

2022 Soapbox Derby

Cubmobile Racing Competition for Cub Scouts and Webelos



Saturday, August 20, 2022
Pleasant Hill High School
1 Rooster Way, Pleasant Hill, MO 64080



MISSION STATEMENT

Provide an annual cub scouting event that encourages creativity, camaraderie, leadership, and activity while incorporating community Scouting culture. Motivate bridging the gap in troop-to-pack relationships thru teamwork. Encourage recruitment for youth in the Heart of America Council (HOAC) community as well as build a foundation of adult volunteers to lead as role models for the future.

RULE BOOK

Please Note:

**Copy this and give to each Team Member. Read it completely!
Cubmobiles must pass inspection prior to competition racing on race day.
Be sure to follow ALL SPECS.
Inspection/Check in begins at 8:00 am on race day!**

ENTRY FORMS AND FEES ARE DUE BY June 1, 2022.

Entries that arrive late, after June 1, 2022 will cost an extra fee of \$5.00/cubmobile.

Please make checks payable to "Pack 300"

General Instructions:

1. Do not start building your cubmobile until your entry form has been accepted.
2. Any cubmobile may be sponsored. Sponsorship of a cubmobile is the responsibility of the cubmobile owner(s). Any cubmobile that has been sponsored must have a decal or paint scheme signifying the sponsor.

3. All participating **team members** must be chartered cub scouts, webelos, scouts, or adult volunteers. All participating **drivers** must be cub scouts or webelos.
4. Drivers must be at least age 7 prior to test driving any cubmobile and driving on racing day. Those cub scouts ages 5 and 6 can actively participate on team, however cannot drive a cubmobile.
***** See page 11 for details for drivers ages 5 and 6 Big Wheel Race on race day *****
5. If driver has special health concerns, please let staff know at time of registration AND upon check-in on race day.
6. Minimum number team members per cubmobile is 1 team member. Maximum number team members per cubmobile is 5 team members. If team consists of more than 1 member than team must select 1 driver for the cubmobile on race day. Any 1 driver can only drive any 1 cubmobile on race day. The driver is assigned to the cubmobile at time of inspection.
7. Each team member, including driver of cubmobile, must be wearing matching custom shirts.
***** See page 11 for details regarding attire on race day *****
8. Each pack participating in race will be required to provide at least one volunteer for Recruitment tent, Volunteer to help with event, or both.
***** See page 12 for details for Recruitment Tent and Event Volunteers *****
9. While constructing cubmobiles YPT guidelines must be maintained, including den chiefs and 2-deep leadership. There must be adult supervisors present while constructing all team attire and the cubmobile. Adult supervisors can be den leaders, parents, etc. The number of adult supervisors' present must be 2 cub scouts per 1 adult supervisor OR equal the number of cub scouts present at time of construction.
10. On race day, if a cubmobile fails to pass inspection, the Race Grand Marshall has the authority to reject and eliminate from the race any vehicle which he/she believes is unsafe, or does not conform to the specifications. Modifications are allowed at time of check-in, however after cubmobile passes initial inspection no further modifications can be made.
SAFETY CONCERN: Weight CAN NOT be ADDED to cubmobile on race day, AT ANY TIME. All weight included on cubmobile must be assembled and secured in place upon arrival to check-in on race day. Weight can be removed only during check-in and inspection process, BUT NOT ADDED. If race officials see such conduct of adding weight, cubmobile will be disqualified.

