RACE INFORMATION AND RULES

SUNDAY, JUNE 25, 2017
11:00 AM
WESTMORELAND PARK
CASTING POND

REGISTER ONLINE BY JUNE 21st
http://royalrosarians.com/Page/milk-carton-boat-race
The Royal Rosarians’ Milk Carton Boat Race offers a memorable day for participants and spectators alike. Children and adults race and show off their handmade boats that float only by means of recycled milk cartons and jugs. Creatively-crafted watercraft will compete in nine classes. Join us for a Sunday filled with family-friendly entertainment and some spirited competition.

The People’s Choice Award
All classes of racing boats compete for The People’s Choice Award. This award is given to a boat that is the crowd favorite.

Artistry or Velocity - Show Boat Parade
It’s a chance to test the laws of buoyancy atop a pile of milk cartons, but also an opportunity to launch a piece of personality on the pond. Build a boat that’s creative or imaginative or one that’s sleek and slim for racing.

MILK CARTON BOAT CATEGORIES

Racing Classes

- Child: (ages 7-12) Single Rider
- Child: (ages 7-12) Multi Riders (2-4 riders)
- Child: (ages 7-12) Multi Riders (5+ riders)
- Adult: (ages 13+) Single Rider
- Adult: (ages 13+) Multi Riders (2-4 riders)
- Adult: (ages 13+) Multi Riders (5+ riders)
- Mixed Ages: (2-4 riders)
- Mixed Ages: (5+ riders)
- All Ages: Mechanical Advantage

The Show Boat Parade

2017 SCHEDULE OF EVENTS (Approximate)

<table>
<thead>
<tr>
<th>Time</th>
<th>Event</th>
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</thead>
<tbody>
<tr>
<td>9:30 - 10:30 AM</td>
<td>Check In and Onsite Boat Registration</td>
</tr>
<tr>
<td>11:00 AM</td>
<td>Opening Ceremony</td>
</tr>
<tr>
<td>11:20 AM</td>
<td>Adult Race Preliminary Heats</td>
</tr>
<tr>
<td></td>
<td>Child Race Preliminary Heats</td>
</tr>
<tr>
<td></td>
<td>Adult Multi-riders Preliminary Heats</td>
</tr>
<tr>
<td></td>
<td>Child Multi-riders Preliminary Heats</td>
</tr>
<tr>
<td></td>
<td>Mixed age-riders Preliminary Heats</td>
</tr>
<tr>
<td>1:15 PM</td>
<td>Awards Ceremony</td>
</tr>
</tbody>
</table>

ALL TIMES SUBJECT TO CHANGE

REGISTER ONLINE BY JUNE 21st

http://royalrosarians.com/Page/milk-carton-boat-race
RULES AND SAFETY REQUIREMENTS
Racers must be a minimum of 7 years old

1. Each racer must have his or her own US Coast Guard approved life preserver. Sharing of vests among same heats will not be allowed.

2. Individual boats can only race once per racing class. If a family has multiple entries in a class they must have a separate boat for each entry.

3. Boats must be made by the participant with flotation dependent upon milk cartons/jugs (no soy, almond or juice containers). Waxing, shellacking, sealing or otherwise covering hulls with materials such as plastic, lamination or metal is not allowed. Oars with pivot or oarlock are allowed.

4. Boats in racing classes shall be no longer than 10 feet. Any boat longer than 10 feet will be moved into the show boat classification.

5. No engines or motors of any kind are allowed. Propulsion power or any other kind of stored energy is also prohibited. All race boats can only be powered by means of oars or paddles (human power only). Any race vessel powered using a mechanical advantage (such as a propeller or gears) can only be raced during the Mechanical Advantage Competition. Any propeller or mechanical device must be covered by a protective enclosure.

6. Boats must keep the same design for all events. Additions or changes to boats during or between races will result in disqualification.

7. Nothing is to be thrown or intentionally released from boats while in the water. Violation results in immediate disqualification.

8. Each boat and participant will be inspected prior to the race for compliance with the Rules and Safety Requirements outlined here. Any boat or participant not meeting safety construction or apparel requirements will be disqualified.

9. Race contestants will begin the race in their boats at the starting line. Any boat crossing the starting line early may be disqualified. Judges may disqualify boats impeding the progress of others. All boats should attempt to stay in their assigned lanes.

10. Decisions of the race officials are final.

11. The Milk Carton Boat Race reserves the right to cancel any race due to lack of participants. Participants whose race gets cancelled will be placed in the next best race division.

12. Boats are only allowed in the casting pond during designated times. Any violation will result in disqualification. Trial runs may NOT be done at the casting pond on Race Day.

