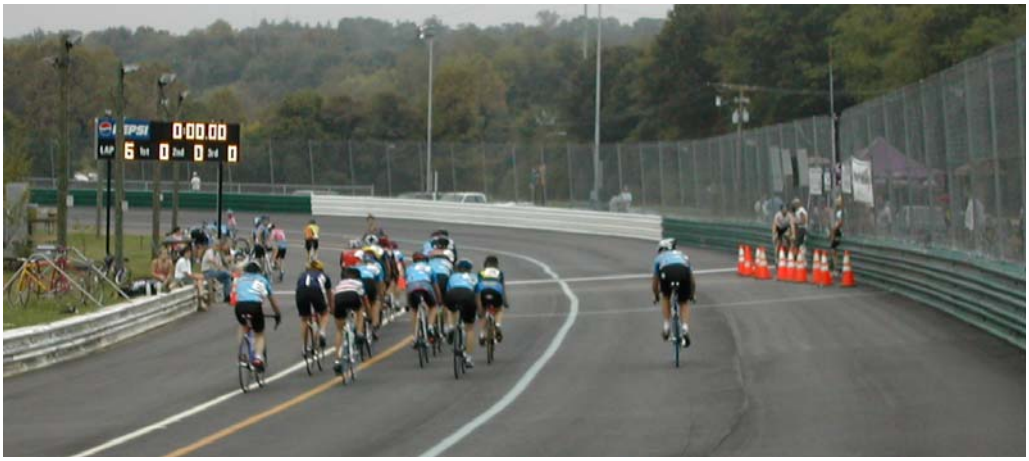
In the middle of the home and backstretch, at equal distance from each other are yellow lines that run from the inner edge of the track extending to the wall. These lines serve as the start and finish points for the pursuit events.

Kilometer Start Line

Start points for fixed distance events are marked on the front straight before the finish line.

Mellowdrome Dimensions

- One-lap Distance: 491 meters
- Apron 10 feet (varies)
- Width 21 feet (varies)
- Banking: 4-8º
- One mile = roughly 3 laps



Chapter

3

General Rider Knowledge

General Etiquette

1. Enter and exit the track on the backstretch. Use the apron to control your speed when getting off the track.

2. Yield to riders on the track as you enter the track on the backstretch and blend with the flow.

3. When exiting the track on the control your speed and yield to the other riders on the track as you go down onto the apron.

4. When you do decide to exit the track, following a gradual angle will help you control your speed. Do not change your mind once you are committed. Try not to exit the track in the middle of a turn.

5. If you hear a rider approaching from behind, don't swerve; hold your line until he/she passes.

6. The faster rider is responsible for passing safely. Clearly call out, "stick" or "stay" when overtaking a slower rider. If passing between a rider who is close to the outside wall then call out "rail" or "top" in order to execute a pass.

7. The slower you ride the higher up the track you should ride.

8. Look over your right shoulder if moving up the track and over the left shoulder if moving down the track. This glance should become a habit.

9. Do not stop at the wall during training or warm-up sessions. The only time to stop at the wall is when instructed or at the start of a race.

Pace Line Riding Etiquette

The First Rider in the Pace Line

- Maintain a steady pace. Going faster will open gaps; going too slow will bunch up the group causing dangerous overlaps. Ride at the front for one or a half lap. This is called taking a pull.

- Before swinging off, the first rider should do two things; glance over their right shoulder to check if the track is clear and flick their right elbow to alert the other riders that they are pulling off.

- Clear the lead position gradually. Move from the yellow measurement line to the white sprinter's line, then on up the track.

- Continue in a straight line up the banking, letting the bike slow, then ride near the top of the banking. Drop down onto the tail end of the pace line.

- Tip: If you wait until the last rider passes you before you head back down the track, there will be a gap to close. This will take practice.

The Second Rider in the Pace Line

- Help the first rider maintain the speed. Alert the lead rider to variations of pace. Encourage the lead rider to ride as smooth a line as possible.

- Prepare yourself to take the lead. Make sure you do not overlap wheels especially to the outside. Be careful not to follow the lead rider when he/she starts to pull off.

Other Riders in the Pace Line

- Ride as smoothly as possible to insure the rest of the paceline rides a straight line.

- Remember to look beyond the person in front of you. Stay ahead of the bike.

- If a gap develops, close it gradually. If you find yourself coming up too quickly on the next rider, roll slightly up track or to the right until it is safe to come back behind the rider you are following.

- If there is an accident, lead the riders behind you up track or to the right.

- If for some reason you can't maintain the pace, or you must leave the paceline, use your right hand to wave the paceline around you. The riders pacing behind you will pass on the right as you gradually slow down. When the group has passed you, swing up the track to continue to slow down.

