

# Pack 363 Pinewood Derby Race

## 2009

The Pinewood Derby is open to all registered Pack 363 Scouts. The entrant is to have the satisfaction of building his own car from materials in the official BSA Pinewood Derby Grand Prix kit. Guidance and minimal assistance should be given. Because it is difficult to establish how much help was given, a separate "Old Timers" (adult) and "Sibling" Pinewood Derby competition will be held. *All* cars must pass inspection to qualify to race. A concession will be available to purchase food and refreshments. Official BSA Pinewood Derby rules will be used for car construction and specifications. Race operations will conform to BSA rules, where applicable, and rules established by the Pack Pinewood Derby Committee. It is the responsibility of all race participants to be familiar with the rules. While all racers strive to be winners, not everyone will win. The ultimate goal is for all Cub Scouts to "Do Their Best" and to have fun.

### SCHEDULE OF EVENTS\*

**SATURDAY , March 28<sup>th</sup>, 2009**

RANK	REGISTRATION	HEATS
TIGERS	8:45 a.m.	9:00 a.m.
WOLVES	9:45 a.m.	10:00 a.m.
BEARS	10:45 a.m.	11:00 a.m.
WEBELOS	11:45 p.m.	12:00 p.m.
OVERALL	12:45 p.m.	1:00 p.m.
SIBLINGS	1:45 p.m.	2:00 p.m.
"OLD-TIMERS"	2:45 p.m.	3:00 p.m.

\* Be on time for registration. Race times may vary, depending on number of racers.

### RACE OPERATIONS

- 1) The race will be scored using commercial derby software. A point system will be used for determining finalists. Depending on the number of racers, elimination thresholds will be set so that even eliminated racers will have raced multiple heats (unlike the traditional "double elimination" method, in which some racers may only race 2 times before being eliminated.)
- 2) Scouts and cars will be assigned a single race number used for all heats.
- 3) The car whose nose is over the finish line first is the winner. An electronic finish line will determine place order 1-2-3-4. In the rare case of a tie, the heat will be run again with all cars until a tie is broken. The electronic timer is accurate to .001 second and will be the sole method of determining place finishes. The timer will assign a tie to any finishes within .002 second.

- 4) If any car leaves the track, runs out of its lane, interferes with another car, loses an axle, etc., the heat will be rerun with all cars. If the same car gets into trouble on the second run, the contestant is disqualified and automatically loses the heat. If, on the second run, another car is interfered with, the heat will be run a third time without the disqualified car. (BSA rules)
- 5) All cars must have been constructed during the current racing year. Previously raced cars are prohibited.
- 6) If a car becomes damaged during a race, a five minute repair period will be allowed. If the car can't be repaired in five minutes, it will be disqualified. Lubrication or modification (weight shifting, adjustment, etc.) **are not** repairs, and will not be allowed during the race.
- 7) Division (Tigers, Wolves, Bears, Webelos) will be determined first. The first four final places from each division will compete in the Pack overall championship finals.
- 8) The first four winners from each Division will qualify for the District Pinewood Derby to be held at the Scout Expo (tentatively Mardi Gras world for 2009. Date: TBD). Cars qualifying for the District Pinewood Derby will not be returned to racers until after the District Derby.

## **RACER / AUDIENCE CONDUCT**

- 1) All racers must remain clear of the track until their number is called for a heat. Racers in the heat will take seats at the finish line end of the track. Racers qualifying for further races will return their car to the starter after each heat.
- 2) To protect race equipment and cars, only race officials will set cars and operate the starting gate.
- 3) Under no circumstances will racers step or jump over the track at any time. Repeat violations will result in racers being restricted to outside of the designated racer zone. Enthusiasm is expected and encouraged, but the investment of the Pack must also be protected.
- 4) Adults must demonstrate proper positive role modeling at all times.
- 5) To avoid damaging cars, they shall not be run on the floor or tables prior to the Derby.
- 6) While leaders are involved in race operations, adult partners must make sure their boys follow rules of conduct at all times.
- 7) Racers **MUST** be present to race. Cars will **NOT** be raced without racer present. The only exception is for medical **EMERGENCY**.