13. Participants are responsible for the transport of their vessels to and from Westmoreland Park on race day. No cars are allowed on the grass and may not deliver boats to the casting pond. (Consider bringing a wheelbarrow or cart to help move your boat.)

14. Participants must be present to win awards.

15. Milk cartons/jugs must be visible on the exterior of the boat.

16. Boats must be removed from the Park upon completion of race(s). If you choose to dismantle your boat on site you must disassemble piece by piece with removal of duct tape and put into the designated recycle/garbage containers provided or take the pieces with you.

17. Boats and participants shall be family appropriate in presentation, design and apparel.

NEED MORE INFORMATION?
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503-649-2739
www.royalrosarians.com/Page/milk-carton-boat-race
**HOW TO BUILD A MILK CARTON BOAT**

1. **Create Your Design**

   Study the rules and regulations. Remember, your boat must float entirely from milk cartons/jugs. Racing boats are usually lightweight - long and narrow - like a kayak.

   Begin by sketching a design of your boat, noting the dimensions. Make a list of the items needed to complete the vessel, as well as their weight. Frame, décor, and person(s) operating the boat should all be accounted for.

   Calculate the number of milk jugs/cartons you will need. The weight of your vessel and crew must be fully supported by the buoyancy of the milk cartons/jugs.

<table>
<thead>
<tr>
<th>SIZE</th>
<th>WEIGHT</th>
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<tbody>
<tr>
<td>1 one-gallon plastic jug</td>
<td>floats 8 lbs.</td>
</tr>
<tr>
<td>1 half-gallon paper or plastic carton</td>
<td>floats 4 lbs.</td>
</tr>
<tr>
<td>1 one-quart paper carton</td>
<td>floats 2 lbs.</td>
</tr>
</tbody>
</table>

   Keep in mind larger boats will need more milk cartons/jugs to float.

   Kayak paddles and oars are two ways to power your boat.

2. **Gather Your Supplies**

   Frames can be built of wood, plastic or aluminum. Above the water line you may decorate however you choose. Be creative! You may use glue, nails, tape or other construction materials. Be sure, however, that all parts are securely fastened.

   Milk cartons/jugs are the most important materials for your boat. It’s easy to collect enough cartons/jugs if you save throughout the year. If you haven’t started a collection, ask your friends, family and neighbors to help you. You can also find milk cartons/jugs at coffee stands, restaurants, hospitals, cafeterias, etc. Simply ask for their empty containers.

3. **Construct Your Boat**

   Here is an example of how to build a milk carton boat. You may choose to build your boat differently, and that’s okay. These general instructions will get you started.

   Frames should be joined together with wood screws. Use wooden 2x4s for the main structure.

   Follow these instructions to make a basic frame and/or visit this 2012 YouTube “How to Build a Milk Carton Boat” for a tutorial.
   https://www.youtube.com/watch?v=xEbBqRp7-Mg

   Cut 1 board into 4 equal lengths.

   Place two 8' boards parallel to each other, approximately 20' apart. Using the 4 short pieces, attach one board at either end with wood screws, keeping the 8' boards 20' apart. Attach one short board mid-length as the seat and the short final board 14-18" in front of seat board.

   Finished frame will loosely resemble a rectangular ladder.

   Keep milk cartons water-tight by hot gluing and stapling the mouths shut. Use hot glue to keep lids on milk jugs. Then hot glue the cartons/jugs together in bundles or wrap the cartons in duct tape. Use duct tape or hot glue to connect the cartons to the frame. Prevent cartons from breaking loose by using chicken wire or mesh on the bottom of the boat. DO NOT enclose the cartons completely within the frame, as they must be visible. If not, it will result in a disqualification when inspected.

   You can make your boat as a single unit or pieces that can be put together at the park. Bring all of your supplies and allow adequate time for construction on race day.

4. **Do a Trial Run**

   Don’t forget to test your boat with a trial run. Look for flooding in milk cartons, breaks, cracks, stability in water, and how the boat handles in the water. Plan a trial run with enough time to fix anything before race day. Trial runs may NOT be done at the casting pond on Race Day.

5. **Helpful Hints for Race Day**

   **Pre-Register**

   Register online by June 21st to guarantee your spot at the Milk Carton Boat Race. Please bring your signed waiver(s).

   **Register On-Site**

   Limited registration will be available on-site. Registration will be open from 9:30-10:30 am at the Registration tent.

   Each participant must check in at the registration tent between 9:30 am and 10:30 am on race day. You will receive a participant number for your boat. An inspector will examine your boat to see that it meets the rules and regulations.

   Note: Race schedule is approximate and could actually run faster or slower than expected. Pay attention to the day’s Schedule of Events and listen to the public announcements to find out when it is your turn to race. All racers and their boats will line up 20 minutes before their race.