



THE GREATEST SPECTACLE IN CUB SCOUT RACING!

2018 Boone Trails District Derby

RULES OF THE ROAD

1. The race is open to all Tigers, Wolves, Bears, Webelos, and Arrow of Light Scouts, whose primary registration is within the Boone Trails District.
2. Scouts must be present for registration of their cars, during the racing of their cars and final race. Scouts should be in **Uniform** if at all possible.
3. Each Cub Scout is allowed to enter one (1) car per his years in the Cub Scout program with a maximum of five (5) cars. Cubs are allowed to re-enter their car one time after elimination. More re-entries may be allowed dependent upon the number of participants.
4. After the car has been assigned a number, no one will be allowed to alter the car until after it has been eliminated or until the final race has been completed.
5. Only race officials will be permitted into the racetrack area. **NO CUB SCOUTS ARE ALLOWED IN THE TRACK OR PIT AREA AT ANY TIME EXCEPT AS DIRECTED BY THE TRACKMASTER.**
6. The cars will be electronically timed.
7. Cars will be grouped in a **heat**. A heat is a group of up to 12 cars. Each car will run at least once on each lane of the track. The slowest race time will be discarded and the car with the resulting fastest cumulative heat time on the official timer shall be the winner of the heat.
8. The winner of each heat will advance to the Grand Final Race and compete for the big trophies. Once the winner of the heat is determined, the winner must decide immediately if he wishes to leave his car in the finals or withdrawal the car to try to get a better time or compete with a different car in another heat. If a car is withdrawn, the second place finisher of that heat will advance to the finals. Once a scout has a car in the finals, he can no longer race competitively in additional heats.
9. Trophies will be awarded to the winner of each heat and the first through sixth places of the Grand Final Race only.
10. A racing fee of \$3.00 per car per heat is required. Each car will race at least once in each lane per heat.
11. Any parts coming off of a car and interfering with the race will cause the offending car to be disqualified.

INSPECTION AND DISPUTES

1. Each car must pass inspection by the official inspection team before it may compete. The inspection team has the right to disqualify those cars that do not meet these rules. Car owners will be informed of the violations and given an opportunity to modify the car to meet these rules.
2. Any participant (including the parent of the participant) has the right to appeal to the race committee for an interpretation of these rules. The race committee, by majority vote, will be the final judge of these rules. In case of a tied vote, the decision of the race committee chairperson will be final.
3. Ungentlemanly or unsportsmanlike conduct by any participant or member of the audience will be grounds for expulsion from the competition and/or the race area.

CAR SPECIFICATIONS

1. LENGTH, WIDTH, CLEARANCE & WHEEL LOCATION

- a. Maximum overall width (including wheels and axles) shall not exceed 2 $\frac{3}{4}$ inches.
- b. Minimum width between wheels shall be 1 $\frac{3}{4}$ inches so the car will fit over the center guide strip.
- c. Minimum clearance between the bottom of the car and track shall be $\frac{3}{8}$ inches so the car will clear the center guide strip.
- d. Maximum length shall not exceed 7 inches and the car must fit underneath the timer.
- e. **The wheelbase** (distance between the front and rear axles) **may not be changed or altered** -- precut slots in block must be used as the axle base (precut slots may be squared if needed).

Given that the blocks are mass-produced and there is some natural variability in the wood, the following measurements account for that variability.

- i. The maximum allowable distance from the front of the car to rear axle is 6 $\frac{1}{16}$ inches.
 - ii. The standard allowable measurement from slot to slot is $4 \frac{3}{8} \pm \frac{1}{8}$ inches
- f. No part of the car can protrude in front of the starting peg. The nose of the car should not come to a point and should be at least approximately $\frac{1}{2}$ " wide to rest on the starting peg and to trip the finish timer.