11. At time of inspection each cubmobile will be assigned to **modified** OR **custom** class. This will designate which class cubmobile is racing in for duration of race day.
12. The Soapbox Derby Planning Committee on site race day will serve as the Race Officials.
13. In all cases where a decision is required, the Race Official's majority vote will be required. If this does not resolve any issue, then the Race Grand Marshall will be asked for a final decision. There will be Race Officials along the race course to make sure that participants stay within their lanes and to ensure that fair racing is maintained.
14. There will be two "Starting Officials" to ensure fair starts.
15. There will be two 'Race Officials' at the finish line.
16. Participants may be disqualified for unsportsmanlike behavior of driver or pit crew.
17. Protective head gear must be worn during each race. We strongly recommend a snowmobile, bicycle, or motorcycle helmet.
18. Rules of the race will be available at the Check-In tent on race day.
19. Start ramps will be used: you must build your cubmobile so that it conforms to the minimum and maximum dimensions.
20. Each team must have a volunteer adult capable of holding cubmobile at top of start ramps and releasing, letting go, at appropriate time. The appropriate time is upon hearing "Go!" from Starting Officials as they call "On your mark, get set, go!"
21. Your cubmobile will be issued an officially approved sticker after it has passed inspection. No alterations to your cubmobile will be allowed after the sticker is issued. Please keep affixed to cubmobile until all racing has concluded.
22. It is expected that all drivers and people in their pit crew will act in a sportsmanlike manner at all times. Anyone who does not uphold the requests of the Race Officials may be expelled from the race.
23. Each class will have 1st, 2nd, and 3rd place awarded at end of races on race day.
24. Each race will include 2-3 racers, one in each lane of the track. Lanes will be designated by hay bales and/or cones positioned on track. Time will be recorded after each heat for each individual cubmobile. Elimination will be determined pinewood derby style - as the races progress, cubmobiles are eliminated from the competition, narrowing the field down to the fastest cars.
25. If any one cubmobile impedes another cubmobile's racing lane by crossing into divider lane hay bales, obstructing the racing lane(s), 1st time - there will be a one time re-race for both of the cubmobiles involved. If any one cubmobile impedes another racing lane a 2nd time - the impeding cubmobile will be disqualified. The affected racer in opposing lane will get to re-race their cubmobile due to impediment.

26. If your cubmobile needs repair during the races, and you are called upon to race, you will be given one run's grace or about ten minutes, but you must be ready when your number is called for a second time, or be eliminated. (This action must be taken so as to not slow the race schedule.)

NOTE: Once cubmobile has passed inspection, repairs are allowed only if damage to cubmobile occurs during a race AND after repairs are made the cubmobile must pass re-inspection by a Race Official prior to racing again in the next heat.

Cubmobile Specs:

To maintain fairness and family fun we ONLY permit custom or modified classes of cubmobiles. Professional kit race cars, NOT modified, are NOT allowed.

- **Modified** - cubmobile has been changed in some form or fashion from a kit derby car to meet qualifications of this cub scout Spirit Trail District Soapbox Derby
- **Custom** - cubmobile has been constructed entirely custom, home-built from scratch part-by-part

In order to ensure competitive fairness and safety, each cubmobile, regardless of class must conform to the following specifications.

1. The total receipted value of the Little Rascal class cubmobile (including the wheels) cannot exceed \$300.00 Receipts will be required for all purchases or donations put towards, or for the construction, of the cubmobile.
2. The Little Rascal class cubmobile length will be no longer than 80" (inches).
3. All Little Rascal class cubmobile must have 4 wheels.
4. Each Little Rascal class cubmobile must be gravity powered. No motors or engines.
5. A minimum ground clearance, cubmobile body to the ground, of 3" must be met when the driver is seated in the cubmobile
6. Minimum wheelbase (center of the front wheel to the center of the rear wheels) of **48"** (inches) is required.
7. Front and rear axles must be the same width with the distance between the wheels a minimum of **30"** to a maximum of no more than **36"**. No exceptions.
8. The cubmobile must have an adequate brake system. Brake system must be capable of bringing cubmobile to a complete stop within 20 feet.
 - a. Skid pad on the wheels is a very basic, yet very effective braking method. In this method, you set up a pad or brake shoe that rubs against the wheels to stop the car.
 - b. A skid pad on the ground is similar to the first option, but instead of a pad contacting the wheels, it contacts the ground. This method is a little more complex to construct and probably less effective than the pad on the wheels method.
 - c. Caliper brakes on the wheels are like your basic bicycle brakes. This method works great although the construction needs to be fairly concise for the brakes to be effective.

9. A steering apparatus must be included on cubmobile.
 - a. Simple pivot steering is the most basic and common steering system. Basically, the front axle is a solid piece that rotates about a single pivot in the center.
 - b. Four bar linkage is like a steering mechanism that you might find in your automobile. It is more complex and harder to construct and thus it is seldom recommended.