The Standing Start

Standing starts are used for individual and team time trials. Either a coach or an instructor during practice and an official at competitions holds the rider. The start should be smooth and in a straight line. Remember getting up to speed takes at least one full lap of the race. The shorter the events distance the more critical a strong fast start will be.

The Standing Start should have the following characteristics:

- The stronger leg should be in the 2 o'clock position

- The cyclist's shoulders are square to the direction of travel, the head should be up, and looking ahead. Arms should be slightly bent; hands in the drop position on the bars.

- Stand up with two seconds to go, arms stiff. Begin the start as if pulling on a pair of pants.

- The rider should accelerate until a comfortable spin is achieved, transition to seated, and continue the pace until the end of the distance.

The Flying Start

A Flying Start is used for the 200-meter time trial or for flying lap timing. The 200-meter time trial is used for qualifying and seeding for match sprinting. The most common mistake in the flying 200-meter time trial is not hitting the 200-meter starting

line at full speed. The time starts when you cross the perpendicular white line on the backstretch and stops when you cross the finish line on the homestretch.

Transitioning to a Banked Track

Those riders from the Mellowdrome that have never been on a banked track will find this section particularly useful.

If you are riding a track bike for the first time, ride around the track on the apron then move onto the track to the stayer's line for a few laps to familiarize yourself with controlling the speed of the bike.

Look 100 feet or so ahead of you when riding, not directly in front of you. Stay ahead of the bike and stay relaxed.

At first, ride as straight as possible near the different colored lines of the track. This will help you get use to the banking.

If you feel unsure about riding the banked turns of the track, point your nose more towards the right side of your handlebars.

If there is an accident ahead, move up track. Remember the rider/s will slide down.

The turns are banked to assist you through the curves. Ride straight through the turns and the banking will help to turn you.

When riding a pace line, riders should be aware that diving down back into the pace line after leading is a much quicker maneuver on a banked velodrome. At the Mellowdrome you have to dive at the second to last rider in order to catch on the back of the pace line. Elsewhere you dive right after the last rider passes you.

Chapter 4

Track Events

Time Trial Events

200 Meter Time Trial

The 200-Meter Time Trial will decide whether or not you qualify to race and whom you will race against in the Match Sprints. The basic sprint format revolves around the idea that the fastest rider races the slowest rider early in the competition. This way the two fastest riders face each other in the final. For this reason, a slow 200-meter time will seed against a much faster time. On the other hand, if you do a fast 200-meter time, you will get to race a slower rider than yourself.

1000 Meter Time Trial

The 1000 Meter Time Trial is a race against the clock. Adding to the lure of the 1000 meter is that it is a one-time effort. Another fascination for the 1000 meter comes from the blending of power and speed; two ingredients when put together can produce an astounding ride. There is no qualifying round and everything must work perfectly the first time.

During the 1000 meter time trial, a cyclist concentrates on the start, speed and maintaining a low line on the track. Because of the explosive nature of this event, mental preparation is another key ingredient to a successful ride against the clock.

At regional and national level event, women are timed over the distance of 500 meters.

Olympic Sprint

The Olympic Sprint is a three lap team event with three riders. Three riders start together from a standing start. After each lap the lead rider pulls off, thus each rider pulls for one lap. The first rider completes one lap then pulls off leaving two; at the completion of the second lap the lead rider pulls off leaving one; the last rider completes the remaining lap solo. The best teams are set up to follow the following format: The first rider has a fast start (probably a sprinter), second rider is quick and

able to maintain a high speed (probably a good mass start racer with a quick start), and the third rider has strong finish (usually a kilometer or pursuit rider).

The general rule for the Olympic Sprint is to go as hard as you can. The exception is if the starting rider is much faster than either the second is or third rider is. A small gap opening between riders in the first lap is generally good to push the last two riders to close the gap. On the other hand, if the gap is too big then the last two riders will fatigue. The front rider should begin to pull up to the red line in the final turn before their last straight away. The next rider should ride under the front rider and the front rider will not pull away until the two riders are even (which should occur at the pursuit line).

4000 Meter Pursuit

Riders are paired up at opposite sides in the middle of the track. They start at the same time and "pursue" each other until one rider's wheel passes the other rider's or until the designated distance, typically 2-4K, is covered. In most cases the pursuit is run as a time trial and the fastest time wins. In larger tournaments there is a qualifying round, semi-finals, and finals over the course of two days.

4000 Meter Team Time Trial

Same as the pursuit only 4 riders comprise a team. All 4 riders start together and take turns pushing the wind at the front. The team time is based upon when the 3rd rider's front wheel crosses the finish at the end of the designated distance, typically 4K. This race looks easy, but is very difficult to coordinate for maximum team efficiency.