2. WEIGHT & APPEARANCE

- a. Weight shall not exceed 5.00 ounces (141.75 grams). The readings of the official race scale will be considered final. The car may be hollowed out and built up to the maximum weight by the addition of wood or metal only, provided it is built into the body and/or firmly affixed to it. Weights cannot be taped to the car. No loose or moving materials of any kind, including mercury, are permitted in or on the car.
- b. Details such as steering wheel, driver, spoiler, decals, painting, interior details, etc., are permissible as long as these details do not cause the car to exceed the maximum length, width, and weight specifications.

3. WHEELS & AXLES

- a. Only official Scout Grand Prix wheels and axles can be used. Axles may be polished, but may not be grooved. Axle diameter may not be decreased.
- b. Wheels may be lightly sanded to remove mold imperfections and flashings. This light sanding is the only wheel modification allowed. **NO** material may be removed from the wheel, this includes removal of the step from either end of the wheel bore, or outer hub face, or removing material from the wall of the wheel for "balancing". Beveling, tapering, sanding, wafering, rounding, lathe truing, reducing diameter, narrowing, thinning, etc., is prohibited. **NOTE: ILLEGAL WHEELS, PURCHASED OR MODIFIED, ARE THE #1 CAUSE FOR DISQUALIFICATION.**

For clarification:

- i. Wheel diameter may not be reduced below 1.170 inches
- ii. Wheel width may not be reduced beyond 0.360 inches

- c. Wheel bearings, washers or bushings are prohibited and the car shall not ride on any type of springs.
- d. The car must be free-wheeling with no starting device or other propulsion.
- e. Distance between front and rear axles must be maintained at $4 \frac{3}{8} \pm \frac{1}{8}$ inches spacing (See 1.e.ii).
- f. The car must have four wheels, free spinning on axles, with axles installed from the side of the car in the precut slots.

- g. Only three wheels must contact the track, whether intentional or accidental, and it is not required that the entire wheel surface contact the track or be “flat” on the track.
- h. Axles may be bent or angled in the slot to adjust steering, angle a wheel or to raise a wheel from touching, however, the axles must be in the slot.
- i. The axles, including the tip, must be visible to the inspector. Any glue or epoxy in the slot must be transparent. If the axles cannot be seen, the car may be disqualified or be required to be disassembled.

4. LUBRICATION

- a. Only dry lubricants, such as powdered graphite, may be used. Krytox, XOil, Nyoil, and similar liquid lubricants are NOT allowed. Car must have visible evidence of dry lubricant application. Regular oils or silicone sprays may soften the plastic wheel or damage the track and are prohibited.
- b. Powdered graphite will be permitted only in the Pit Stop Area inside the derby location.

Cars may be lubricated in the Pit Stop Area before inspection. No further lubrication will be permitted.`

Frequently Asked Questions

- **Who can enter?**
 - The race is open to all Tigers, Wolves, Bears, Webelos, and Arrow of Light Scouts, whose primary registration is within the Boone Trails District.
- **Do I need to win my Unit’s Derby to participate?**
 - No, placing/winning in your own Unit’s Derby is not required.
- **How many cars can I enter?**
 - Each Cub Scout is allowed to enter one (1) car per his years in the Cub Scout program with a maximum of five (5) cars.
- **Can I enter my car more than once to try to get to finals?**
 - Scouts are allowed to re-enter their car one time after elimination. More re-entries may be allowed dependent upon the number of participants.
- **How much is it?**
 - The cost is \$3 per car per heat.
- **What do I wear?**
 - Scouts should wear their **FULL FIELD UNIFORM** for the event.
- **What awards are given out?**
 - The winner of each heat (maximum of 12) will receive a trophy. The top 6 overall finishers in the finals will receive a trophy.
- **If two of my cars make it to finals, what do I do?**
 - You can only advance one car to finals. If you win a heat, you must decide immediately if you wish to leave your car in the finals or withdrawal it to try to get a better time or compete with a different car in another heat. If a car is withdrawn, the second place finisher of that heat will advance to the finals.