Whatever method of steering you use it's not wise to limit it to the range of your car. The derby will be run on a straight course so that there will be little need for sharp turns. Please do not design your car to turn on a dime, it is not safe and may cause your car to flip.

10. The body of the cubmobile must be made of wood, fiberglass or plastic ONLY (NO METAL in excess of nails, bolts, screws and the like used to attach parts together).
11. The body of cubmobile must not enclose the cockpit seating area completely and must permit free use of the hands, arms, head, and clear line of sight.
12. The driver's head cannot be confined by the body of cubmobile or any individual part of the cubmobile.
13. Each entrant/driver must assist in building his/her own cubmobile.
14. No sharp edges are permitted on the exterior or interior of the cubmobile. No protruding objects are permitted on the interior of the cubmobile.
15. If extra weight(s) is added to cubmobile, it must be secured in place and no more than 1/2 the driver's weight. The extra weight(s) cannot obstruct the driver's vision while seated in cubmobile.

Safety and Qualifications:

Final Safety **Inspection** and qualification will be race day at check-in tent.

The Cubmobile Inspector will check the following:

The driver of each cubmobile must be in attendance at the safety inspection and qualification where we confirm each driver's:

1. Driver's proper fitting helmet.
2. Driver's age is at least 7 years old
3. Weight of driver combined with cubmobile must not exceed 250 lbs.
4. Cubmobile brakes (a test of the brakes will be performed during inspection)
5. Cubmobile strength of the frame
6. Cubmobile fastening and securing of the axels and wheels
7. Cubmobile steering assembly
8. Cubmobile no sharp protruding edges or objects
9. NO ALTERATIONS to wheels or bearings will be allowed on race day, including excess use of oil or lubricant
10. Permission Slip for driver AND an Entry Form for driver are on file and signed

The Race:

The course will be in Pleasant Hill High School parking lot, Pleasant Hill, Missouri.

You are advised to be at the staging area with your cubmobile by 8:00 am (Saturday, August 20, 2022) for final check-in and inspection.

All cubmobiles will be started from a ramp. False starts will be called only if the starting judges feel an advantage from the start was made. Each cubmobile will have at least two runs, each time running in a different lane. All cubmobiles will race 1st run, prior to beginning of 2nd runs.

The order of racing shall be determined by a draw. Drivers and cubmobiles must be ready to race when driver's name are drawn for 1st runs.

All cubmobiles will be returned after each race by a truck/ATV with attached trailer to the pit area.

Please bring your own blocks, or wheel chocks, for when cubmobile is in the pit, not racing.

Any further instructions will be made on race day at the drivers' meeting prior to race time.

The race will begin at 9:00 am.....don't be late!

Race Officials

Local race officials include inspector, judges, and Race Grand Marshall and those persons appointed to assist in the responsibilities of the local race.

It is the responsibility of the local race officials to:

1. Enforce all rules outlined in the most current edition of the rule book.
2. Administer all paperwork pertaining to the local race in a timely manner.
3. Manage and control the conduct on all matters pertaining to the interpretation and enforcement of the rules.
4. Render final decisions on all matters pertaining to the interpretation and enforcement of the rules.
5. Render final decisions on all matters pertaining to the determination of winners.
6. Assess safety concerns to participants and/or spectators before, during and after the local race.
7. Remove him or herself from any decision where there is an apparent conflict of interest and the decision must be assigned to another local race official.

A Final Note Regarding Changes to Cubmobiles:

Absolutely no changes may be made to any cubmobile once it has been inspected and received an approval sticker.

Anyone found making changes to his/her cubmobile during the course of the race, **without prior approval from judges or Race Grand Marshall**, will be automatically disqualified and eliminated from the remainder of the race.

This shall include but not be limited to the following:

- a. Removal of or addition to weight of the cubmobile – ex. Sandbagging
- b. Removal of or modification to body panels or structure of cubmobile
- c. Changing to a second set of wheels.
- d. Excess oil or lubricants are not allowed in the pits during the race without Race Grand Marshal approval. Wheels must not be cleaned once the race has begun without the Race Grand Marshall's approval.