Match Sprints

No other track event displays as much variety, strategy and excitement as the match sprint. Enacted over two or three laps, the match sprint features two or more riders racing against each other in a game of nerves and speed. Throughout the race, the riders cautiously stalk each other looking for tactical advantages.

The starting position of the riders is determined by drawing lots. The lead rider is obligated to lead the first lap at a slow pace. After the first lap the lead rider may come to a stand still called a track stand. Since a majority of sprinters consider the lead position a disadvantage, many will attempt to reverse their role by using the track stand.

While the first part of the match sprint may seem deliberate, the conclusion is always unpredictable and exciting. As the bell rings for the final lap, the riders commit to their strategy of finesse and speed over the final 200-meter's.

The rules regarding the sprinter's lane are slightly different for match sprinting than during scratch races.

While moving for position the riders may use the entire width of the track from the measurement line to the wall. A lead rider may not force a competitor into the wall, nor may they force a competitor onto the blue band. Regardless of the 200 meter line, once the sprint opens, if the lead rider occupies the sprinters lane then that rider may not exit the lane.

Skills Needed:

- Ride at the top of the track slowly while looking over the left shoulder.
- Ride in close proximity to the other rider or riders.
- Comfort in moving up and down the track.
- Quick acceleration.
- Hold a straight line when riding fast.

The Chariot Race

A variation of match sprinting is the Chariot Race. The Chariot race is generally conducted over a shorter distance than a Match Sprint. The race is typically an all out effort and there is less tactical finesse than in a match sprint. A holder holds the rider. The race begins at the sound of a whistle. The holder is allowed to push or even throw the rider into the race and possibly the lead. At the Mellowdrome the Chariot Race is one lap in length.

Mass Start Racing

Nearly all mass-start races begin from the wall. Consequently, getting comfortable starting from the wall is very important. Points to remember when starting from the wall:

- Roll up gradually; allow your hand to slide on the railing to help you slow down.
- Try to stop at a comfortable distance behind the rider in front of you and with your pedals at 3 and 9 o'clock.
- Angle your bike slightly down track with the wheel aimed up, this will help to keep the bike from turning down track.
- When the official gives the signal to roll out for the neutral lap of the race, look behind you before rolling from the wall to make sure you won't collide with the other riders.

- Pull yourself forward by using the railing, let go, and aim down track. Remember that gravity will help you pick up speed.

The Neutral Lap

Generally the first lap of a mass start race is neutral. This neutral lap gives all the riders a chance to get off the wall. During the neutral lap, riders are to stay in tight group until the official signal the start of the race with either a whistle or gunshot.

Scratch Race

The Scratch Race is the most common and easiest track event to understand. It can be a short 5-lap race or a long 25-lap race. The organizer of the event will set the distance. The winner of the scratch race is the first rider to cross the finish line on the last lap.

Miss & Out

The Miss and Out could be considered the musical chair event of track racing. Each lap the last rider across the finish line is eliminated from the race. During this race all the action is taking place at the back of the field instead of the front. This style of event requires that the riders race from the front so as not to get caught behind a slower rider and forced to the back. The race goes until three riders are left and the last sprint determines the top three places. Sometimes a rest or neutral lap is given when the race is down to the final three riders. This will be announced at the beginning of the race.

Win & Out

This is a type of points race in which the winner of the first sprint takes first place and drops out of the race. The winner of the second sprint gets second and drops out, and so on through fourth place.

Madison

The Madison traces its beginning to the 6 Day Races in Madison Square Garden. At the turn of the century bike racing was the biggest spectator sport in the country.

Riders would pair up for these endurance events in tag team bike racing, of sorts. Today the Madison is generally run with 2 person teams in a Points Race format. One rider races for points and laps while the relief rider rolls around the track above the stayer's line (blue line) until called upon to relieve the racing rider. The strategies are similar to points racing, but the racing requires a rare combination of

speed, endurance, teamwork, and tactics, making it a racer and crowd favorite.

Unknown Distance Race

The Unknown Distance Race is basically a scratch race with a twist. The twist is that the racers don't know how many laps they will ride. The riders will try to guess when the bell will ring to signify the last lap.

Snowball Race

The Snowball Race is another points style event. This time the points grow just like a snowball as it rolls down a hill. Points are awarded to the first rider across the finish on each lap. The winner of the first lap earns one point; the winner of the second lap earns two points, and so on. Points are awarded according to the number of the laps. The rider with the most points at the end of the race is the winner.

Point a lap

This is a type of points race in which one first place point is awarded every lap.