## **REGISTRATION**

- 1) A 15-minute grace period will be granted following initial registration to allow registers time to modify cars measuring or weighing **OVER** the maximum allowances.
- 2) An official scale will be available for registration.
- 3) After the car has been registered and accepted by Derby officials, the Cub Scout WILL NOT be allowed to handle the car until after the race.
- 4) **Participants in the "Old-Timers" and "Siblings" divisions since they are not registered scouts will be charged \$5 to cover the price of the trophies.**
- 5) Participants to the "Overall" division will consist of the first four winners of each rank division. "Old-Timers" and "Siblings" are not eligible to participate. These winners must be present to Participate in the "Overall" division race. To this end, the cars of the first four racers in each rank Division will not be returned to the owner until the race of the "Overall" division has concluded. If a qualifying racer is not present at the beginning of the "Overall" race, the next racer (ex. 5th place, etc) may be asked to participate instead to fill the available opening.

## AWARDS

- 1) All registered Pack members racing will earn a Pinewood Derby patch, to be distributed maybe at a later date.
- 2) Trophies will be awarded for First, Second, Third, and Fourth place in each division for Tigers, Wolves, Bears, and Webelos.
- 3) Trophies will be award to First, Second, Third, and Fourth place Overall Derby winners.
- 4) First, Second, Third and Fourth place awards will be presented in the "Old Timers" and "Siblings" divisions.
- 5) The award ceremony for each division will take place immediately following the end of the divisional race.
- 6) Trophies will be given to cars judged winners in the following categories: "Most Beautiful"; "Akela's Choice" (Best Scouting theme); "Most Creative"; and "Most Unusual". In addition, meritorious awards will be given to runner-ups in each of these design categories.

## LENGTH, WIDTH, AND CLEARANCE

- 1) Maximum length of the car shall not exceed 7 inches, including any attachments or extensions.
- 2) Maximum overall width (including wheels and axles) shall not exceed 2-3/4 -inches.
- 3) Minimum width between wheels shall be 1-3/4- inches, so the car will clear the track center guide strip.
- 4) Minimum clearance between the bottom of the car, including any attachments (weights, etc.) shall be 3/8-inch so the car will vertically clear the center guide strip.
- 5) There is no BSA maximum height; however, all cars must be able to pass under the electronic finish timer (approx 5 inches).
- 6) The wheel base (distance between front and rear axles) may be changed.

## WEIGHT & APPEARANCE

- 1) Weight shall not exceed 5.0 ounces. The readings of the official scale are final. Cars may be decreased / increased in weight by hollowing out or building up with **wood or metal only**, provided it is securely built into or affixed to the car body. **No loose materials** (including lead shot or other weights) of any kind are permitted on or in the car.
- 2) Mercury shall not be used for adding weight, due to health hazards.
- 3) Details and attachments, such as steering wheels, driver, spoiler, decals, painting and interior details are permissible, as long as all details do not exceed the maximum length, width, and weight specifications. All cars must be able to pass under the electronic finish timer.
- 4) Cars with wet or tacky paint or uncured/wet glue will not be accepted.
- 5) Shifting, movable, moving, loose, or counter weights are prohibited.

## WHEELS & AXLES

- 1) Only the official BSA Pinewood Derby Grand Prix wheels and axles may be used. One-piece axles and non-BSA kit wheels are prohibited. Wheels may be "trued" and surface imperfections removed, but treads must remain flat. The following wheel modifications are prohibited:
  - a) Wheel bearings, washers, or bushings are prohibited.
  - b) The car shall not ride on any type of springs or suspension.
  - c) The car must be freewheeling with no starting device or any type of propulsion.
  - d) Wheel surfaces may not be rounded, angled, or tapered in any fashion.

## LUBRICATION

- 1) Only **dry** graphite lubricants may be used. Regular oils, silicone sprays, graphite or regular grease, or liquid lubricants of any type are **strictly prohibited**.
- 2) Cars may be lubricated before inspection. No further lubrication will be permitted at any time during the Derby (including between heats/finals).

The Pack has invested several hundred dollars in the race track and equipment. For the protection of the equipment and cars and fairness of the Derby, please do not violate or attempt to circumvent any of the above rules. Any violations will result in disqualification.

"A Scout is Trustworthy".