In the event of damage to a cubmobile, for example where the driver hits a hay bale, repairs can be made to the extent that as little work as necessary is done to allow the cubmobile to continue racing, and it must pass safety re-inspection before being allowed to continue.

***** DRIVE AT YOUR OWN RISK *****

Conduct:

We insist all drivers and pit crew, including parents and spectators, act in a sportsmanlike manner at all times.

Race Officials are volunteers who will attempt to make sure that all cubmobiles are running according to regulation and that all races are run in a fair manner.

Race Officials have the right to disqualify driver, cubmobile, or pit crew at any time for inappropriate behavior.

Race Officials have the right to remove any spectator from the race

Race Officials decisions are final.

Driver Attire Requirements:

Shirt, shorts/pants, and closed toe shoes must be worn for the duration of the event. No skirts or baggy clothing. Helmet is required. Additional safety attire is optional and at your own discretion.

Shirt must have displayed in some fashion, cub scout pack # and BSA. Get creative! Design a custom shirt to display your team spirit!

Hat can be worn while not in a cubmobile, however as soon as enter cubmobile must be removed and placed outside of the cubmobile.

Team Attire Requirements:

Shirt, shorts/pants, and closed toe shoes must be worn for the duration of the event. No skirts or baggy clothing.

Shirt must match that of the racer/driver.



BIG WHEEL RACE RULE BOOK

1. Ages 5 and 6 years old ONLY.
2. Bring your own Big Wheel to race on race day.
3. Each driver that plans to race in Big Wheel Race must turn in an entry form, permission slip, and health form upon arrival on race day. Entry forms will be accepted prior to race day as well.
4. No ramps will be used at start gate of Big Wheel Race.
5. Race will be single elimination where first to cross finish line in each heat will have a final race off.

Recruitment Tent and Event Volunteers to Help with Race(s)

The planning committee has designed race day as a zero-budget event. What's put in as a group effort is what we'll get out! This means volunteer staff is necessary for success!

Each participating pack that has a driver racing is to sign-up and plan for at least 1 volunteer adult on race day to staff the recruitment tent and/or help with race day in general. This is to keep registration fees low and provide for more adult volunteer participation.

There can be more than 1 volunteer from each pack AND supporting members of the pack can sign up to be volunteers as well. The only requirement for volunteers is that they must have Adult Application completed and proof of YPT certificate on file.

Recruitment Tent

Tent will have a table with sign up info for cub scouts and a list of contacts for each district's commissioner. Spectators can visit tent and gather more info about scouting and sign up to be a cub scout in their local district! Contact info provided will be arranged in a school district/county to HOAC District format. Spectators can then take the info and contact gathered to find out which pack they would be in and officially sign up. Youth and Adult applications will be available at tent as well.

Volunteer staff will assist in providing info and a friendly face at tent. Volunteer staff will assist spectators entering tent find which HOAC district they are in and share contact info with district commissioner for specified district. Volunteer staff will also promote Scouting by sharing their own experiences in Scouting as appropriate.

Event Volunteers to Help with Race(s)

Adult volunteers are needed to help Race Officials carry out normal race day activities. Adult volunteer will be utilized in any number of capacities, from directing cars for parking at entrance of event to helping at start/end gates.

Remember the Sportsmanship Cup...



What Is Sportsmanship?

Sportsmanship is defined as:

- Playing fair
- Following the rules of the race
- Respecting the judgement of judges and Race Grand Marshall
- Treating opponents with respect

Some people define good sportsmanship as the “golden rule” of sports – in other words, treating the people you play with and against as you’d like to be treated yourself. You demonstrate good sportsmanship when you show respect for yourself, your teammates, and your opponents, for the teams on both sides, and for the Race Grand Marshal, judges, and other officials.

But sportsmanship isn’t just reserved for the people on the field. Cheerleaders, fans, and parents also need to be aware of how they behave during competition. Sportsmanship is a style and an attitude, and it can have a positive influence on everyone around you.

Make sure your sportsmanship cup is full.

**REMEMBER MOST
IMPORTANTLY.... HAVE FUN!!!**