Tempo

This is a type of points race that varies from track to track. Usually two points are awarded on every lap to the first place rider and one point to the second place rider..

Points Race

The Points Race is an event in which sprints for points are held on certain laps. The top four riders in each sprint will be awarded points in order of finish as follows: 5 points, 3 points, 2 points and 1 point. The number of points will be doubled on the final sprint. Riders may also attempt to win the race by lapping the field. This is a very risky move, but the riders who do will gain a higher ranking in the final standings than a rider who has not lapped the field but may have more points. Remember laps rule over points.

At the turn of the 20th century stationary, quarter-mile tracks, constructed from sand and gravel, were everywhere. Some areas of the country hosted more than a dozen of these outdoor tracks. During the 1920s and 1930s, six-day track racing grew into a popular form of entertainment. The indoor tracks used for these events were steep, 55 degrees, and were 150 to160 meters long. The Alkek Velodrome by comparison is 33 degrees. The bikes used then are very much like those used today.

Chapter

5

Racing at the Mellowdrome

Training Sessions

Typically Mellowdrome riders will train on Saturday mornings during the late fall, winter, and early spring. Sessions begin with two groups (a fast group and a not-so-fast group) doing a 40-lap warm-up. Pace line rules are in affect and strictly enforced by riders!

After warm-ups there is a practice session for the "event of the day." This event rotates quad-weekly with emphasis on the kilometer, pursuit, team sprint, and team pursuit. Periodically there are special days in which a certain skill (standing starts or Madison exchanges) are taught, demonstrated, and practiced.

The Mellowdrome is open at all times the park is open and riders are encouraged to train at any time.

Race Sessions

Races are held biweekly during the late spring and summer. Hosted by Hearn's Cycling & Fitness, these sessions are open to all licensed riders of the United States Cycling Federation (USCF). Three different mass start events will be held for each of two categories: A (for the upper-level track racer) and B (for the lower-level track racer). New riders will begin as a B and will be "upgraded" to an A as the promoter see fit. We do not use the USCF category system. See the next section for license upgrades.

Prizes are awarded for omnium finishes only. Upgrade points are awarded based on the omnium only. Points are award for 1st-4th places as follows: 5, 3, 2, and 1. One additional point is awarded per omnium night. For example: if you finish 3rd in the omnium during a series night you will receive 2 omnium points and 1 race point for a total of 3 upgrade points.

Upgrades

Beginning riders on the track will be categorized according to the USCF as either a 5 (men) or 4 (women). The Mellowdrome will upgrade riders from 5 to 4 (men) and from 4 to 3 (men and women). For the purposes of upgrading to a 2, the rider will have to use the guidelines in the current USCF rulebook and will have to be upgraded at another track (Dick Lane Velodrome is the closest).

The upgrade policy for the Mellowdrome is outlined below:

- To Category 4:
    - Six Saturday sessions AND
    - Four race days
    - Consideration to time spent at banked velodromes

- To Category 3:
    - Five race days AND
    - 20 points (points earned at another track may be used) AND
    - Five race days on a banked velodrome

Please refer to the current USCF rulebook on the upgrade points system.

Track Championships

As a member of the American Track Racing Association (ATRA), the Mellowdrome will host a Track Championship prior to 03 Jul 05 for the purposes of qualifying riders to the 2005 USCF Elite National Track Championships. Riders who place first through fifth (or first through third for women) in each event will qualify either in all sprint or endurance events. The top two teams from each team event will qualify as well.

Note that the Track Championships is a qualifier only for Elites. Any rider may still participate in Masters or Juniors.

Eligibility

All current USCF licensed track riders may participate in the Mellowdrome Track Championships. However, riders that qualify for Elites must be aged 17 or older and be either:

- Men Cat 1-2 or Women Cat 1-3 for sprints

- Men Cat 1-2 or Women Cat 1-3 for keirin

- Men Cat 1-2 or Women Cat 1-3 for 30/20 km points race

- Men Cat 1-2 or Women Cat 1-3 for 15/10 Km Scratch race
- Any category for other events

Note that one-day licenses are NOT acceptable for Track Championships.

Awards

USA Cycling will provide medals for the top 3 cyclists

Qualification Events

Cyclists who place high enough to qualify for the USCF Elite National Track Cycling Championships will do so in one of two areas: Sprint or Endurance.

Cyclists may enter to ride any or all of the events at Nationals in their qualified area.

Prior to entry, cyclists should check that they meet all other requirements for entry into championship events (proof of citizenship, category restrictions, etc.).

Sprint Events

Match Sprint; Time Trial (500m or 1km); Keirin, Team Sprint

Endurance Events

Ind. Pursuit, Team Pursuit, Scratch, Points Race, and Madison

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